
The Implementation of Differential Analysis in Ultra-Micro Manufacturing Business

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ABSTRACT (10 PT)

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This research aims to investigate the implementation of differential analysis in ultra-micro manufacturing businesses. The literature shows the role of differential analysis in cost allocation decisions. Consideration of costs and benefits to be gained becomes the main focus when conducting differential analysis. This research was conducted with a qualitative method. This research shows that management has not applied differential analysis in calculating the cost of goods manufactured for special orders. The differential analysis plays an important role especially in the decision-making to accept or reject special orders. This research shows that the proposed alternatives can accept special orders as long as the production capacity is adequate. The research findings indicate that based on the results of the differential analysis, management should choose an alternative to buying raw materials because it is more profitable than producing them yourself. Managers should start applying differential cost analysis so that special orders can be used as an alternative to increasing company profits.

Keywords: **Benefit, Cost,** First keyword, Decision-Making, Differential Analysis, Job-Order

1. INTRODUCTION

The decision-making process is one of the crucial parts facing organizations (Rohma and Sholihah, 2022). The ability taking the right decision is influenced by the role of good governance so which could be in line with the company's goals for optimizing profit (Lutfia et al., 2020). In the business, it is also necessary to analyze the possibilities that will come, to avoid things that can harm the company. The company needs information to could determine the right action as a base-taking decision. The differential analysis could help the perpetrator's effort in getting accurate information related to the business carried out. The differential analysis could become an alternative for perpetrator effort to face all situations in the future. Analysis of costs and benefits becomes an important part that is could not be ignored.

The literature has considered differential analysis in evaluation efforts for the purchase or production of raw material (see: Bonde, 2015; Rantung, 2014; Tumbol, 2014; Permata et al., 2014; Tampubolon, 2013; Oktavian and Nugroho, 2014; Elvalina et al., 2015; Pertiwi, 2020; Maskun, 2015; Dewi, 2012; Gumolung et al., 2014; Gitasari, 2014; Nancy, 2014; Lalenoh and Pinatik, 2014; Andry, 2011; Octavians, 2014; Kusumawati et al., 2014; Tilaar et al., 2015; Lilis, 2017; Egon et al., 2016). However, the study the specific to the organization scale micro with capacity production permanent under process costing system.

The limited research that considers effort ultra micro-scale under job order costing system. This research aims to analyze implementation differential analysis to help the organization to taking decisions. This study uses ultra micro organization under the job order costing system. This research uses the qualitative method. The results show that the management still does not yet use differential analysis when to occur situations outside capacity production. Thus, organizations do have adequate tools for knowing the effectiveness of every action taken. The role differential analysis no could be ignored. Based on the results differential analysis preferably research site chooses an alternative to buying raw materials because more profitable than produce. The better choice alternative accepts order special under is at inability production capacity. The presentation of this article is sequentially followed by a literature review, research methods, discussion, and conclusions

2. LITERATUR REVIEW

The differential cost is the different cost in some conditions, compared with other conditions (Supomo, 2013). Prawironegoro (2009) explains that the definition of differential cost is different costs as a consequence of the existing level of different products resulting in different costs fixed. The differential cost is a different cost consequence of existence level production. Application cost differential in special decisions taken by managers about several things among others, make or buy, forward or stop, sell or process more continue, accept or reject special order. The decision to accept or reject special orders needs to discriminate prices to get profit maximum or push loss. However, the policy is only done on condition special, that is if the company has capacity idle, then the company in conditions that are not optimal, because company Secretes cost permanent in the amount a lot, while acquisition income not proportional with cost permanent that. To reduce loss, a company could make use of it with accept special orders. Specials orders are usually received with utilize idle facilities. Besides, the company only serves specials order for customers certain just because the set price for specials order is usually below market price. If the order this no limited, then policy discrimination price precisely will destroy the regular market. Conditions that must fulfill special orders could be accepted, including considering that capacity production company still there are unemployed, as well as existing market separation between sale cost with the sale for serve order special.

3. RESEARCH METHOD

This research used the qualitative descriptive method. Qualitative descriptive is something purposeful method describe, compare, giving a description company, and explain some data later analyzed so that could conclude following information and data that have been there. Method data collection used. First, the research field namely to get results expected to research, then required data and information to support the study. To obtain data and results with an interview, that is technique data collection with Street stage Interview direct with the competent and responsible party for providing the required data and information. Direct observation is the technical data collection with the method observed and review straight away. That thing meant to get confidence that the data obtained previously is true and to get a real picture of activity operations at the company.

4. RESULTS AND ANALYSIS

This research focus on differential analysis expected could help a company intake decision for produce or purchase, and receive or reject special order. Halim et al (2013:21) explain that costs based on behavior are changing pattern costs concerning change in activity volume on activity company for example the volume of production and sales. Following is the calculation cost from company X for production.

Table 1. Raw Materials (Produce)

Subject Cost	Amount	Unit Price	Amount Cost
Cost Material A	5 kg	Rp. 5,000	Rp. 25,000
Cost Material B	2 Tie	Rp. 5,000	Rp. 10,000
Cost Material C	1 kg	Rp. 10,000	Rp. 10,000

Source: Primary Data, Total Cost Raw Material For Produce 100 Units/Day

Table 2. Raw Materials (Buy/Purchase)

Fee Name	Amount	Unit Price	Amount Cost
Cost Material A	5 kg	Rp. 5000	Rp. 25,000
Cost Material B	1 bottle	Rp. 12,000	Rp. 12,000
Cost Material C	1 bottle	Rp. 12,000	Rp. 12,000

Source: Primary Data, Total Cost Raw Material For Produce 100 Units/Day

Table 3. Labor (Produce)

Fee Name	Number of working hours	Cost per hour	Amount Cost
Material A	15 hours	Rp. 2,000	Rp. 30,000
BC Material	10 hours	Rp. 1,000	Rp. 10,000

Source: Primary Data, Total Cost Raw Material For Produce 100 Units/Day

Table 4 Labor (Purchase)			
Fee Name	Number of Working Hours	Hourly Fee	Amount Cost
BC Material	15 hours	Rp. 2000	Rp. 30,000

Source: Primary Data, Total Cost Raw Material For Produce 100 Units/Day

Table 5 Factory Overhead			
Fee Name	Amount	Unit Price	Amount Cost
Topping X	1 kg	Rp. 19,000	Rp. 19,000
Topping Y	250 grams	Rp. 56	Rp. 14,000
Jam	500 grams	Rp. 16	Rp. 8,000
Plastic A	100pcs	Rp. 130	Rp. 13,000
Paper	100pcs	Rp. 100	Rp. 50,000
Plastic C	100pcs	Rp. 1,000	Rp. 100,000

Source: Primary Data, Total Cost Raw Material For Produce 100 Units/Day

Table 6 Analysis Income in Buy or Produce (Raw Material)		
	Buy	Produce
Production Unit	5 kg	5 kg
Selling Price	Rp. 10,000	Rp. 10,000
Income	Rp. 1,000,000	Rp. 1,000,000
Raw Material	Rp. 49,000	Rp. 45,000
Labor	Rp. 30,000	Rp. 40,000
Factory Overhead	Rp. 204,000	Rp. 204,000
Total Cost Differential	Rp. 283,000	Rp. 289,000
Profit Differential	Rp. 717,000	Rp. 711,000

Source: Primary Data, Total Cost Raw Material For Produce 100 Units/Day

Could be seen from Table 6 that the election alternative buys raw produce profit Rp. 6.000,- higher than produce. Besides, choosing to buy raw materials is more efficient time so the cost of power work is directly issued even more a little than the produce. So that decisions can be taken based on results analysis of differential namely the effort to buy raw material because will produce more profitable than produce.

Table 7 Analysis Differential in Accept or Reject Special Order			
	Without Special Order	Special Order	Difference
Sales: 100 x Rp. 10,000	Rp. 1,000,000		
Special Order: by Sama Jaya Collection 1000 x Rp. 20,000		IDR 20,000,000	
Income Differential	Rp. 1,000,000	Rp. 20,000,000	Rp. 10,000,000
Cost Variables :			
- Cost Ingredient Raw : 49,000 x 9	Rp. 49,000	Rp. 441,000.	
- Labor Cost _ Direct : 30,000 x 9	Rp. 30,000	Rp. 270,000	
- Factory Overhead Cost : 204,000 x 9			
Total Cost Variable	Rp. 204,000	Rp. 16,524,000	
	Rp. 283,000	Rp. 17,235,000	Rp. 16,956,000
Profit Differential	Rp. 717,000	Rp. 2,765,000	Rp. 2,408,000

*The nominal of BBB, BTKL, and BOP refers to Table 6

Could be seen from Table 7 that the election alternative accept order could produce a profit of Rp. 2.408.000,- higher than previously without order special. So that decisions that can be taken based on results analysis differential are accepted order special from Sama Jaya Collection as much as 1,000 units because could add profit.

The results of the study explain that companies can make decisions to accept special orders because they have the potential to provide profits for the company. There is an idle capacity that can be used to benefit

from receiving special orders using differential analysis. The full costing calculation to determine the cost per unit has the potential to make management reject special orders because the cost per unit exceeds production costs. However, if analyzed using the differential cost method by eliminating the indirect labor costs and other non-production costs, it shows that there are advantages to special orders. Therefore, based on differential analysis, management can receive special orders to optimize company profits.

Differential cost analysis can be used to increase company profits in receiving special orders. The findings of this study are in line with Andry (2011) that prices are greater than variable costs so that orders offered by clients can be accepted. This finding is also in line with Gitasari (2014) that the selling price of special orders is greater than the variable costs incurred by the company so that orders offered from clients can be accepted. This study supports Nancy (2014) that the price offered for special orders is greater than the variable costs so special orders are potentially profitable if accepted. So the results of the study also show that special orders can be accepted as long as they do not exceed production capacity because the selling price is greater than the variable costs incurred.

5. CONCLUSION

This research gives information about the role of differential analysis related to accepting or rejecting special orders as well as buying or producing raw materials. The finding study shows that from results analysis differential should company X chooses alternative buy raw material because more profitable than produce. The differential analysis recommended choosing an alternative to accept special orders from Sama Jaya Collection. For activity in the future, then get order special returns from a different order, we recommend no pegged to analyze differential this. Due to the price and quantity of orders are possible just different. Besides, it is necessary to notice that capacity production can resolve. So that analysis must be done differently, for results the analysis could more reliable.

REFERENCES

- Andry. (2011). Penerapan Biaya Relevan Dengan Menerima Atau Menolak Pesanan Khusus Pada PT Adinanta. Skripsi, Universitas Hasanudin.
- Bonde, Ryan Arius. (2015). Analisis Biaya Diferensial Dalam Pengambilan Keputusan Memproduksi Sendiri Atau Membeli Bahan Baku Pada R.M. Bakso Ba' Nyuk Nyang Manado. *Jurnal Ekonomi dan Pembangunan*. 3(1): 570-577. Universitas Sam Ratulangi Manado
- Dewi. (2012). Rancangan Biaya Diferensial Dalam Pengambilan Keputusan Menerima Atau Menolak Pesanan Khusus Pada CV Zodiak.
- Elvalina. Saerang, David dan Victorina Z. (2015). Analisis Biaya Diferensial Dalam Pengambilan Keputusan Membeli Atau Memproduksi Sendiri Dan Analisis Biaya Peluang Pada RM Pondok Hijau. *Journal Accountability*
- Gumolung, Anggreyni. Morasa, Jenny dan Stanley Kho Waladow. (2014). Analisis Biaya Diferensial Dalam Pengambilan Keputusan Menerima Atau Menolak Pesanan Khusus Pada UD Berkas Anugerah. *Jurnal Ekonomi dan Pembangunan*. 2(4): 723-731
- Gitasari, M. Tunggal. 2014. Analisis Biaya Diferensial Dalam Pengambilan Keputusan Menerima Atau Menolak Pesanan Khusus Pada UD JAYA CARD. *Jurnal EMBA*, Vol.2 No.1, pp: 420-427.
- Hansen, D.R., dan Mowen, M.M. (2016). Akuntansi Manajerial. Jakarta: Salemba Empat
- Hansen, Don.R., Maryanne M. Mowen. (2009). *Managerial Accounting*, Edisi 8. Buku 1 Jakarta: Salemba Empat
- Hansen, Don.R., Maryanne M. Mowen. (2009). *Managerial Accounting*, Edisi 8. Buku 2 Jakarta: Salemba Empat
- Kusumawati, Denis. Rahayu Sri Mangesti dan Dwi Atmanto. (2014). Analisis Biaya Diferensial Dalam Rangka Menerima Atau Menolak Pesanan Khusus : Studi Pada Suksesabiz Store Konveksi dan Sablon, Sidoarjo. *Jurnal Administrasi Bisnis*.
- Lalenoh, Ardelia dan Sherly Pinatik. (2014) "Analisis Biaya Diferensial Dalam Pengambilan Keputusan Menerima Atau Menolak Pesanan Khusus Pada UD Yunita Bakery. *Jurnal Riset Manajemen, Ekonomi, dan Akuntansi*. 2(4):743-750.
- Lutfia, C., Hidayat, W., dan Rohma, F. F. (2019). Determinan Nilai Perusahaan: Apakah Peran Pengungkapan Tanggungjawab Sosial?. *Technobiz: International Journal of Business*, 2(2), 53-58.
- Maskun, Madina Rizka. (2015). Analisis Penerapan Biaya Diferensial Dalam Menerima Atau Menolak Pesanan Khusus Pada UD Angel Bakery. *Jurnal Ekonomi dan Pembangunan*. 3(2): 1114-1122.
- Nancy, Ticoaly. 2014. Penggunaan Informasi Biaya Diferensial Dalam Pengambilan Keputusan Terhadap Pesanan Khusus. *Jurnal EMBA Vol 2 No 1*, pp: 686-695.
- Permata, Astyta. Sondakh, Jullie dan Wokas, Heinke. (2014). Analisis Biaya Diferensial Dalam Pengambilan Keputusan Membeli Atau Memproduksi Sendiri Pada UD. Nabila Jepara Meubel dan UD Jepara Furniture. *Jurnal Ekonomi dan Pembangunan*.
- Pertiwi, Galuh Ananda Remy. (2020). Analisis Biaya Diferensial Dalam Pengambilan Keputusan Menerima Atau Menolak Pesanan khusus Pada UD Sumber Rejeki Surabaya.
- Prawinegoro, Darsono. 2009. *Akuntansi Manajemen*. Edisi ketiga. Penerbit Mitra Wacana Media, Jakarta.

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- Rantung, Dewinta (2014). Penerapan Biaya Diferensial Dalam Pengambilan Keputusan Membeli Atau Memproduksi Sendiri Pada RM. Pangsit Topaso. *Jurnal Ekonomi dan Pembangunan*. 2(3):030-037. Universitas Sam Ratulangi Manado
- Rohma, F. F., dan Sholihah. (2022). The Urgency of Determining Accurate Costing Methods in the Cost of Goods Manufactured. *Neo Journal of economy and social humanities*, 1(2), 105-109.
- Supomo, Bambang. 2012. *Akuntansi Manajemen Suatu Pandang*. Penerbit BPFE, Yogyakarta.
- Tampubolon, Phamela. (2013). Penerapan Informasi Akuntansi Diferensial Dalam Pengambilan Keputusan Membeli Atau Membuat Sendiri Produk Setengah Jadi Pada UD Berkat Anugerah. *Journal of Accounting Research*
- Ticoalu, Nancy. (2014). Penggunaan Informasi Akuntansi Diferensial Dalam Pengambilan Keputusan Terhadap Pesanan Khusus Pada UD Vanela. *Jurnal Ekonomi dan Pembangunan*. 2(1): 686-695. Universitas Sam Ratulangi Manado
- Tumbol, Wanda. (2014). Analisis Dengan Menggunakan Informasi Akuntansi Diferensial Dalam Pengambilan Keputusan Membeli atau Membuat Sendiri Bakso Pada Bakso Pasuruan. *Jurnal Ekonomi dan Pembangunan*. 2(2): 1440-1447. Universitas Sam Ratulangi Manado
- Tunggal, Gitasari Monica. (2014). Analisis Biaya Diferensial Dalam Pengambilan Keputusan Untuk Menerima Atau Menolak Pesanan Khusus Pada UD Jaya Card. *Jurnal Ekonomi dan Pembangunan*. 2(3): 420-427. Universitas Sam Ratulangi Manado
- UU NO 20 Tahun 2008. <https://www.ojk.go.id/sustainable-finance/id/peraturan/undang-undang/Pages/Undang-Undang-Republik-Indonesia-Nomor-20-Tahun-2008-Tentang-Usaha-Mikro,-Kecil,-dan-Menengah.aspx>