

## Is It Possible to Apply Gig Economy for Farmer in Indonesia?



Siti Rochaeni

Faculty of Science and Technology, State Islamic University Syarif Hidayatullah Jakarta

**ABSTRACT:** The gig economy keeps growing along with the development of digital technology and internet accessibility. The gig economy already applied to various sectors, especially to digital-based jobs. The gig economy is going to optimize the farmer performance only is the farmers have the knowledge of digital technology, internet access, and the digitalized farming system. This research approached the farming activities and the farming environment that affected the application of the gig economy. The gig economy can apply to the farming activities that required more labour, such as planting, harvesting, and product marketing. The offline gig worker can involve in the planting and harvesting activities. The online gig worker can participate in the product marketing activities using the reseller or drop-shipping system to reach deeper into the market. The internal factor that should get attention is the farmer's readiness to hire the gig worker, especially the labour training. The external factors that should get attention are government policies, applicable law, and the health issue due to current pandemics condition.

**KEYWORDS:** Gig economy, Gig farming, Digital farmer, Online marketing

### I. INTRODUCTION

Indonesia's economy is facing the challenging time due to the global pandemic in 2020 which hit both the demand and supply side of the economy [1]. The pandemic of Covid-19 affected the economic activity in Indonesia, including the mass dismissal of employment [2] and panic buying [3]. The gig economy could support economic resilience in Indonesia by providing jobs and business opportunities [4].

Food security is important during a pandemic due to efforts to limit mobility and panic buying that affect food supplies [5]. Agricultural inputs, farms, food processing, and distribution are need attention so that food can flow in adequate amount from farm to fork [6]. Farmers and other workers in agriculture need to keep working to meet agricultural needs while maintaining health protocols related to pandemic situations. The next step in feeding the world's rapidly growing population involves self-driving tractors, precision farming, and Internet of Things sensors to quantify agriculture in vast new ways [7].

The gig economy keeps growing along with the development of digital technology and internet accessibility. The gig economy already applied to various sectors, especially to digital-based jobs. Some gig jobs are available to be done online, while other must do the offline jobs, such as food delivery, day-labour, and odd-jobs task [8]. The gig economy is a source of income from informal sectors by relying on digital technologies through third-parties platform as a connector between the gig worker and the employer [9]. To enter the gig economy, internet access and digital literacy is a must. The gig economy is going to optimize the farmer performance only is the farmers have the knowledge of digital technology, internet access, and the digitalized farming system.

The pandemic has also increased internet access and the use of digital technology. It can be an opportunity for farmers to open insights into digital technology and take advantage of the gig economy to increase agricultural productivity. Therefore, this research aimed to analyse the readiness of Indonesian farmers to implementing a gig economy in their farming systems.

### II. METHOD

This paper used secondary data from scientific articles and official government publications. The data was summarized to predict the future possibility of applying gig economy for farming activities. The data was analysed by Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis.

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The SWOT analysis used the farmer as the object. The strengths and weaknesses are based on the farmer's internal environment, such as competency, skill, and capability. The opportunities and threats are based on the farmer's external environment, such as policy, climate, and competitiveness.

### III. RESULTS

The gig economy can apply to the farming activities that required more labour, such as planting, harvesting, and product marketing. The offline gig worker can involve in the planting and harvesting activities. The online gig worker can participate in the product marketing activities using the reseller or drop-shipping system to reach deeper into the market.

#### A. Strength Analysis

Indonesian millennial farmers, range from age 19 to 39 years old, digital literate, and got supports from the government [10]. The important factor for applying gig economy is digital literate because the gig economy used digital platform for the operation. The millennial farmers are the great pillar for the gig economy because they understand the online system. The best part is that the millennials farmers got supported from the government, makes them got powers to do a lot of innovations for their farming systems.

#### B. Weakness Analysis

Indonesian old farmers are unable to understand the digitalization, which led to underdeveloped for the agriculture system in Indonesia. The traditional farming method relied on the farmers skill on field. Old farmers only act as the food producer, take care everything on field, without exposed to the digitalization. The agriculture products were handled by the other parties, caused the old farmers stay in the agricultural vicious circle and poverty.

#### C. Opportunities Analysis

The gig economy is related to internet users [11]. The number of Indonesian internet users in 2020 is 196.7 million people [12]. Compared with a population of 270.2 million people [13], internet users in Indonesia are around 73%. The users are predicted to keep increase until almost all the citizens are become the internet user in 2025 [14]. The coverage also almost available in every place in Indonesia, so it can be a great basis for the gig economy application.

Another opportunity is that a lot of labor and job seeker in Indonesia. The unemployment still a problem so there are a lot of gig worker available for work, online and offline.

#### D. Threats Analysis

The agriculture products from Indonesian farmers faces a big competition with the imported products due to the government policy. This caused the local farmers lost to the cheap imported products and unable to sustain their agricultural business. The local farmers need protection for their product so they can compete fairly with the imported products.

The gig economy is something new and still no official regulation for the gig worker, platform, and employer. There still no regulation for the labor fee, employer rights, and other related issues. This is a threat for the farmer to apply gig economy because the uncertainly could led to a high-risk decision.

### IV. DISCUSSION

The gig economy can be done in two ways, which are online and offline. The offline gig job is a job that require the worker to done something on a real world, such as harvesting, while the online gig job require more performance in the virtual world, such as marketing.

<u>Strength:</u> Millennial farmers	<u>Weakness:</u> Old farmers
<u>Opportunities:</u> -Internet users and coverage -Local workforce	<u>Threats:</u> -Imported products -Labor policy

Fig. 1 SWOT analysis of applying gig economy

The farming activities are before planting activities, planting activities, harvesting activities, and post-harvesting activities. Each activity required worker to done it. Usually, the farmers done it themselves or handed it over to other parties without

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future control about it. By applying gig economy, with the farmer get a role as an employer, the farmer can get more control and benefit from each activity that can lead into the increase of farmer welfare.

The before planting activities are included the planning, procurement of production facilities and the land preparation for planting. The planning activity is to identified farming objectives and needs. The procurement activities are choosing and buying the production materials and facilities, such as seeds and agrimotor. The land preparation activity is prepared a planting medium that is contain no weeds.

### CONCLUSIONS

The gig economy is applicable only if the farmer is the millennial farmer. The old farmers could not apply gig economy to their farming system due to their digital illiterate and fixed traditional product distribution flow. The application of gig economy to all farmers in Indonesia needs a strong power, such as government, to protect and control the process.

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