Effects of Disruptive Innovation on the Employment Status and Income of Migrants and Non-migrants Engaging in Online Transportation, the City of Palembang

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Abstract: This study was intended to explain how disruptive innovation, that is, online transportation affected the employment status and income of migrants and non-migrants in the City of Palembang. It employed a quantitative descriptive approach and acquired the data through surveys, with a sample size of 384 respondents working in a mobility service provider, GoJek. Then, the collected data were processed in a statistical analysis tool, SPSS 23, using the feature Cross Tabulation. The results showed that online transportation provided an opportunity for both unemployed and already employed populations. Also, it attracted migrants and non-migrants to either quit or keep their first jobs in formal and informal sectors and work as online motorcycle taxi drivers. Relatively high income enticed many of them into earning a living solely from online transportation. However, some chose to undertake another job to receive additional income and, expectedly, improve their welfare and life standard.

1 INTRODUCTION

Disruptive innovation can have positive and negative impacts depending on how people or companies deal with it. For instance, it is likely to lead to positive outcomes if companies turn it into a challenge in running their enterprises or if individuals perceive it as a potential source of income. On the contrary, failing to adapt may result in negative consequences. Companies built traditionally can be disturbed by innovations that make use of technology, which continually gives birth to new business models (Bower and Christensen, 1995). Disruptive innovation induces a competitive situation for companies that have been around for a long time to continue to exist in the world of business. Unable to treat disruptive innovation as a challenge may have repercussions like loss of profits for previously successful companies (Christensen et al., 2015). The market of ordinary companies is exposed to disruption due to new technologies (Faisal, 2015), including online transportation.

One of the newest services in m-commerce is online transportation (Silalahi et al., 2017), and its users do not need access to a personal computer (Clarke III, 2008). It is a transportation service that the public can order with only their smartphone (Nurhidayah et al., 2017), which connects drivers to passengers (Wallsten, 2015) (Watanabe et al., 2016). This way, online transportation offers time efficiency in finding a means to move from one place to another (Farin et al., 2016). Many people in Indonesia, including Palembang, have felt this benefit.

Palembang is one of the cities in Indonesia and the only one in South Sumatra Province that has an online mobility service provider. Focusing on an online transportation company, GoJek, this paper describes how it creates occupational opportunities for migrants and non-migrants who are either unemployed or already employed. It will also result in the transfer of work for those who previously worked in the for-

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mal or informal sector. A variety of reasons underlie their decision to work in this company, for example, presumably high income and flexible working hours. Although formal employment is typically associated with high education and income, people already engaging in it potentially exhibit particular interest in working in online transportation, which is an informal sector that is commonly characterized by low education and income (Bambang and Saputra, 2015).

This research is based on the existence of research on online transportation in Indonesia that focuses on customer satisfaction (Santoso and Nelloh, 2017), the influence of online transportation user behavior that is there are a variety of services, perceived pleasure and innovation (Septiani et al., 2017). In addition, other research that focuses on the quality of online transportation services is the ease of using services (Silalahi et al., 2017). The novelty in this study lies in the object of research not on users of online transportation services, but on online transportation workers. Therefore, research on Effects of Disruptive Innovation on the Employment Status and Income of Migrants and Non-migrants Engaging in Online Transportation, the City of Palembang becomes inherently fascinating to analyze.

2 RESEARCH METHODS

This quantitative research employed a descriptive approach. Data collection techniques using a survey with a questionnaire as a research instrument. The supporting data were collected through surveys from a sample consisting of 384 respondents who worked at an online transportation company (GoJek). These data were then processed in an analysis tool, SPSS 23, using the cross-tabulation feature. The flow chart of this research is as follows:

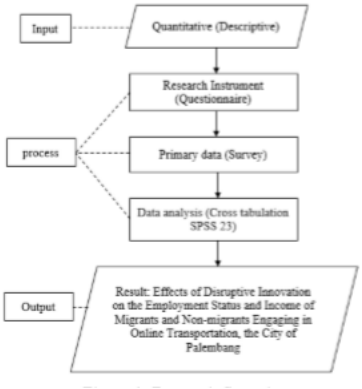

Figure 1: Research flow chart

3 RESULTS AND DISCUSSION

3.1 The Employment Status of Migrants and Non-migrants before Working at an Online Transportation company (GoJek)

Before online transportation, migrants and nonmigrants earned a living in various sectors. Some had been engaged in the formal industry as, among others, staff in companies, teachers, and bank employees, and the informal sector, including fruit vendors and transport workers. Some others had been unemployed. Figure 2 shows the economic activities that migrants and non-migrants practiced before working as motorcycle taxi drivers at GoJek.

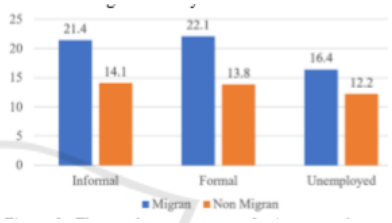

Figure 2: The employment status of migrants and nonmigrants before working at gojek company

Based on Figure 2, migrants and non-migrants had different employment statuses before working at GoJek. The highest percentage (i.e., 22.1%) was migrants previously engaged in the formal sector, whereas the lowest one (16.4%) was migrants who were initially unemployed. As for the non-migrant respondents, most of them previously earned a living from the informal sector (14.1%), and a fewer number of them were unemployed (12.2%). In other words, before working at GoJek, some migrants and non-migrants did not have sources of income, while some others were already employed either formally or informally. Based on the sector of employment, the majority of migrants worked in the formal industry before holding down a job at GoJek, while the largest share of non-migrants had informal employment.

Both migrants and non-migrants seemed to be interested in working at GoJek regardless of their former occupations in formal and informal sectors. Such interests are indeed inseparable from economic determinant, that is, income. The opportunity to receive an even higher one than in their previous employments attracts more people to work for GoJek. The leading reason for working in an online transportation company is flexible working hours (Nurhidayah et al., 2017), followed by the potential for earning a high income (Hall and Krueger, 2018). For instance, in San

Francisco in 2013, onethird of the 8,500 registered taxi drivers resigned and chose to work at an online mobility service provider called Uber (Essif, 2014). This type of service industry offers job opportunities for unemployed and already employed migrants and non-migrants (Anwar, 2017).

3.2 The Other Occupations of Migrant and Non-migrant Motorcycle Taxi Drivers at an Online Transportation Company (GoJek)

Some migrants and non-migrants were solely transport workers at GoJek, but some others chose to undertake another occupation. Figure 3 below presents data on the proportions of migrants and non-migrants based on their second jobs.

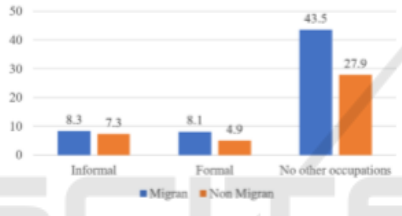

Figure 3: The other occupations of migrant and nonmigrant motorcycle taxi drivers at an online transportation company

Figure 3 shows that migrants and non-migrants chose to work two jobs. Informal employment had the highest percentage, i.e., 8.3% in migrants and 7.3% in non-migrants. These results indicate that working at GoJek does not prevent them from undertaking two jobs. Having two occupations means earning a living from two sources and, thereby, generating higher income. Some transport workers at GoJek strive to gain this benefit.

Although some migrants and non-migrants had other occupations, those who did not were dominant, namely 43.5% and 27.9%, respectively. This finding suggests that most of them want to focus on working as online motorcycle taxi drivers, which requires them to reach a preset target point for a higher income. Seeking to attain this, they do not keep another occupation. It is believed to be the effect of disruptive innovation, that is, a business model that can interrupt other existing enterprises (Isaac and Davis, 2014) and, consequently, persuade people to leave their previous work in one particular business and move to online transportation. Ride-hailing services offer flexible working hours, and, for this reason, drivers can manage their schedule by themselves (Watanabe et al., 2016) and earn better income (Fanggidae et al., 2016).

3.3 The Income of Migrants and Nonmigrants before Working at an Online Transportation Company (GoJek)

Before working for GoJek, the income of migrants and non-migrants with formal and informal employment ranged between <IDR 1,000,000 and >IDR 3,000,000. Figure 4 summarizes the distribution of these research subjects based on their monthly income before working at an online transportation company.

No	Employment status	Regions of origin	Income before working at GoJek (%)					Total
			No Income	< IDR 1.000.000	> IDR 1.000.000 – 2.000.000	> IDR 2.000.000 – IDR 3.000.000	> IDR 3.000.000	
1	Informal	Migrants	-	8.1	13.3	-	-	21.4
		Non-migrants	-	5.0	9.1	-	-	14.1
2	Formal	Migrants	-	1.3	4.1	12.0	4.8	22.2
		Non-migrants	-	-	6.0	6.2	1.5	13.7
3	Unemployed	Migrants	16.4	-	-	-	-	16.4
		Non-migrants	12.2	-	-	-	-	12.2
Total			28.6	14.4	32.5	18.2	6.3	100.0

Source: Data analysis 2019

Figure 4: The monthly income of migrants and non-migrants before working at gojek.

Prior to working at GoJek, both migrant and non-migrant motorcycle taxi drivers generated different amounts of income. Based on the largest proportions among the income group, 13.3% migrants and 9.1% non-migrants earned IDR 1,000,000-2,000,000. As for those working previously in the formal sector, the highest percentages were 12% migrants and 6.2% non-migrants with incomes between ¿IDR. 2,000,000 and IDR 3,000,000. In other terms, although both migrants and non-migrants earn a substantial amount of income, they continuously work at GoJek. Online transportation companies give millions of people a chance to improve their standard of life (Nurhidayah et al., 2017). Therefore, many people decide to work for these companies even though they have already earned a relatively large income before. They undertake this job indeed because of one leading factor, that is, receiving an additional income (Izzati, 2016) (Anwar, 2017).

3.4 The Income of Migrants and Nonmigrants Generated from Working at an Online Transportation Company (GoJek)

Migrants and non-migrants who entered the online transportation networks earned varying amounts of income, namely >IDR 1,000,000 - 2,000,000, > IDR 2,000,000 - 3,000,000, and >IDR 3,000,000. These data are presented in Figure 5.

Figure 5 above shows that migrants and nonmigrants received different amounts of monthly incomes from working at GoJek. Around one-third of them,

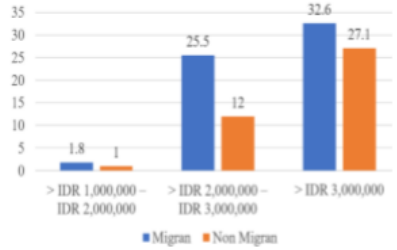

Figure 5: The income of motorcycle taxi drivers at GoJek

precisely 32.1% of the former and 27.1% of the latter, generated >IDR 3,000,000 per month. These results prove that working as motorcycle taxi drivers can increase their earnings. Also, none of them received below IDR 1,000,000. In other words, those who were unemployed or already employed prior to their jobs at GoJek earned upwards of IDR 1,000,000. These findings express the benefit of disruptive innovation, that is, helping workers to make a substantial amount of income. Online transportation applies the concept of sharing economy (Wahyuningtyas, 2016) that all workers have the same opportunity to earn income, whose rate depends on the target points they have achieved. Therefore, the majority of them invest their time and resources in online transportation (Isaac and Davis, 2014).

3.5 The Incomes Generated by Migrants and Non-migrants at an Online Transportation Company from Other Sources (GoJek)

Some transport workers at GoJek also tried to earn a living from other sources. This income was categorized into five classes, namely no income, <IDR. 1,000,000, between IDR 1,000,000 and 2,000,000, between > IDR 2,000,000 and 3,000,000, and >IDR 3,000,000, as presented in Figure 6 below.

No	Employment Status	Regions of Origin	Incomes generated from different sources beside GoJek					Total
			No Income	< IDR 1.000.000	> IDR 1.000.000 – 2.000.000	> IDR 2.000.000 – IDR 3.000.000	> IDR 3.000.000	
1	Informal	Migrants	-	5.4	2.8	-	-	8.2
		Non-migrants	-	5.2	2.1	-	-	7.3
2	Formal	Migrants	-	-	0.4	4.4	3.4	8.2
		Non-migrants	-	-	0.4	2.8	1.8	5.0
3	No Income	Migrants	43.5	-	-	-	-	43.5
		Non-migrants	27.8	-	-	-	-	27.8
	Jumlah		71.3	10.6	5.7	7.2	5.2	100.0

Source: Data analysis 2019

Figure 6: The incomes generated by motorcycle taxi drivers at GoJek from other occupations.

Based on the highest percentages in Figure 6 above, migrants and non-migrants had no other incomes. However, small proportions of them similarly showed other sources of income from formal and informal employments. In the formal sector, less than 10% of migrants (8.2%) and nonmigrants (5.0%) earned IDR1,000,000-2,000,000, >IDR2,000,000-3,000,000, and >IDR 3,000,000; also, none of them received below IDR 1,000,000. In the informal sector, only a small share of migrants (8.2%) and non-migrants (5.0%) received <IDR 1,000,000 and >IDR 1,000,000-2,000,000.

The results of this study indicate that disruptive innovation can help migrants and non-migrants to multiply their earnings, specifically from working as motorcycle taxi drivers and in either formal or informal sectors. In other terms, it can increase not only their financial input but also their welfare or life standard. Flexible jobs at an online transportation company allow workers to generate income from it in addition to one from other occupations (Hall and Krueger, 2018).

4 CONCLUSIONS

Disruptive innovation, that is, online transportation has created opportunities for both unemployed and already employed persons. It attracts migrants and non-migrants to leave their previous employments in the formal and informal sectors and move to an online mobility service provider. Sufficiently high income has made most of them focus on working at this company without having other sources of income. Nevertheless, some keep their old occupations, and for them, holding two jobs at the same time means earning an additional income to improve their welfare and standard of life.

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