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## Analyzing the Effectiveness of Public e-Marketplaces for Selling Apparel Products in Indonesia

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#### Abstract

Public e-marketplace is a mean in selling products online. Unfortunately, there is limited understanding which public e-marketplace is more effective in selling specific products. This study examines the relationships concerning traffic and selling performance of public e-marketplaces. More specifically we examine for apparel products. We compare the performance of three public e-marketplaces in Indonesia namely Tokopedia, Bukalapak, and Shopee. There are three performance indicators to assess that are total sales volume, total sales amount, and total sales variances. The results indicate that Tokopedia as the highest traffic public e-marketplaces exceeds the other two public e-marketplaces. In addition, Shopee as the lowest traffic public e-marketplace proves more effectives compare to the second highest, Bukalapak.

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Keywords: e-Business; e-Commerce; Public e-Marketplace; Channel Analysis; Customer Relationship Management

#### 1. Introduction

The advancement of information technology has led to many innovations which introduces unprecedented competitive business environment [1-4]. One innovation is internet technology. Internet technologies have been enabling the improvement of mobile commerce transactions. Here, the adoption of mobile cellular network has achieved seven billion people in 2016. This number is approximately 95% of the world citizens [3]. This figures encompass other 4 billion people who have possess LTE networks which are more speedy than the regular mobile

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networks [3]. By having this information, we could glimpse that the number of online customer will increase significantly. It is assumed that by the end of 2017, online sales reach 147 million in which large portion is mobile customers [4]. Also, annual mobile sales is projected grow in Europe by 71% while Latin America and China will grows 69% and 249% [5]

Euromonitor International forecasted that in 2019 online retail transaction in Indonesia could grow four fold than that of 2015. It could value IDR 18,325 billion [6]. One method to sell online is by using public E-marketplace. Public e-marketplace is a website which contains more than one e-retailers to sell their products or services. An e-retailer may sell a product which similar to other e-retailers. Most public e-marketplaces do not directly earn any financial benefits from their e-retailers (such as subscription fee). For this reason, many e-retailers select public e-marketplace as an affordable mean to sell their products and services.

Unfortunately, selling product in one public e-marketplace does not mean an exclusive service for an e-retailer. A high internet traffic public e-marketplace does not mean an e-retailer will be easier to get customers. Each e-retailer must compete with other e-retailers to obtain customers. In the other hand, there is another lower traffic e-marketplace that offers a more niche service than that of higher internet traffic. In the internet setting, a more focus public e-marketplace may attract specific-type customers which correspond to the niche market. This can lead to a better sales closing. Also, this type of public e-marketplaces may have smaller competitors for each e-retailer in the same public e-marketplace.

The arise research question is whether a high traffic public e-marketplace will lead to a better sales deal than that of a lower traffic public e-marketplace. To answer this, we investigate three public e-marketplaces in Indonesia namely Tokopedia, Bukalapak, and Shopee. The two former public e-marketplaces are the two highest traffic public e-marketplaces while the latter is an an emerging public e-marketplace. We select apparel as the main commodity to investigate because of its market size. The apparel industry also a sector which enjoys a stable growth despite of global downturn [7]. According to McKinsey Global Fashion Index, the apparel industry increases around 5.5 percent per year. It worth USD 2.4 trillion in 2016 [8]. Similarly, NPD groups indicates that the total value of apparel industry reaches USD 218 billion (only in US) [9].

The reminding sections of this paper are organized as follows: Section 2 discusses the methodology of our research. Section 3 describes the data analysis that we conduct, Section 4 gives brief discussion of our funding and the last section provides conclusion.

#### 2. Methodology

The methodology employed in this research consists of several phases. First, we identify suitable measurement variables for all three public e-marketplaces. This phase is important since each public e-marketplace has different naming standard for measurement variables as shown in the following table. By identifying these variables, we can assure that the comparison can be carried out. Furthermore, based on the variables, we can develop crawler for data gathering (see Table 1).

| Tuble 1. Weasurement variables. |   |  |  |
|---------------------------------|---|--|--|
| Variables                       | Tokopedia                                 | Bukalapak  | Shopee   |
| Sales Volume                    | Sold                                      | Sold   | Sold   |
| Sales Amount                    | Price in<br>IDR*Number of<br>product sold | Price in<br>IDR*Number of<br>product sold          | Price in<br>IDR*Number of<br>product sold          |
| Sales Variance                  | Sold Product                              | N/A (Need furher<br>processing for<br>calculation) | N/A (Need furher<br>processing for<br>calculation) |

Table 1. Measurement variables.

After we determine the measurement variables, we elicit data from public e-marketplaces by utilizing crawler. We gather data for 70 days with more than 40 types of product in each public e-marketplace. The last phase is data

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