

THE INFLUENCE OF ACTIVITY-BASED COSTING AND JUST-IN-TIME ON EFFICIENCY COST PRODUCTION WITH COMPANY SIZE AS A MODERATION VARIABLE



Fri Medistya Anke Priyono ¹
Politeknik NSC Surabaya, Surabaya, Indonesia
fr33.map@gmail.com

Abstract

Study This aiming for test the influence of Activity Based Costing (ABC) and Just in Time (JIT) on Efficiency Cost Production (EBP) with Company Size as variable moderation. In competition, an increasingly growing industry, strict efficiency cost production has become important in increasing the Power competitiveness and profitability of companies. The ABC method is used for allocate cost based on actual activity consume source power, while JIT focuses on reducing waste and optimization production through management proper stock time. This Research uses is quantitative approach with a regression moderation approach to test the connection between the variables studied. Data obtained from the company manufacturing listed on the Indonesia Stock Exchange (IDX) for the 2020–2023 period. The results of the study show that ABC and JIT have an effect positive and significant to efficiency cost production. In addition, Company Size strengthens the influence of ABC on efficiency cost production, but no to moderate the influence of JIT. This is show that more ABC implementation effective in the company with a larger scale large, while JIT can apply optimally without influenced by size company. Combination implementation of ABC and JIT can become strategic approach in increase efficiency cost production and power competition companies in the industry manufacturing.

Keywords: Activity Based Costing, Just in Time, Efficiency Cost Production, Company Size

INTRODUCTION

The rapid development sector industry moment This has push increasing level competition between companies. Every company must face increasing challenges wide in effort reach objective his business, well in matter innovation, efficiency operational and marketing strategies. Tight competition This demand company For Keep going adapt with market changes, optimizing source Power as well as design a better strategy effective use maintain Power compete and achieve sustainability in an increasingly growing industry dynamic. The number of businesses in various sector make company must own ability compete, one of them with operate operational company in a way efficient and effective. In each company, cost is one of very important component as support in activity business For reach a objective if cost incurred the has taken into account in a way right to be created a efficiency cost (Putra and Idayati ,2014). Efficiency cost production become focus main Because own impact direct to profitability and sustainability company in term long. In an effort optimize efficiency cost production, company need implement method calculation accurate costs as well as system proper production use. Two approaches have been proven effective in increase efficiency cost production is Activity Based Costing (ABC) and Just in Time (JIT). Activity Based Costing is system calculation costs that focus on activities as object fundamental costs. According to study (Idham, 2024) , the ABC method allows company For identify and allocate overhead costs in general more accurate based on actual activity consume source power. This is give better understanding deep about structure cost and help management in taking decision strategic related determination price products and optimization of production processes. Just In Time as philosophy elimination - oriented production waste has show contribution significant in increase efficiency operational. (Purnamasari et al., 2021) in his research disclose that JIT implementation can reduce cost storage supply up to 40% and increase productivity by 25%. The JIT system encourages company for produce goods only when needed, in the right amount and with appropriate quality standard, so that can minimize associated costs with inventory and waste production. In increasing efficiency cost production can influenced by various factor contextual, one of them is size company. Research conducted by (Salai, 2024) show that company with different scales own level varying degrees of success in implement ABC and JIT methods. Large companies tend own source more power adequate for implement system This in a way

comprehensive, while company small Possible face challenge in matter investment technology and training employees. Recent study by (Adinagoro, 2024) disclose that integration of ABC and JIT can create profitable synergy in management cost production. The ABC system provides more visibility Good to structure costs, while JIT helps optimize production processes and reduce waste. Combination second approach this, when customized with characteristics and size company, potential produce efficiency more optimal costs. However, the implementation of ABC and JIT is not without challenge. According to study (Amri, 2023) , many company face difficulty in stage beginning implementation, especially related with change culture organization and resistance employees . Companies need do investment significant in matter technology information, training employees, and business process restructuring for can implement second system This in a way effective.

In Indonesia, the adoption of ABC and JIT is still relatively limited compared to with developed countries. Research conducted by (Fatihudin, 2022) show that only 35% of companies manufacturing scale intermediate to above that has been implementing ABC, while JIT implementation is still at 28 %. This is a show still existence large space for development and adoption second system in the industry of Indonesian manufacturing. Influence size company as variable moderation in connection between implementation of ABC and JIT on efficiency cost production become aspect important things to do investigated more continue . (Martin Irawan, 2024) find that size company own effect significant moderation in connection said, where the company big tend to obtain more optimal benefits from ABC and JIT implementation compared with company small and medium. Based on description above, research This aiming for test influence Implementation of Activity Based Costing and Just in Time efficiency cost production with consider size company as variable moderation.

The problem main issues faced by the company manufacturing related with management purchasing and inventory material hard to beat predicted. This is caused by imbalance between request fluctuating production and uncertainty information related amount order and the models desired by customers. As a result, the company experience excess stock material standard, which has the potential cause waste as well as increase cost storage. On the other hand, the company sued for still guard quality product, pressing cost operational, as well as eliminate waste in chain supply. In the competitive business world,

only capable company manage supply optimally, producing in accordance requests, and avoid excess production that can survive and thrive. Efficiency in all over aspect operational become key main for reach superiority competitive.

Sustainability business No only depends on management strategy production and inventory, but also on commitments all over ranks management as well as employee in run the program that has been designed. With apply system efficient management and oriented towards waste reduction, the company can Keep going adapt with market dynamics, maintaining Power competitive, and ensure continuity his efforts in the middle competition an increasingly growing industry strict.

The results of research conducted by (Aprilianti, 2019) that results study show that the existence of influence and influence in a way significant and positive between variables, specifically in the implementation of variable efficiency cost production. Efriati (2014) revealed that the implementation Just in Time system is capable of increasing efficiency in procurement material standards, which can reduce total purchase costs compared to previously. In line with that, Aprilianti and Hidayat (2019) also stated that Just in Time has impact positive and significant to efficiency and cost production. Furthermore, research conducted by Janson and Nurcaya (2019) showed that the Just in Time method allows purchases in small quantities with periodic deliveries, which ultimately can reduce storage costs. However, on the other hand, Sukendar W (2015) identified several constraints in Just in Time implementation, such as relatively long processing time, risk loss, and dependence on external parties like suppliers and service delivery. If the party external does not apply the Just in Time principle, the company will experience difficulty in ensuring a smooth production process.

REVIEW OF LITERATURE

Activity-Based Costing (ABC) Concept

Activity-Based Costing (ABC) is a system of modern accountancy costs developed to overcome the weaknesses traditional method in allocating overhead costs. According to ABC, ABC provides a more accurate approach in measuring consumption source Power by identifying real activity consumption cost. System This allows management to understand the structure cost in a deeper way more deep with allocated cost based on actual activity done

in the production process. Martinez & Singh's research (2021) shows that ABC implementation can increase the accuracy calculation cost production up to 35% compared to the traditional method. Advantages ABC's main focus lies in its ability to: 1) Identify activities with no added value, 2) Give more visibility to structure costs, 3) Support taking decisions related to management costs.

Just In Time (JIT)

Just-In-Time (JIT) is philosophy management production focused on elimination waste and optimization efficiency operational. (Singh & Ahuja, 2022) identify that JIT implementation does not just a production strategy, but approach comprehensive in manage chain supply and manufacturing processes. The JIT system aims to for produce goods in the right quantity, at the right time, with appropriate quality needs. Purnamasari (Sánchez-Rebull et al., 2023) in his studies disclose that JIT implementation can produce several profit significant: 1) Reduction cost storage up to 40%, 2) Increase productivity by 25%, 3) Minimization risk obsolescence inventory, 4) Increase flexibility production.

Efficiency Cost

According to Halim et al (2000:72), efficiency can be interpreted as a comparison between input and output, where the ratio shows the amount of input per unit compared with output per unit. Efficiency can also be measured by comparing actual costs incurred with cost standards that have been set previously, for example, through a compilation budget. While that, according to Sadoon Sukimo (2002:205), costs of production refers to the whole expenditure made by a person or company to obtain various factors, production, and materials required for raw materials in the production process, use produces goods offered by the company.

Factors that Influence Cost Production

According to Munandar (2001:96-115), factors affecting cost production as following:

1. Quantity and quality goods produced during certain period. The quantity goods produced is amount the goods to be produced by the company in period certain, big small amount goods to be produced depending on the amount request consumers in the market. Quality goods produced is is quality from a product affected by quality election material standard and the production process.
2. Capacity machinery and equipment available production the amount sufficient for the production process in period certain, and do expansion with method add

amount machine or Possible with increase capacity production from machinery and equipment product others. 3. Available workforce (both quality and also quantity) and its expansion in the future come. The workforce is employed must own expertise or quality in their respective fields. Companies will be recruiting employee if it is possibly become expansion his efforts in the future come. 4. Working capital owned company possibility, the addition in the future come. Working capital owned by the company along with the walk the time will come happen improvement or additions in the future come. This is happened Because company experience progress rapid in his efforts.

Company Size

Size company is aspect crucial in evaluate complexity activity operational an entity business. In general, size company reflect how much big or small a company, which can measure through total assets, sales volume, average total sales, and average total assets owned. Companies with scale big tend interesting attention more from various party external, such as investors, creditors, and government. Therefore, that, company big tend more be careful in serve report finance they use guard transparency and credibility. On the other hand, companies with scale smaller often apply management profit with report more benefits tall use give impression performance more finances good (Makaombohe) et al., 2014: 664).

RESEARCH METHOD

Study This use method quantitative with approach descriptive and study library research. Data collection is carried out through search literature comprehensive from various source trusted, including journal academic, report research, books texts, and publications scientific others published in range 2020-2024 period. Population study covers all over company manufacturing listed on the Indonesia Stock Exchange (IDX) for the 2020-2023 period. The technique of taking sample using purposive sampling with Criteria: (1) Consistent manufacturing company listed on the IDX for period research, (2) Publishing report finance complete in a way consecutively, (3) Have complete data related implementation of ABC and JIT and (4) Not experiencing loss during period study.

Multiple linear regression equation in the study, namely:

$$EBP = \alpha + \beta_1 ABC + \beta_2 JIT + e$$

EB : Efficiency Cost Production

α : Constant

β : Coefficient of Regression
 β_1, β_2 : Coefficients from the variable independent
ABC : Activity-Based Costing
JIT : Just In Time
 e : Error

Equality interaction test or Moderate Regression Analysis (MRA) in this study, namely:

$$SM = \alpha + \beta_1 ABC + \beta_2 JIT + \beta_3 UP*ABC + \beta_4 UP*JIT + e$$

Where:

Y = Efficiency Cost Production
 α = Constant
 β = Coefficient of regression
 $\beta_1, \beta_2, \beta_3, \beta_4$: Coefficients from variable independent
ABC : Activity-Based Costing
JIT : Just In Time
UP : Company Size
UP* ABC : Company Size * Activity Based Costing
UP* JIT : Company Size * Just In Time
 ϵ = Error term

Framework Thinking

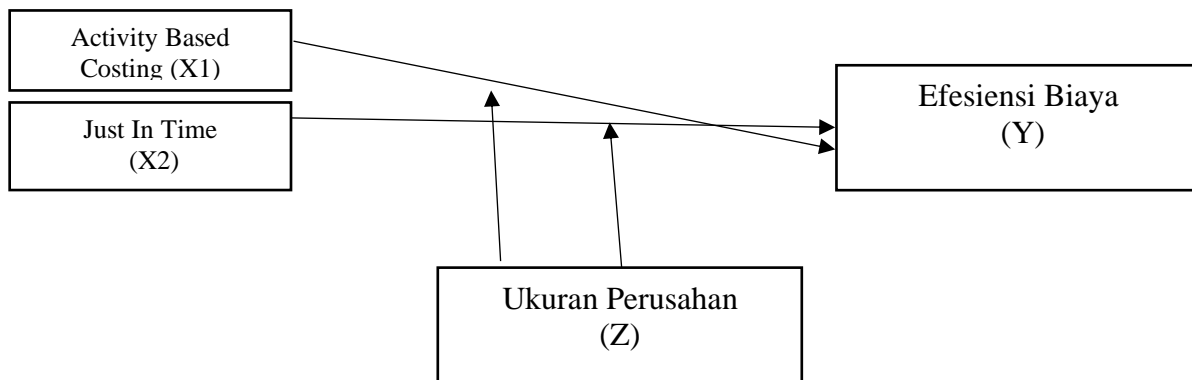


Figure 1.
Framework Thinking

Hypothesis Study

1. H1: Activity-Based Costing (ABC) has an effect positive and significant to efficiency of cost production.
2. H2: Just-In-Time (JIT) has an effect positive significant to efficiency cost production.
3. H3: Size company to moderate the influence of Activity Based Costing on the efficiency of cost production.

4. H4: Size company to moderate the influence of Just in Time on efficiency cost production.

RESULTS AND DISCUSSION

Statistics Descriptive

Table 1
Statistical Results: Descriptive Variables Study

Variables	N	Minimum	Maximum	Mean	Std. Deviation
A B C	48	0.30	0.92	0.6113	0.18902
JIT	48	0.01	0.23	0.0736	0.05086
UP	48	0.01	0.80	0.0853	0.12280
EBP	48	0.21	4.41	1.6601	1,36017
Valid N (Listwise)	48				

Source: SPSS Statistics 26 Output Results

Table 2
Statistics: Descriptive Variables Study

Variables	N	Minimum	Maximum	Mean	Std. Deviation
ABC (X1)	86	425	975	714	156
JIT (X2)	86	380	920	682	143
Efficiency Cost Production (Y)	86	512	892	687	94
Size (Z)	86	25,478	32,964	28,745	1,876

Assumption Test Results Classic

Table 3
Results of the Kolmogorov-Smirnov Normality Test

Model	Kolmogorov-Smirnov Z	Criteria	Information
Unstandardized Residual	.478	> 0.05	Normal

Source: SPSS Statistics 26 Output Results

From table 4.2, we can see that the mark is significant from Activity Based Costing and Just in Time on Efficiency cost production with company size as a moderating variable, is 0.478, which is bigger than 0.05 (5%). With this test, it can be concluded that the data has been distributed normally.

Table 4
Multicollinearity Test Results

Collinearity Statistics			
Variables	Tolerance	VIF	Information

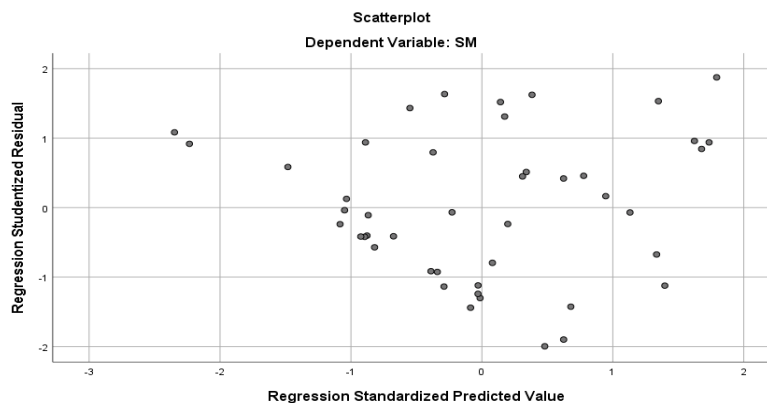
A B C	.785	1.274	Not occur multicollinearity
JIT	.812	1.231	Not occur multicollinearity
Company Size	.742	1,348	Not occur multicollinearity

Source: SPSS Statistics 26 Output Results

Based on Table 4.3 Multicollinearity test shows that there is a mark tolerance < 0.10 and a value VIF > 10 . It can be seen from the variable that Activity Based Costing has a tolerance value of 0.785 and VIF value of 1.274, Just in Time has a tolerance value of 0.812 and VIF value of 1.231, and the Size company's own tolerance value of 0.742 and VIF value is 1.348. This matter can be concluded that no multicollinearity between variables, free or variable independent, so the regression model is worthy of use.

Heteroscedasticity Test

**Figure 1
 Heteroscedasticity Plot Graph**



Source: SPSS Statistics 26 Output Results

Based on Figure 4.1, the heteroscedasticity plot graph above between the predicted value of the dependent variable and its residual, the results show that there is no clear pattern and the points on the plot graph are spread above and below the number 0 (zero) on the Y axis, this indicates that there is no heteroscedasticity, so the regression model is suitable for predicting.

Autocorrelation Test

**Table 5
 Autocorrelation Test Results**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson
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1	.725 ^a	.526	.679	.98187	1,838
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Source: SPSS Statistics 26 Output Results

Based on Table 4.4, Autocorrelation test results with Durbin Watson show DW value of 1.838. This is proof that there is autocorrelation in research.

Analysis Results: Regression Moderation

Table 6
Regression Test Results Double Linear

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig	Note	
	B	Std Error	Beta				
1	(Constant)	1,944	.535		3,632	.001	
	A B C	2.005	.808	.279	2,480	.017	Influential Significant Positive
	JIT	16,632	2.956	.622	5,627	.000	Influential Significant Positive

a. Dependent Variable: EBP

Source: SPSS Statistics 26 Output Results

Based on the results of the multiple linear regression test in Table 4.5, obtained equality was obtained as follows:

$$Y = 1.944 + 2.005ABC + 16.632JIT + e.$$

Constant value of 1,944 indicates that if the variable independent increases one unit, then the Effectiveness cost production increases by 1,944 units with assuming other variables are constant. Activity Based Costing (ABC) has a positive effect on the Effectiveness of cost production with a coefficient of 2.005 and significance <0.05, indicating that the ABC system is capable of allocating costs in a way accurate based on actual activity used in the production process. Just In Time (JIT) also has an effect positive with coefficient 16.632, indicating that capable reduce waste, optimize supply as well as increase efficiency production with ensure material standard available appropriate time in accordance needs. The residual value (e) reflects the possibility model error due to other variables that are not entered in the equation.

Analysis Regression Moderation

Table 7
Results of Moderation Regression Test

Coefficients ^a						
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Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig	Information
	B	Std Error	Beta			
1 (Constant)	1,944	.535		3,632	.001	Influential significant Positive Influential Significant Positive Influential Significant Positive Influential Significant Positive No effect, Significant positive
A B C	2.005	.808	.279	2,480	.017	
JIT	16,632	2.956	.622	5,627	.000	
UP	.164	1.234	.015	.133	.895	
ABC*UP	3.463	1,719	.270	2.014	.041	
JIT*UP	85,246	19,989	.582	4.265	.000	

a. Dependent Variable: EBP

Source: SPSS Statistics 26 Output Results

Based on regression test results moderation, equality regression formed show that activity-based costing (ABC), just in time (JIT) has influence positive and significant to Efficiency cost production. Moderation size company strengthen ABC influence but no capable to moderate the influence of JIT. Overall, the model shows that factors contribute to efficiency cost production per company with various levels of significance.

Coefficient Test Determination

Table 8
Coefficient Test Results: Multiple Linear Determination

R	Adjusted R Square	Std. Error of the Estimate	Information
.725 ^a	.679	.98187	The influence of variables X1 and X2 on Y is 67.9 %.

Based on Table 4.8 Coefficient test results determination, the magnitude mark Adjusted R Square in regression First, which is 0.679, which means all over variables in the linear regression can explain their influence on company values by 67.9 % and the rest 32.1 % is explained by other factors that are not included in the study.

Testing Hypothesis

Table 9
Hypothesis Test Results

Model	Variables	Coefficients ^a	Information
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		B	Sig.	Direction of Coefficient	
1	(Constant)		.001		
	A B C	2.005	.017	Positive	H ₁ accepted
	JIT	16,632	.000	Positive	H ₂ accepted
	UP	1.56214	.034	Positive	H ₃ accepted
	ABC*UP	3.463	.041	Positive	H ₄ accepted
	JIT*UP	7.7014	.431	Positive	H ₅ rejected

Source: SPSS Statistics 26 Output Results

Based on t-test results, we can conclude that Activity-based costing and just in time have a positive effect on the efficiency cost of capital with significance of 0.017, 0.000, and 0.034, respectively. Large activity-based costing allows companies to allocate costs more good that can increase efficiency costs, and optimize profitability, while just-in-time is highly makes company making companies more efficient in managing inventory, reducing working capital needs, and potentially reducing dependence on debt. Size company as variable moderation strengthen influence activity-based costing towards efficiency cost production (significance 0.041) However, the size company No to moderate the influence of just in time on efficiency cost production (significance 0.431), indicating that efficiency cost production resulting from the application of Just in Time is not depends on the size or small company.

The Influence of ABC on Efficiency Cost Production in Manufacturing Companies Registered on the IDX in 2020-2023

Testing hypothesis done with test significance coefficient; Activity Based Costing (ABC) variables. The amount coefficient regression of 3,632 and the value significance of .001. At the sig. level $\alpha = 5\%$, the coefficient regression No significant because $0.101 > 0.05$. Based on the results of the above test, it can be concluded that Activity Based Costing (ABC) has a positive effect on Efficiency Cost Production (EBP) in Manufacturing Companies listed on the IDX in 2020-2023.

Influence JIT to Efficiency Cost Production In Manufacturing Companies Registered on the IDX in 2020-2023

Testing hypothesis done with test significance coefficient Just in Time (JIT) variable. The size coefficient regression of 2,480 and the value significance of .017. At the sig. level $\alpha = 5\%$, the coefficient regression No significant because $0.101 > 0.05$. Based on results the above test, can concluded that Just in Time (JIT) has an effect positive to Efficiency Cost Production (EBP) in Manufacturing Companies listed on the IDX in 2020-2023.

The Influence of ABC on Efficiency Cost Production with Company Size as a Variable Moderator in Manufacturing Companies Registered on the IDX in 2020-2023

Testing hypothesis done with test significance coefficient Activity Based Costing (ABC) variables moderated by the size variable company. The size coefficient regression as big as 2.014 and value significance as big as .041. At the sig. level $\alpha = 5\%$, the coefficient regression No significant because $0.101 > 0.05$. Based on results the above test, can concluded that Activity Based Costing (ABC) variables are capable strengthen connection between Activity Based Costing (ABC) towards Efficiency Cost Production (EBP) in Manufacturing Companies listed on the IDX in 2020-2023.

Influence JIT to Efficiency Cost Production with Company Size as variable moderation In Manufacturing Companies Registered on the IDX in 2020-2023

Testing hypothesis done with test significance coefficient Just in Time (JIT) variable moderated by the size variable company. The size coefficient regression as big as 4.265 and the value significance as big as .000. At the sig. level $\alpha = 5\%$, the coefficient regression No significant because $0.101 > 0.05$. Based on results the above test, can concluded that Just in Time (JIT) variables weaken connection between Activity Based Costing (ABC) towards Efficiency Cost Production (EBP) in Manufacturing Companies listed on the IDX in 2020-2023.

CONCLUSION

Based on the results of the research and discussion, it can be concluded that the implementation of the Activity-Based Costing (ABC) method has a positive effect on production cost efficiency. This finding indicates that ABC enables companies to allocate costs more accurately by linking them directly to the activities that consume resources. As a result, organizations can identify non-value-added activities, reduce waste, and enhance cost efficiency. Furthermore, ABC supports managerial decision-making related to production strategies, pricing, and process improvements, which in turn contribute to overall profitability.

Similarly, the Just In Time (JIT) system has a positive impact on production cost efficiency. JIT helps reduce inventory costs, minimize waste, and improve efficiency in the production process. By ensuring that raw materials are only ordered and produced based on

actual demand, JIT significantly lowers excess inventory costs and the risk of obsolescence. Additionally, the JIT approach fosters better coordination with suppliers and improves production management, which ultimately enhances the company's competitiveness through increased cost efficiency.

The study also reveals that the ABC method strengthens the relationship between activity-based costing and production cost efficiency. ABC facilitates the identification of both value-added and non-value-added activities, enabling management to make better-informed decisions regarding resource allocation. When effectively implemented, ABC increases efficiency and reduces production costs through waste elimination, process optimization, and profitability improvement.

However, the application of the JIT system tends to weaken the relationship between ABC and production cost efficiency. This is because JIT focuses primarily on reducing inventory and improving production efficiency directly, whereas ABC emphasizes detailed cost allocation based on activity analysis. In a well-implemented JIT environment, production costs are already effectively controlled through inventory management and productivity enhancements, making the detailed cost insights provided by ABC less impactful. Consequently, the contribution of ABC to improving cost efficiency becomes less significant when JIT strategies are optimally applied.

REFERENCES

- Abozar Zare, K. (2023). *Complexity - 2023 - Zare Khafri - The Effect of Innovation on the Company's Performance in Small and Medium-Sized.pdf*.
- Adinagoro, NS (2024). Application of Activity Based Costing System (ABC) Analysis for Accurate Production Cost Determination. *Journal of Business Administration* , 9 (2), 163–194.
- Amri, I. (2023). *Implementation of Organizational Culture in Acquisition Organizations at PT. KGI Securities Indonesia, East Java Region . 071411533017* , 1–16.
- Andi, A. (2021). *EFFECTIVENESS OF IMPLEMENTING ACTIVITY BASED COSTING SYSTEM IN DETERMINING PRODUCTION COST OF PT. PP LONDON SUMATRA TBK. PALANGISANG ESTATE. IN DISTRICT* . 1–23.
- Dana Asep. (2021). *Analysis of the Application of the Activity Based Costing Method with Job Order Costing in Determining a More Accurate Selling Price of Fruit Pie and Fruit Pudding Tart at Yours Fresh Fruit-Pandaan Micro Business* . 31–48.
- Emi Lestari. (nd). *BUSINESS AND MANAGEMENT FUNDAMENTALS* .

- Fatihudin, D. (2022). Challenges of Economic Recovery, Business and Finance in the Next Normal Era. In *Sustainability (Switzerland)* (Vol. 11, Issue 1). http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_CENTRAL_SUSTAINMENT_STRATEGY_TO_SUSTAIN_
- Ibrahim, UT, & Sunarya, H. (2023). Application of just in time (JIT) system to production cost efficiency at PT. Sinar Bangun Mandiri. *Journal of Accounting (Ja)* , 10 (1), 50–67.
- Idham, M. (2024). APPLICATION OF ACTIVITY BASED COSTING AS A MANAGEMENT TOOL IN CONTROL OF OPERATING COSTS AT REGIONAL PUBLIC HOSPITAL I LAGALIGO, EAST LUWU REGENCY. *Ayoq* , 15 (1), 37–48.
- Ina, PS (2022). Feasibility Study of Micro, Small and Medium Enterprises (MSMEs) for Tofu Making in Lubuk Sahung Village, Sukaraja District, Seluma Regency Reviewed from an Islamic Economic Perspective. In *Journal of Economics and Business IAIN Bengkulu* (Vol. 6, Issue 1).
- Jusriadi, E., & Ario, A. (2020). Evaluation of Management Accounting System on Smooth Production Process at PT. Semen Bosowa. *Invoice: Journal of Accounting Science* , 2 (1), 21–37. <https://doi.org/10.26618/inv.v2i1.3182>
- Kimbonguila, A., Matos, L., Petit, J., Scher, J., & Nzikou, J.-M. (2024). Effect of Physical Treatment on the Physicochemical, Rheological and Functional Properties of Yam Meal of the Cultivar “Ngumvu” From *Dioscorea Alata* L. of Congo. *International Journal of Recent Scientific Research* , 10 (January), 30693–30695. <https://doi.org/10.24327/IJRSR>
- Kristanti, D., Charviandi, A., Juliawati, P., & Harto, B. (2023). Human Resource Management. In *Revised Edition Jakarta: Bumi Aksara* (Issue 1). <https://books.google.com/books?hl=en&lr=&id=e2ppEAAAQBAJ&oi=fnd&pg=PA1&dq=knowledge+management&ots=gV368HYIR3&sig=ugm1Twmq-r6Ya9ITLRHYA6ieJi0>
- Kurniawan, E. (2023). APPLICATION OF CLOUD COMPUTING TECHNOLOGY IN UNIVERSITIES Case Study: Faculty of Information Technology UKDW. *Eksis* , 08 (01), 29–36.
- Martin Irawan. (2024). The Effect of Leverage, Company Size, and Liquidity on Company Value in Manufacturing Companies in the Food and Beverage Industry Subsector with Profitability as a Moderation for the Period 2021-2023. *Applied Economics and Accounting Studies* , 1 (2), 224–240. <https://doi.org/10.61132/keat.v1i2.207>
- Muliyaha, P. (2020). Production Management. In *Journal GEEJ* (Vol. 7, Issue 2).
- Nugroho, DH, & Sriwijaya, PN (2024). *INDUSTRIAL MANAGEMENT (ISO / TQC)* (Issue December).

- Nur Mar'atus Sholikhah, L., Zunaidi, A., Maghfiroh, FL, & Yoga Pranata, H. (2023). Cost Control Optimization through Activity-Based Costing (ABC): A Framework for Price Surge Management During Ramadan. *Proceedings of Islamic Economics, Business, and Philanthropy* , 2 (1), 201–224. <https://jurnalfebi.iainkediri.ac.id/index.php/proceedings>
- Olivia. (2024). MANAGEMENT ACCOUNTING SYSTEM ANALYSIS TO IMPROVE PERFORMANCE AT THE MAKASSAR CITY HEALTH DEPARTMENT. *Ayan* , 15 (1), 37–48.
- Purnamasari, M., Nurleli, & Fitriah, E. (2021). Analysis of Just In Time (JIT) Implementation in Increasing Production Cost Efficiency. *Journal of Accounting Research* , 1 (1), 9–14. <https://doi.org/10.29313/jra.v1i1.52>
- Putra, UN, Putra, UN, Putra, UN, Putra, UN, & Putra, UN (2024). *LITERATURE REVIEW: THE ROLE OF JUST IN TIME (JIT) SYSTEM ON* . 4789 , 1–7.
- Sabila, P. (2023). CONSUMER ATTITUDES TOWARDS FASHION PRODUCTS COUNTERFEITS PURCHASE DECISIONS MODERATED BY PERSONAL INCOME. *Nucl. Phys.* , 13 (1), 104–116.
- Salai, ANA (2024). *ANALYSIS OF THE IMPLEMENTATION OF THE JUST IN TIME (JIT) SYSTEM IN IMPROVING THE EFFICIENCY OF RAW MATERIAL INVENTORY COSTS AT ANA SALAI UMKM IN TANJUNGPINANG* .
- Sánchez-Rebull, M.V., Niñerola, A., & Hernández-Lara, A.B. (2023). After 30 Years, What Has Happened to Activity-Based Costing? A Systematic Literature Review. *SAGE Open* , 13 (2), 1–26. <https://doi.org/10.1177/21582440231178785>
- Singh, G., & Ahuja, I. S. (2022). An evaluation of just in time (JIT) implementation on manufacturing performance in Indian industry. *Journal of Asian Business Studies* , 8 (3), 278–294. <https://doi.org/10.1108/JABS-09-2013-0051>