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## **A Study of The Best Selling Smartphone in The Two Biggest Marketplace in Indonesia**

**Alfian Budi Primanto<sup>1)</sup>, M. Khoirul ABS<sup>2)</sup>, Afi Rahmat Slamet<sup>3)</sup>**

1), 2), 3) Faculty of Economics, University of Islam Malang, Indonesia  
E-mail: alfianprima@unisma.ac.id

### **Abstract**

The number of entrepreneurs in Indonesia has increased significantly in the past decade. Many entrepreneurs expand their business into digital by using marketplace platform. Although, there are a lot of entrepreneur use digital landscape to scale up their business, many online business ended in failure. This research aims to answer the following questions; what is the success factor of smartphone campaign in the Indonesia marketplace platform? Is there any difference success factor between each marketplace platform? The researcher uses secondary data, simple random sampling, and binary logistic regression modeling for the purpose to answer research questions. Interestingly, this research shows that there are no relationship between seller reputation and sales acquirement. Also, there is no difference behaviour between each marketplace platform. Therefore, to be succeed in marketplace competition, each seller should pay attention to their price competitiveness while at the same time find the best option to increases their number of store page views.

**Keywords:** marketplace, reputation, prince, sales, views, binary logistic regression

### **Introduction**

Internet usage is growing so rapidly around the world. This growth is creating business opportunities through digital landscape. E-commerce is one type of digital business that try to get advantage from the usage of the internet. E-commerce itself is an extension of traditional/retailing commerce (Strauss and Frost, 2009). E-commerce can be divided into five activities like listing, online marketplace, shopping mall, online webstore, social media store, and crowdfunding (Pradana, 2015). As the result of the technology advances, purchasing good and services through e-commerce have become increasingly popular and commonplace activities lately.

E-commerce present much opportunities in the emerging countries like Indonesia. With 250 million population and rapidly growing internet adoption, Indonesia overtook Singapore and Thailand to emerge as the largest e-commerce market in ASEAN with expected online sales of \$130 Billion by 2020 (Wu et al, 2015; Sinha, 2017). According to Google Indonesia findings, Hamdi (2017) added that the number of Indonesian consumers who shop through online marketplaces has reached 81 million people from 100 million internet users by 2017. E-commerce also owned the highest growth rate of e-economy sectors in Indonesia annually by 39% annual growth rate. Usability, convenient, cost-time efficiency, services experiences, the availability of product/services offered, the detailed information and

price comparison is the main reason for people to shop online (Wang et al, 2005; Lim and Dubinsky, 2004; Prasyad and Aryasri, 2009).

Despite the fact that Indonesia offers vast opportunities for the growth of e-commerce sector, many online business/seller ended in failure. Previous research from Primanto et al (2017) shows that only 29% online seller who can make a sales while the rest of them were ended with a null sales acquirement. Primanto et al (2017) added that the number of store pages views and price competitiveness is the crucial factor that need to be controlled and strategize by online sellers to get more sales acquirement. Interestingly, Primanto et al (2017) research also concludes that there is no relationship between seller reputation and sales acquirement. This conclusion is contradictory with another previous research that stated seller reputation has a positive and significant relationship toward consumers purchase decision (Melnik and Alm, 2002; Ye et al, 2009, Cabral and Hortacsu, 2010; Pan et al, 2013).

Therefore, as the research recommendation from Primanto et al (2017), researcher added Bukalapak as the research study to get more in-depth understanding about the effect of store page views, seller reputation, and price on sales acquirement and to answer the research question, is there any difference success factor between each marketplace platform? As the research object, researcher chooses Samsung Galaxy J1 Mini (also known as J1 Mini) due to the reason that J1 Mini classified as the Indonesia best selling smartphones of 2016 by Counterpoint Research (Rifai, 2016).

## **Research Method**

### *Research Design*

Researcher uses secondary data, simple random sampling, and binary logistic regression modeling in answering research questions and testing the hypotheses. Researcher decided to focus on one type of product which is smartphones (Samsung Galaxy J1 Mini). The reason in choosing those specific product category/brand is that mobile phones posted as the fourth most online favorite product in Indonesia (Saroh, 2016). While Samsung Galaxy J1 Mini considered as the Indonesia best selling smartphones of 2016 by Counterpoint Research (Rifai, 2016). Tokopedia and Bukalapak was chosen as the research location due to the reason that Tokopedia and Bukalapak awarded as the best Indonesia E-Commerce Award (Marketplace) and considered as the highest e-commerce traffic in Indonesia (Ningrum, 2015). Totally, researcher uses about 366 selected data to be processed for analytics requirement. This number of cases was fulfill the minimum of cases required for logistic regression modeling which is 10 cases per independent variable (Andrew, Pedersen, McEvoy; 2011).

### *Research Variables and Framework*

This research consists of three independent variables (store page views, seller reputation and price) and binary dependent variable (sales acquirement, sales and no sales). The research framework that was proposed by the researcher to answer research questions can be briefly described in Figure 1.

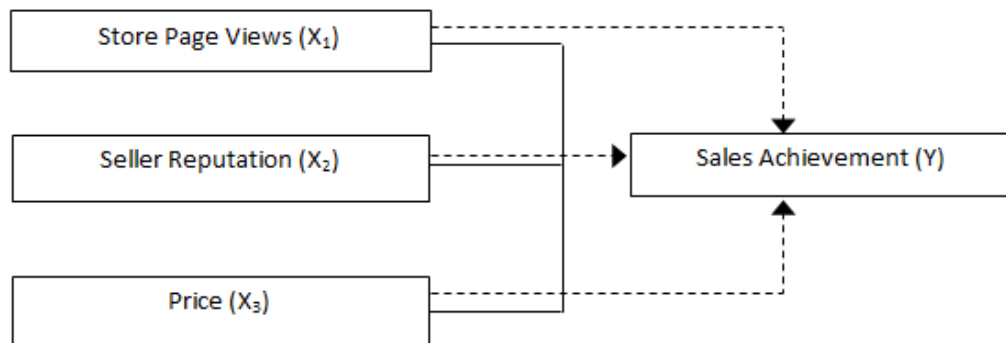


Figure 1 Research Framework

## Result and Discussion

### Result

The following table shows that from 369 seller of Samsung Galaxy J1 Mini in Tokopedia and Bukalapak only 44% or 163 seller who can make a sales while the rest of them (or 201 sellers) were ended with a null sales acquirement. Moreover, the researcher also added that there are 3 sellers controlling more than a half of Samsung Galaxy J1 Mini market share in each marketplace, Bukalapak and Tokopedia. Total sales revenue of Samsung Galaxy J1 Mini in Tokopedia itself estimated to reach Rp. 1.449.613.000,-. While in Bukalapak reached Rp. 3.584.272.000,-. Bukalapak also tends to have more average views than Tokopedia (5:1).

Table 1 Sales Data Resume

	Sales	No Sales	Total
Tokopedia	79	103	182
Bukalapak	84	98	182
Total	163	201	364

Researcher uses Hosmer-Lemeshow (HL) tests to decide whether the model is correctly specified compares the actual and predicted values of the dependent variable (McAlexander, Koenig, and DuFault; 2014). The model requirement that uses by researcher to determine whether the model was good enough to predict the values is if the HL test produce significant value that higher than 0.05 then the model passes the test and the hypotheses testing can be continued (Ghozali; 2009, Allison; 2012). Based on table Hosmer-Lemeshow (HL) Test below, it seems that the Hosmer and Lemeshow Goodness-of-Fit score for Bukalapak is 6.232 and the Hosmer and Lemeshow Goodness-of-Fit score for Tokopedia is 10.684 with significant values that higher than 0.05 (0.621 and 0.220) therefore we can conclude that the model accepted.

Table 2 Hosmer and Lemeshow Test

Cases	Chi-square	Sig.	Cox & Snell R Square	Nagelkerke R Square
Bukalapak	6.232	.621	.427	.572
Tokopedia	10.684	.220	.453	.605

In measuring R-Square, or the effect of independent variables toward dependent variables Researcher uses The Cox and Snell R-Square and Nagelkerke R-Squared score which represents the proportion of variance explained by the model (Pseudo R-Square). Based on table above, The Nagelkerke R-Squared score for Bukalapak and Tokopedia are more than 50% (57.2% and 60.5%). It can be concluded that there are morethan 50% of

variations can be explained by the proposed model. These values also represents high signifying a good fit for the model (Hosmer and Lemeshow, 2000).

The proposed log-regression model for Bukalapak cases can be described as below

$$\ln \left[ \frac{\pi(x)}{1-\pi(x)} \right] = 5.950 + 0.004 \text{ Store Pages Views} - 0.007 \text{ Price}$$

And the proposed log-regression model for Tokopedia cases can be described as below

$$\ln \left[ \frac{\pi(x)}{1-\pi(x)} \right] = 3.655 + 0.010 \text{ Store Pages Views} - 0.005 \text{ Price}$$

The Wald statistics and the significance level from table 3 shows that seller reputation for both marketplace (Tokopedia and Bukalapak) is out from the model because its had significance value that more than 0.05 (0.447 and 0.807). Researcher also added that, the proportion of the correctly classified seller that make a sales at Bukalapak was 91.3% and the proportion of the correctly classified seller that make null sales at Bukalapak was 67.1%. The overall predicted model correct classification was 80.8%. While the proportion of the correctly classified seller that make a sales at Tokopedia was 91.8% and the proportion of the correctly classified seller that make null sales at Tokopedia was 76.2%. The overall predicted model correct classification was 84.6%.

Table 3 Binary Logistic Regression

Variables	B	S.E.	Wald	df	Sig.	Cases
Views	.004	.001	21.387	1	.000	Bukalapak
Reputation	.000	.000	.059	1	.807	
Price	-.007	.003	4.283	1	.038	
Constant	5.950	3.610	2.717	1	.099	
Views	.010	.002	17.612	1	.000	Tokopedia
Reputation	.000	.000	.578	1	.447	
Price	-.005	.003	3.836	1	.050	
Constant	3.655	2.866	1.626	1	.202	

### Discussion

Primanto, et al (2017) concluded that there is no relationship between seller reputation and sales acquirement. Although this argument may contradictory with another previous research about brand image and brand reputation (Melnik and Alm, 2002; Ye et al, 2009, Cabral and Hortacsu, 2010; Pan et al; 2013), researcher argues that there is differences between digital and conventional consumers in term of their behaviour. Digital business (online marketplace) consumers usually just type or uses search box future in order to get their product preferences. Then, the marketplace recommendation system will publish store page list to consumer. Consumer then can customized its store page list based on their preferences like based on best seller, best price, location, best reputation, and others. Therefore, it can concluded that seller reputation is just an options for consumer in selecting their preferences. Figure 2 shows that more than 50% seller who has a good reputation

(beyond average) still struggle with sales acquirement at Bukalapak and Tokopedia. Moreover, the good reputation of marketplace vendor that provide interface between buyer and seller (like Tokopedia and Bukalapak) itself is enough to make consumer believes in making purchase decision. Consumers perceived risk will be lower when the marketplace vendor is more well-known (Dawar and Paker, 1994; Purohit and Srivastava, 2001; Biswas and Biswas, 2004; Chu and Li, 2008).

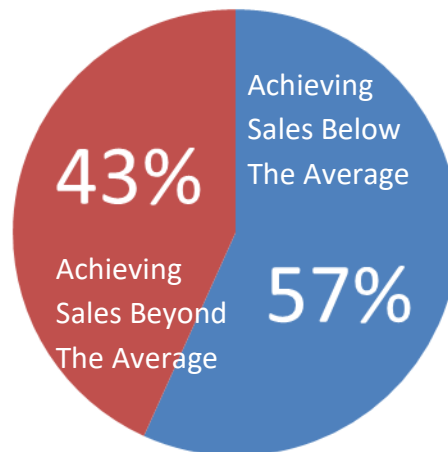


Figure 2 The Proportion of Good Sales Reputation Toward Sales Acquirement

This research support Perdikaki, Kesavan, and Swaminathan (2012) conclusion who stated that the more the number of store page viewers (visitor) will increases the sales acquirement, as the higher traffic will lead more opportunities for sales. Converting traffic to store page into sales is critical for every online retailer. Therefore, it's better for online retailer to target the high purchasing probability consumer than regular purchasing probability consumer (Moe and Fader, 2000). Regarding the research conclusion which stated that there is negative and significant effect of price toward sales acquirement, its support the law market of demand which stated that if the other factors being constant (*ceteris paribus*), a higher price leads to a lower quantity demanded and a lower price leads to a higher quantity demanded. This research also support previous research from Morton, Zettelmeyer, and Silva-Risso (2001), Friberg, Ganslandt, Sandstrom (2001), Zettelmeyer, Morton, and Silva-Risso (2005) who stated that consumers always use the Internet to get the best price (lower prices) offering.

### Conclusion and Suggestions

This research concludes that there is a positive and significant relationship between store page views and sales acquirement. It means that the more the number of store page viewers (visitor) will increases the sales acquirement, as the higher traffic will lead more opportunities for sales. This research also concludes that there is a negative and significant relationship between price and sales acquirement. It means that a higher price leads to a lower quantity demanded and a lower price leads to a higher quantity demanded. Interestingly, this research shows that there is no relationship between seller reputation and sales acquirement. It seems that seller reputation is just an options for consumer in selecting their product/brand preferences. They only uses the internet to get the best price (lower prices) offering.

Therefore, based on the conclusions of this research, researcher recommends marketplace vendor (Tokopedia and Bukalapak) to improves their recommendation systems

by including seller reputation as one of their ranking factors. Seller who has more page views, best reputation, and best prices offering should be ranked in first page of every product listing. Secondly, researcher recommends seller to improve their conversion rates by targeting the high purchasing probability consumer using their own store website and any social media channels. Hopefully, by using those strategies it can helped seller to optimize sales and get more targeted traffic through effective landing pages (the first page that a visitor lands on as the result of traffic acquisition efforts).

This research are limited in several ways. Therefore, for the purpose of generating more in-depth understanding about the effect of seller reputation toward sales acquirement, future research should be done by including diverse product categories/brand and investigate the effect of the number of store page views, seller reputation, and price toward sales acquirement between local and global marketplace vendor like an Amazon and Taobao.

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