



The Analysis of The Impact of Responsibility Accounting on Production Cost Control

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ARTICLE INFO

Article history:

Received: Oktober 07, 2024

Revised: November 12, 2024

Accepted: December 30, 2024

Keywords:

Responsibility Accounting,
Production Cost Control,
Budgeting

ABSTRACT

This study was written to determine the effect of responsibility accounting on controlling production costs at PT. Medan Grand Mopoli. The research method used in this research is descriptive qualitative. The subject of this research was conducted at PT. Mopoli. The object of this research is the production cost report of PT. Grand Mopoli. Data collection techniques in this study were using observation techniques, documentation techniques, and interview techniques. In this case, the research uses descriptive analysis techniques. The results of the study show that responsible accounting has not been implemented properly because it is seen from the cost of technology and every year it experiences losses (unfavorable) or the realization is higher than the budget.

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Introduction

The Organization of company is coordinated effort and obtained skill and expertise people to achieve the goals. The company undertook the goals so it needed the strategy to collaborate all of component in the organization in accordance with the determined plan. The company implementation test is required supervision or control. One of control tool is used by management is system of responsibility accounting.

Responsibility accounting is a compiled system based on nature and company activities for each of organization units took responsibility the result of the control. Each responsibility center has manager who responsible for activities in the center that he leads, periodically the manager will take responsibility for the result to the leader of company. The Implementation of responsibility must perform objectively because it is one of company policy in the future.

The head of the company can delegate authority and responsibility to leader effectively without supervise directly in the company. The responsibility accounting is evaluated order to the management connected the cost easily with the center manager. The implementation of accounting encouraged the company to achieve the goals.

One of center of responsibility is cost center. The costs occurred in the responsibility center was the responsibility of manager, while the costs cannot be controlled is not his responsibility. The responsibility accounting is a system suit the information for management. Indonesia's economic growth developed in line this business, evidently small company, middle and big company are built-up. The impact of this company is the company problems is complex and tough.

Envisage this condition, the entrepreneurs must accurate to maintain the business. The activities in industry is raw material processing to get profit. All of the economy activities productively or get the profit insist the manager must maintain the costs.

The costs and the profit is part of determine business entity's financial position. The company profit can be measured if the company keep on achieve the goals consistently and maintain the company.

The company improved the ability of work ethic to increase performance and compete to others company. Besides that, the company also increase processing of production efficiency and effectively competitiveness. The process of marketing a product is not about demand of the company to produce the things as much as possible, however we also observe how the producer determined produce of things.

PT. Mopoli Raya is one of private company engaged to oil palm plantation and processing. It was founded on December 17th 1980. There are some researcher that make the writer interested to research PT.

Mopoli Raya Medan, the problem is the deviation between budgeting and the realization of production costs year to year so that the effect of realization of production costs is bigger than the production costs budgeting and it is improvidence.

The authors must show a clear table and images. If you want to display a chart, then all information such as Title chart, Axis title, Legend, Data labels, Data table, Plot area, etc. must be clear and understandable. Each table, image, and graph must be given an appropriate explanation and numbering by the template

Literature Review

The Cost

Cost is the important factor to determine main cost, because of the company operating activities to produce the product spent the cost, the good or service. According to Mulyadi (2014:8) the cost generally is sacrifice of economic resources can be measured by money, probably it will be occurred for specific purpose. Cost often compare with the expense, which is both of the term used to the same purpose. Beside that the expense lost for certain period of time. The definition of the cost is about the differentiate various of perception the cost. However, this kind of the definition of cost by Anggadini (2015:10). Based on the definition of the cost above, it concluded the cost is the sacrificed resources or removed in unit of money to get the good or service that give the benefit for now and the future to achieve the goals.

Every company regardless of its activities whether corporate or non-company always associate with the cost. In processing of the product, the company will spend the costs from the processing until produce the good for sale. The cost generally can be classified functionally, the production cost and non-production cost. The production cost only stand to the own company. Wherefore the activities of industry company is wide for embrace all of the function of main effort, marketing and administration. The production cost is the costs which is spent by company relate to raw material processing to finished material. This is such as the definition of the production cost according to authorities is:

According to Indonesian Accounting Association (2015:14) is : “the cost is cash equivalent paid or fair value paid or fair value of other benefits is given to get an asset or the construction to assets at the time of acquisition or the construction to assets in good place or condition”. It concluded that the production cost limit for raw material cost, direct labor cost and overhead for the elements become finished material or semi-finished material. The account of the production cost influenced by allocation determination or raw material costing, direct labor cost and overhead used to production process.

Responsibility Accounting

According to Syafri (2015:13) Accounting is the effort to manage much human necessities and unlimited it can be enough for the limit material and service, so that it called economic system. Economic system managed how to divide limited need for human who need ideally.

According to *American accounting association* (Rahayu, 2014:3) accounting is the process the identification, measurement, communication of economic information to consider the right decision for user. It concluded that accounting is the system of information relate to financial report used to each company and an accounting system is divided organization structure for the center of responsibility have authority and clear responsible. The responsibility is reported the result of company achievement, it motivated the responsibility accounting centre manager. According to Mulyadi, (2015:174) He stated: “the information of responsibility accounting is the the benefit of future information in budgeting and the benefit of past information to evaluate the performance of the centre responsibility and motivate the manager”. According to Lubia (2015:10) responsibility of accounting is the system measured by the centre of responsibility for the achievement. The setting of manager to business problems can be handled effectively and handled the people for responsible the production operation.

The quotes stated the effect of responsibility accounting according to Sunarto (20216:6) he stated: “the information of responsibility of accounting is an asset, income and cost related to manager which is responsible to centre of responsibility. There are some task for centre of responsibility, namely: “ arrange the budgeting, evaluate manager performance and motivate the manager.

The production cost control is one of part the small interent steps undertake the effort of company to increase efficiently. Controlling the cost must aligned with the goal of company, one of goal can be achieved to get the highest profit and spend the lowest possible cost. Therefore, the production cost control of company to get the highest profit. It was like Mardiasmo (2017:3) stated: “ controlling the cost basically is monitoring and evaluating continuously and comparing budgeting and the realization.

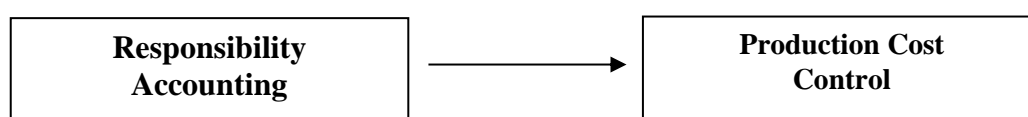
The purpose of controlling the cost according to Shiegel (20015:110) “controlling the cost is the step ensure the goals of cost is arranged the plans and ensure all of segment organization with the policy consistently. According to Willian (2016:6) controlling is the systematic effort management to achieve the goals continuously ensured the part of organization functioned.

The responsibility for controlling the process of production must be handled to the part of responsible to production cost budgeting. Evaluating to performance from the deviation between the real cost with the cost in production.

It concluded that a process of controlling measured the executor with the plan and measured the report for the manager to predict the implementation will be analyzed to determine the effects so that It will be chosen the best alternative to find the plan for the future.

Conceptual Framework

Responsibility accounting will help the foundation for creating a system of cost centre evaluation or controlling and evaluating the performance from the smallest part to the whole company.



Method

The research design used the quantitative research method. According to Sugiyono (2012:7) the the quantitative research method is a research method based on positivism philosophy, researched the certain population and sample. The quantitative data is the data is processed questioner answer shared to production staff at PT. Mopoli Raya. The research object is the report of company production cost. The research was conducted at PT. Mopoli Raya. The technique of collecting the data used to observation technique, documentation technique, questioner technique to analyze such as: descriptive statistic analisis, classic assumption test, simple linear regression analysis, partial test and coefficient of determination.

Results and Discussion

Respondent Characteristic Analysis

Respondent characteristic elaborated the description of respondent identity based on the sample of the research has been set. The goal of the description of respondent identity to elaborate or describe about the respondent identity in the research. The descriptive data described a situation or condition of respondent what to pay attention to additional information figured out the result of the research. Therefore, the respondent characteristic description can be classified to the respondent's majors and the respondent's class.

Table 1. Respondents Characteristic by employee

No.	Majors	Amount (student)	Percentage (%)
1.	Division Head	30	41,1%
2.	Staff	43	58,9%
Total		73	100%

Based on the table 1 the respondent characteristics are type of staff from respondent there are 30 employees (41,1%) division head and 43 employees (58,9%)

Table 2. Respondents by Group

No	Groups	Amount (Students)	Percentage (%)
1	I	30	41,1%
2	II	2	2,7%
3	III	11	15,1%

4	IV	12	16,4%
5	V	18	24,7%
Total		73	100%

Based on the table 2 respondents classification are the respondent class known to group I of 30 employees(41,1%), group II of 2 employees (2,7%), group III of 11 employees (15,1%), group IV of 12 employees (16,4%), group V of 18 employees (24,7%).

Table 3. Respondents by Gender

No	Answer	Amount	Percentage (%)
1	Men	18	24,7%
2	Women	55	75,3%
Total		73	100%

Based on table 3 the respondents characteristic can be classified to men and women in whole respondents are 73 employees. Men 18 (24,7%) and women 55 (75,3%)

Description of Respondent's Answer

The descriptive analysis intend to know the answer of respondent to statement items from each variable shared through the questioner. The questioner included the independent variable of responsibility accounting (X) and dependent variable production cost control (Y). the result of respondent's answer for each statement items presented in the table such as:

The respondent's Answer about Responsibility Accounting Variables (X)

Responsibility Accounting Variables consist of 5 statements, which is the respondent's answer for each statements are:

**Table 4
Respondent's Answer about Responsibility Accounting Variables (X)**

Statement Numbers	Totally Agree		Agree		Don't Agree		Disagree		Totally Disagree		Amount	
	F	%	F	%	F	%	F	%	F	%	F	%
1	29	40	43	59	1	1	0	0	0	0	73	100
2	10	14	58	79	4	5	1	1	0	0	73	100
3	11	15	57	78	4	5	1	1	0	0	73	100
4	7	10	54	74	11	15	1	1	0	0	73	100
5	7	10	45	62	16	22	4	5	1	1	73	100

Based on the table 4 can be described the respondent's answer are:

- 1) The respondent's answer the structure of organization for the unit can be classified into responsibility centre (revenue centre, cost centre, profit centre, and investment centre), the respondent answered totally agree 40%, agree 59%, don't agree 1%, disagree 0%.
- 2) The respondent's answer about the assigned tasks for every unit of organization should be classified clearly, so that the implementation is supervised. The respondent answered totally agree 14%, agree 79%, don't agree 5%, disagree 1%.
- 3) The respondent's answer about budgeting process based on the responsibility centre (revenue centre, cost centre, profit centre, and investment centre). The respondent answered totally agree 18%, agree 78%, don't agree 5%, disagree 1%, totally disagree 0%
- 4) The respondent's answer about every manager of responsibility centre (revenue centre, cost centre, profit centre, and investment centre) participated in budgeting process is led, the respondent answered totally agree 10%, agree 74%, don't agree 15%, disagree 1%

- 5) The respondent's answer about every manager's responsibility of cost centre always consistently in cost control, the respondent answered totally agree 10%, agree 62%, don't agree 22%, disagree 5%

The Respondent's Answer About The Production Cost Control Variables (Y)

The purchasing decision variable consist oconsiststatements, which is each respondent's answer:

Table 5
The Respondent's Answer About The Production Cost Control Variables (Y)

No	Totally Agree		Agree		Don't Agree		Disagree		Totally Disagree		Amount	
	F	%	F	%	F	%	F	%	F	%	F	%
1	25	34	37	51	7	10	3	4	1	1	73	100
2	21	29	36	49	13	18	3	4	0	0	73	100
3	15	21	42	58	9	12	3	4	4	5	73	100

Based on the table 5 can be described the respondent's answer :

- 1) The respondent's answer about the uncontrollable cost, the materials cost are the uncontrollable cost for purchasing manager, the respondent answered totally agree 34%, agree 51%, don't agree 10%, disagree 4%.
- 2) The respondent's answer about criteria to evaluate the performance for cost centre manager, the respondent answered totally agree 29%, agree 49%, don't agree 18%, disagree 4%.
- 3) The respondent's answer about performance assessment to enforce behavior to achieve the target, the respondent answered totally agree 21%, agree 58%, don't agree 12%, disagree 4%, totally disagree 5%

Validity Test

The validity testing researcher used SPSS 24 the formula; *Correlate, Bivariate Correlations*, in the statement score and the amount for each variable. The result of validity test:

Table 6
The Result of Validity Test of Financial Information Variable (X1)

Statements	R _{count}	R _{table}	Description
Statement 1	0,498	0,2997	Valid
Statement 2	0,604	0,2997	Valid
Statement 3	0,632	0,2997	Valid
Statement 4	0,682	0,2997	Valid
Statement 5	0,744	0,2997	Valid

Based on table 6 which is the statement validity value for all the performance had been valid because the whole validity value is bigger than dari $r_{table} (n-2=73-2=71=0,2997)$ used in next valid calculation.

Table 7
The result of validity Test of Award Variable (X2)

Statements	R _{count}	R _{table}	Description
Statement 1	0,864	0,2997	Valid
Statement 2	0,933	0,2997	Valid
Statement 3	0,863	0,2997	Valid

Based on table 7 which is the statement validity value for the all performance had been valid because the whole validity value is bigger than r_{table} ($n-2=73-2=71= 0,2997$) used in next calculation because it had been valid.

Reliability Test

Reliability is the research observed the instrument reliable and trustworthy. If the research variable using the reliable and trustworthy instrument the result has the highest level of trust. There are the observation criteria in reliability test, here we are:

1. If the reliability coefficient (*Cronbach's Alpha*) $> 0,7$ the research instrument is reliable or trustworthy
2. If the reliability coefficient (*Cronbach's Alpha*) $< 0,7$ the research instrument is unreliable or untrustworthy

The high and low level of correlation and the research instrument reliability can be interpreted:

Table 8. The correlation coefficient interpretation

Coefficient Interval	Level of Correlation
0,00 - 0,199	Lowest
0,20 - 0,399	Low
0,40 - 0,599	Average
0,60 - 0,799	High
0,80 - 1,000	Highest

Source: Sugiyono (2017:147)

Table 9. The Result of The Reliability Test of Responsibility Accounting Variable Instrument (X)

Reliability Statistics

Cronbach's Alpha	N of Items
.625	5

Based on Table 9 can be described there is *Cronbach's Alpha* value 0,625 it stated that *Cronbach's Alpha* $> 0,6$ it means that the research instrument can be used reliable or trustworthy, the reliable instrument is on the highest level so that the research instrument in responsibility accounting can be used as the research data.

Table 10. The Result of Reliability Test of Production Cost Control Variable (Y)

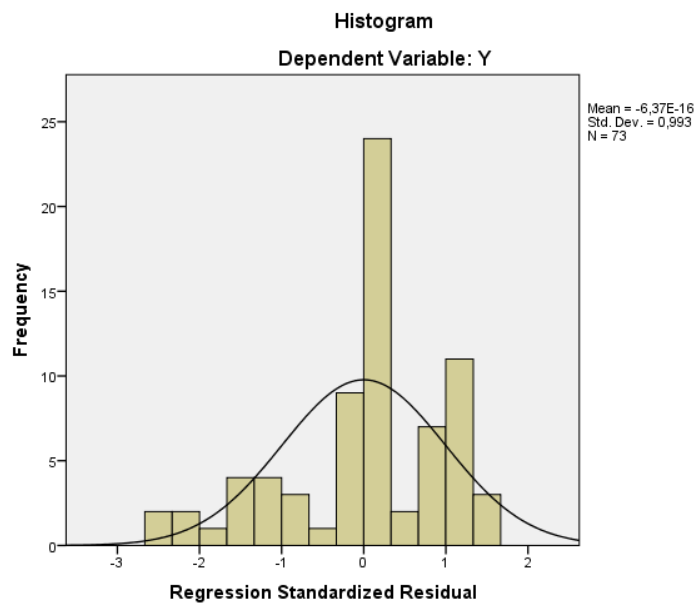
Reliability Statistics

Cronbach's Alpha	N of Items
.856	3

Based on table 10 can be described there is *Cronbach's Alpha* value 0,856 it stated that *Cronbach's Alpha* $> 0,7$ it means that the research instrument can be used reliable or trustworthy which is the reliability of production cost control variable is the highest data in the research.

Normality Test

The goal of Normality Test is verify the regression model, the dependent and independent variable. The good regression model has a normal or close to normal data distribution. The method of normality is graph analysis and statistic analysis. Normality test in the research used graph analysis: The normality can be detected by observing the data dissemination on the diagonal axis of the graph or the histogram of the residuals: if the data seminated in diagonal axis and followed the diagonal axis or the histogram graph indicated normal distribution system, accordingly the regression model do not eligible.



The histogram indicated that the data dissemination above got abroad around the diagonal axis (stay in line). It concluded that the regression data in the research is normal or eligible.

Simple Linier Regression

The regression used simple linier regression to find out the impact of independent variable to dependent variable. The result of simple linear regression used spss versi 20 *for windows* such as:

$$a = \frac{(\sum y)(x^2) - (\sum x)(xy)}{n(\sum x^2) - (\sum x)^2}$$

$$a = \frac{(875)(765625) - (1471)(1287125)}{73.765625 - (1471)^2}$$

$$a = \frac{669921875 - 1893360875}{55890625 - 2163841}$$

$$a = \frac{-1223439000}{53726784}$$

$$a = 14,837$$

Tabel 11. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8,943	3,047		2,935	,004
	X	,151	,151	,118	5,003	,000

The manual calculation about simple linier regression in the research the title The Impact of Responsibility Accounting on Production Cost Control at PT. Mopoli Raya (case study on the student of Economic faculty at University of Muslim Nusantara Al-Washliyah Medan).

$$Y = 8,943 + 0,151 X$$

Based on table 11 the data is significant 0.000 (smaller than 0.05) it means that the responsibility accounting take effect positively and production cost control. It showed that H_0 accepted dan H_a rejected. The manual calculation or *software* SPSS version 20 *for windows* get constant value (a) 8,943 and (b) 0,151 so that it was obtained the linear regression equation $Y = 8,943 + 0,151 X$, which is if the responsibility accounting was improved by one unit increased the production cost 0,151 or 15,1%.

Hypothesis Test

T Test (Partial)

T-Test used for find out the responsibility accounting (X) partially take effect significantly or not to production cost control at PT. Mopoli Raya (Y). The decision making criteria based on significant value :

1. If the significant value < 0,05 so there is impact of independent variable to variable y or hypothesis is accepted

2. If the significant $> 0,05$ so there is no impact of independent variable to variable y or hypothesis is rejected
Based on the value t_{count} dengan t_{table} :
3. If the value $t_{\text{count}} > t_{\text{table}}$ there is impact of independent variable to variable y or hypothesis is accepted
4. If the value $t_{\text{count}} < t_{\text{table}}$ there is no impact of independent variable to variable y or hypothesis is rejected

Based on table 11 "Coefficients" can be classified the significant value 0,000. Because the significant value $0,000 < 0,05$ so that it concluded H_a accepted which is there is impact of the responsibility accounting significantly (X) to the production cost control (Y)

Based on the manual calculation or used application of data manager SPSS Version 20 for windows

There is the comparison value t_{count} and t_{table} is nilai $t_{\text{count}} 5,003 < t_{\text{table}} 2,042$ so it concluded H_a accepted it means that there is impact of the responsibility accounting (X) to production cost control (Y). the degrees of freedom (df) = N-2 so the degrees of freedom to look at the table is 71 with probability level $0,05 = 2,042$

Coefficient of Determination Test (R^2)

Coefficient determination used to measure the model ability in explaining variable variance independent or predictor. The value range from R^2 is 0-1. $0 \leq R^2 \leq 1$ closer to zero it means the model is not good or model variance is limited. On the other hand, the closer to one model is better.

Table 12
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.818 ^a	.714	.678	1,33022

a. Predictors: (Constant), Responsibility Accounting

Based on table 12 the value of R square 0.678. The value took effect the responsibility accounting to production cost control 67,8% while 32,2% production cost control be affected the other variable that is not accurate.

Conclusion

The research can be concluded simple linear regression equation $Y = 8,943 + 0,151 X$, which is if the responsibility accounting is improved by one unit it take effect to production cost control 0,151 or 15,1%. The comparison value t_{count} and t_{table} is $t_{\text{count}} 5,003 < t_{\text{table}} 2,042$ it concluded H_a is accepted, there is impact between responsibility accounting (X) to production cost control (Y)

Based on the conclusion of the analysis result of The Impact of Responsibility Accounting on Production Cost Control at PT. Mopoli Raya, so the suggestion of researcher is:

PT. Mopoli Raya Medan should provide the information of responsibility accounting in performance business plan of manager more adequate in order to emphasize operational costs.

PT. Mopoli Raya Medan was expected minimize deviation on budget and cost realization to get cost efficiency for managers' job appraisal tools. So the company can consider the costs in the future, make a guide and set future budget to achieve the next target well and maximally.

The researcher make the essay for reference to arrange the final project, hopefully the researcher compile better than the previous reference by having more than one reference

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