

Determining Msme's Product Selling Price Based on Price Comparison on E-Commerce Site

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Abstract - Currently, people began to take advantage of e-commerce to reduce time with conventional shopping. With on-line shopping, people can save time, and energy because without having to visit the store, also traffic jams. In connection with this, emerged some e-commerce sites are often used as a reference for on-line shopping. From several sites, only three sites were chosen as research objects focusing on selling the price of the same product.

The initial stage of the research concluded that the determination of the selling price can not be done considering the difficulty of obtaining information from the sellers. Research is ultimately done by comparing prices obtained from two price comparison sites, to support the acquisition of information. Therefore, it is recommended in subsequent research to observe the sale of certain MSME products on various e-commerce sites and examine why the trend of sellers increases or decreases.

Keywords -E-Commerce; Sites; Price Comparison Website.

I. INTRODUCTION

The behavior of today's society gradually began to change in terms of shopping, which in appearance shopping by going to the store in the center full or even where the store opened the outlet. Over time, along with the state of the highway to the destination store, people start thinking more practical by utilizing internet shopping service or also called shopping online.

This change is marked by the hectic ecommerce site popping up. Based on research conducted by AT Kearny (business consultancy and management firm) in 2015, recorded the value of global e-commerce sales of nearly 1 trillion US dollars. The value is equivalent to 18% growth compared to 2014 (Presidenri.go.id).

By using an e-commerce site, people only need internet network to make sales or purchase transactions. Also, people can use the services of price comparison sites like www.Pricepanda.co.id, www.telunjuk.com or any other site to compare the price of a product. Thus, the public does not need to find out how much the price of a product in various e-commerce sites.

When the value of the price has been obtained, the next thing will be a subjective assessment of potential buyers to determine where the product will be purchased based on the information obtained from the comparison site. Problems will arise for the seller, whose price information from competitors is not obtained which leads the prospective buyer to withdraw from the seller because the offered price is too high.

In order for the seller can have information and manipulate it so as to offer the lowest price without having to bother looking for information from competitors, the authors make research on Business Intelligence (BI) to determine the selling price of the product.

II. MATERIALS AND METHODS

Business Intelligence (BI) is an integrated design and collection of operations such as decision support and database applications that provide the business community with access to business data easily.

There are various forms of BI applications such as multidimensional analysis such as OLAP (online analytical processing), click-stream analysis, data mining, budgeting,

business prenalisis, balanced scorecard parenting, visualization, query, reporting, chart creation and so on. (Himawan 2008)

Jayanthi Ranjan (Ranjan 2009) discloses BI components consisting of On-Line Analytical Process (OLAP), Advanced Analytics, Corporate Performance Management (Portal, Scorecard, Dashboard), Real Time BI, Data Source,

Data Warehouse and Data Mart. Meanwhile, Heribitus Himawan (Himawan 2008) put forward the stages in the making of BI. In this study using a frame of mind, which uses the stages that have been used by previous researchers and adapted to the situation as well as the object of research.



Figure 1. Research framework

To analyze the data, the first thing to do is observe the currently running system. Observations are made by searching for information of a similar product from several sites.

After the analysis is obtained, mapped the existing problem, then made the solution by designing the concept first. The resulting design can be a concept (blue print) or even the design of the application.

Research data obtained from the internet precisely from an e-commerce site whose existence can be trusted. The site to be used is lazada.co.id, tokopedia.com and blanja.com. Based on these sites, will be taken a product with the same specifications and then compared based on the supplier.

In this research, the theme of Business Intelligence where the object of research is an item sold by MSMEs. With the same goods, but the price may differ from one supplier to another supplier.

By pulling data from e-commerce sites, researchers will compare and conclude the determination of the selling price for a product. The data collected will be processed and sought to determine the selling price of a product by using the application later.

The object of research is taken from several trading sites (e-commerce) with the keyword "sambal bawang menantoe". Search results from all three sites (lazada.co.id, tokopedia.com, bukalapak.com) are shown in table 1.

Table 1. Sellers from e-commerce sites

Site	Seller
Bukalapak.com	6
Lazada.co.id	2
Tokopedia.com	4

Search results from these three sites show that with the same goods, the selling price of each seller is different from Rp 27.000 untill Rp 64.000. Therefore, it is of concern to the author why this is the case.

III. RESULT ANALYSIS AND DISCUSSION

3.1 Data Analysis

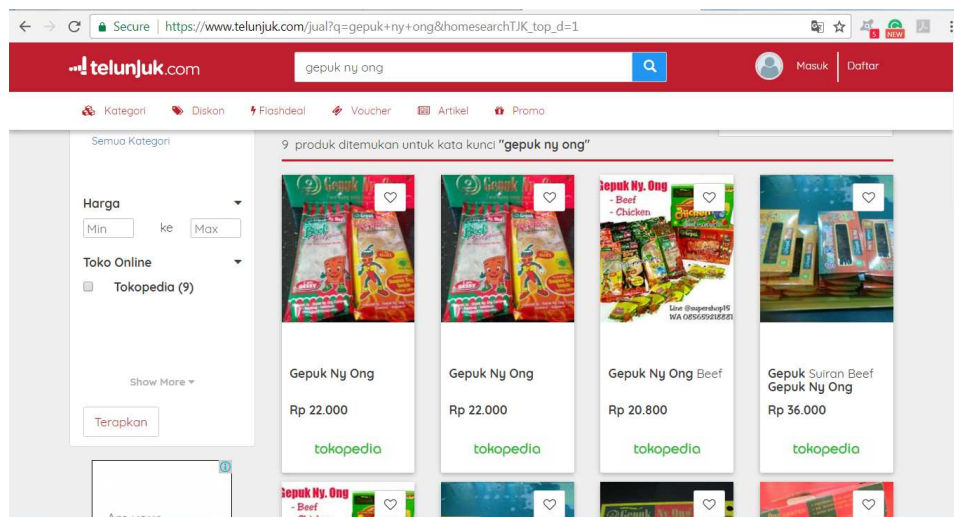
Search results by keyword as of July 20, 2018 in tokopedia, sellers who originally sold the goods shrunk to 5 sellers from the original 10 sellers. As for the seller at blanja.com, there are still no sellers who trade the gepuk, especially sambal bawang menantoe.

Determining product selling price is quite difficult, to determine the selling price, the factor of production cost is the most widely used factor. Simple sales calculations start from how much the cost incurred plus the desired profit margin.

If in figures 2 through 7 show sellers displaying MSME products, 8 to 10 shows sites that compare certain MSME products. Based on the two price comparison sites, UMKM products sold in tokopedia.com dominate price competition.

In other words, the same product from the tokopedia.com

site is recommended to be selected at a competitive price.



Picture 1.

IV. CONCLUSION

In the early stages of this Business Intelligence study, the authors observed the selling price of each seller's product incorporated in the three e-commerce sites plus the withdrawal of data based on the price comparison website.

Found, sellers who are members of the e-commerce site tokopedia.com, lazada.co.id and bukalapak.com have a number of different sellers. Based on observations obtained from this study, sellers who joined in the site tokopedia.com shrink 50% within a period of 3 months. While sellers at lazada.co.id and bukalapak.com still remain the same in the respective numbers.

V. RECOMMENDATION

For future research, it can be observed why in one of the e-commerce sites the number of sellers of MSME products decreases. While on other sites, sellers are still at the same number. In addition, it can be investigated why the sellers can provide different prices with the same UMKM products on the same site. Also, why buyers are more interested in a particular seller even though the buyer-seller's distance is relatively more distant than the other sellers.

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REFERENCES

- [1] Himawan, H., 2008. Implementasi Sistem Business Intelligence Untuk Melakukan Analisis Data Guna Mendukung Pembuatan Keputusan Manajer (Studi Kasus Di PT. Indomarco Adi Prima Semarang). *Techno.COM*, 7(Mei), pp.1–16.
- [2] Ranjan, J., 2009. BUSINESS INTELLIGENCE : CONCEPTS , COMPONENTS , TECHNIQUES AND BENEFITS. *Journal of Theoretical and Applied Information Technology*, 9(no 1), pp.60–70.
- [3] <http://presidenri.go.id/topik-aktual/membuka-dan-mengembangkan-potensi-e-commerce-di-indonesia.html>. Accessed on November 5, 2016
- [4] <http://www.bmiresearch.com/indonesia>. Accessed on October 10, 2016
- [5] <https://www.techinasia.com/7-startups-indonesia-compare-prices-online>. Accessed on November 11, 2016
- [6] <http://www.jatit.org/volumes/research-papers/Vol9No1/9Vol9No1.pdf>. Accessed on November 11, 2016
- [7] [http://www.lazada.co.id/catalog/?q=Gepuk%20Ny%20Ong%20\(Kuliner%20Khas%20Oleh%20Oleh%20Bandung\)&searchclickposition=prod1](http://www.lazada.co.id/catalog/?q=Gepuk%20Ny%20Ong%20(Kuliner%20Khas%20Oleh%20Oleh%20Bandung)&searchclickposition=prod1). Accessed on March 11, 2016

- [8] <https://www.tokopedia.com/search?st=product&q=gepuk+ny+ong>. Accesed on March 11, 2016
- [9] <https://www.motherandbaby.co.id/article/2016/1/35/5623/Ingin-Usaha-Kuliner-Tentukan-Harga-Jual-dengan-Cara-yang-Cerdas>, July 20, 2018