

A New Competition: Change in the Flow of Fruit Commodities Sales in Kalianda District, South Lampung Regency, Indonesia

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Abstract

The COVID-19 pandemic transformed the industry into the most robust online industry of the last decade. One of the commodities that have experienced faster sales since the COVID-19 pandemic is healthy food; fruit is one of them. As a response to the crisis, online fruit traders have emerged using social media. Unfortunately, not all community groups can adapt to technology. Fruit traders who stay in the kiosk (selling offline) are included in the new left behind group due to their inability to technology adaptation. This study aims to differentiate the sales flow of fruit commodities (before and after the appearance of online sales) and describe the advantages and disadvantages of each group (online traders and kiosk/offline traders). The data to answer the two research goals were processed in a qualitative descriptive way. The results show that online traders have a shorter sales flow than kiosk traders. The main advantages of online traders include using social media, which makes it easier to find market and customer information, low prices, and ownership of transportation. Meanwhile, the main disadvantages of offline fruit traders are the limited quantity of human resources, the inability to operate smartphones and social media, and not always having transportation.

Keywords: New Competition; Fruit Sales Flow; Online Trader; Kiosk Merchant

INTRODUCTION

Globalization is a continuous momentum that continues to grow; various rigid boundaries are opened, and interactions between regions are created. Interaction has become globalized in various fields through technology, including trade, which increasingly ignores boundaries (Surugiu & Surugiu, 2015). One clear example of this free trade system is the emergence of e-commerce as an alternative to easy and fast trade, yet it respects legal protection in every transaction (Putri & Priyanto, 2021). Quoted from the Official Website of the Ministry of Communication and Information Technology, Republic of Indonesia (2015), a prediction five years ago stated that e-commerce may become the backbone of the national economy five years later. The prediction was right on target. In 2 years (2014 to 2016), Indonesians have doubled their budget for online shopping (USD 2.6 billion to USD 4.89 billion) (Ramadhan et al., 2019).

The coronavirus crisis is sweeping the world and affecting all aspects of our lives, including consumer spending habits, preferences, and behavior (Taha et al., 2021). UNCTAD noted that the COVID-19 Pandemic transformed global and regional industries into the most robust online sector annually (UNCTAD, 2021). The number of online traders in Indonesia has doubled since before the pandemic. The causes vary, starting from employment termination and then trying to make a profit by becoming an online seller, traditional traders who have begun to leave their kiosks because the rent is not commensurate with the profits (Nurlela, 2021), and other reasons such as livelihoods diversification. Online traders have helped many people survive amid a challenging economy (Doukeris, 2022; Abdul Rashid et al., 2020).

Consumers have various preferences easily channeled through e-commerce, regardless of the underlying background.

Thus, price variations are one of the advantages of using e-commerce. For example, consumers can easily get products at the cheapest prices without leaving their houses amid limited mobility.

Not only trendy goods but also processed and unprocessed agricultural products experienced a 400% increase in online sales in 2020 (Greheson, 2020). However, all opportunities always go hand in hand with obstacles. The research results (Djaenuddin & Permani, 2020) state that the e-commerce system in Indonesia also faces many problems, and the most basic is the lack of knowledge and creativity of farmers (or small traders) regarding procedures for selling online. This means that not everyone can adapt to using e-commerce correctly and quickly.

Ammunition to 'fight' the COVID-19 Pandemic, such as Personal Protective Equipment, medicines, and various types of food, especially healthy food, are the products with the fastest sales growth. Fruits, a healthy food category, increased by about 50% from usual within one week (Al Faqir, 2021). This flow of the fruit supply chain is unique considering the various factors behind it, such as the vast and diverse development potential in Indonesia (Yuniar, 2012) and the distribution process, which is as important as production because freshness is an essential component of fruit (and vegetable) commodities (Tao et al., 2016).

Based on (Nabillah et al., 2022), the fruit sales flow is generally played by several actors: 1) local farmers, 2) market kiosk traders, 3) online traders, 4) local distributors, 5) regional distributors, and 6) national distributors. In general, the distribution of fruit to the last consumers in Indonesia is still dominated by offline methods (consumers will come directly to the market). Nevertheless, the emergence of GoShop (as an example) and various other online fruit delivery features have begun to bloom in big cities (Salim & Ihalauw, 2017). Things are different in small towns or rural areas. Various obstacles, such as high shipping costs, the community's abilities, or limited signals, are obstacles to using e-

commerce. Uniquely, in the case of Kalianda District, the COVID-19 Pandemic has become a momentum for the emergence of many new online traders, including fruit traders. The emergence of this online trader creates new competition in Kalianda District as a small town. They also caused another group that could be categorized as a 'left behind group.' They are the small traders in Kalianda Market. Like two currencies, the emergence of online trading benefits new selling traders due to the economic downturn amid the COVID-19 Pandemic. On the other hand, it also reduces the profits of those who stay at the kiosk.

Based on this background, this study tries to distinguish the sales flow of fruit commodities (before and after the appearance of online sales) and describe the advantages and disadvantages of each group (online traders and kiosk/offline traders). This research is exciting and important because the newly left behind group needs a solution to survive amid the ongoing COVID-19 Pandemic, also considering the progress of communication and information technology that continues to develop.

RESEARCH METHODS

This research is in Kalianda District, South Lampung Regency, Lampung Province. Kalianda District consists of 4 sub-districts and 25 villages with an area of 179.82 km². 7 out of 11 offline fruit traders (at kiosks) sell at Kalianda Market. Others were scattered outside Kalianda Market. 23 online traders were found in Kalianda, Penengahan, Sidomulyo, and Rajabasa Districts. Meanwhile, farmers as the primary producers based on the results of Snowball Sampling are found in Kalianda, Sidomulyo, Palas, and Penengahan Districts. The research location map is shown in Figure 1.

The population in this study is 1) fruit farmers in Kalianda District and the surrounding sub-districts and 2) fruit traders in Kalianda District. The first sample (fruit farmers) was taken using the Snowball Sampling technique based on information on the origin of the supply fruit at Kalianda Market. The second sample (fruit traders) is

divided into two categories, namely a) traders who sell at Kalianda Market (kiosk/offline) and b) online traders. All fruit traders were used as offline and online samples due to the small number (34 respondents). For online traders, researchers considered three Facebook groups, considering 1) the activeness of members in uploading and 2) timing (uploading within the past two years) regarding the momentum of the COVID-19 Pandemic is being considered.

The data collection technique was carried out using in-depth interviews. The data processing technique to answer problem number 1 is descriptive qualitative: the researcher will distinguish the marketing flow before and after the appearance of online traders through descriptions followed by outlining the advantages and disadvantages of each group (online traders and kiosk traders), which is also through descriptions.

RESULTS AND DISCUSSION

The Flow of Fruit Commodities Before the Appearance of Online Traders

Kalianda District only has one market, namely the Kalianda Market. The role of the Kalianda Market is significant for the Kalianda community and the surrounding sub-district community. Some of the reasons are the completeness and opening hours (every day), unlike the markets in the surrounding sub-districts (weekly market), for example, markets in Palas, Penengah, and Bakauheni. Kalianda Market operates starting at 03.00 Western Indonesian Time (WIB) for loading and unloading various commodities, especially vegetables until it closes at around 21.00 WIB. Like the market in general, the kiosk block in the Kalianda Inpres Market is divided into fish, fruit, vegetables, clothing, and household furniture stores. The Kalianda Market is a significant place to see the flow of fruit sales, considering there are seven fruit retailer kiosks in this market. This number is quite dominating compared to the location of fruit traders outside the market. The flow of fruit sales in Kalianda District before the rise of online sales (until the end of 2019) is described in the two schemes below.

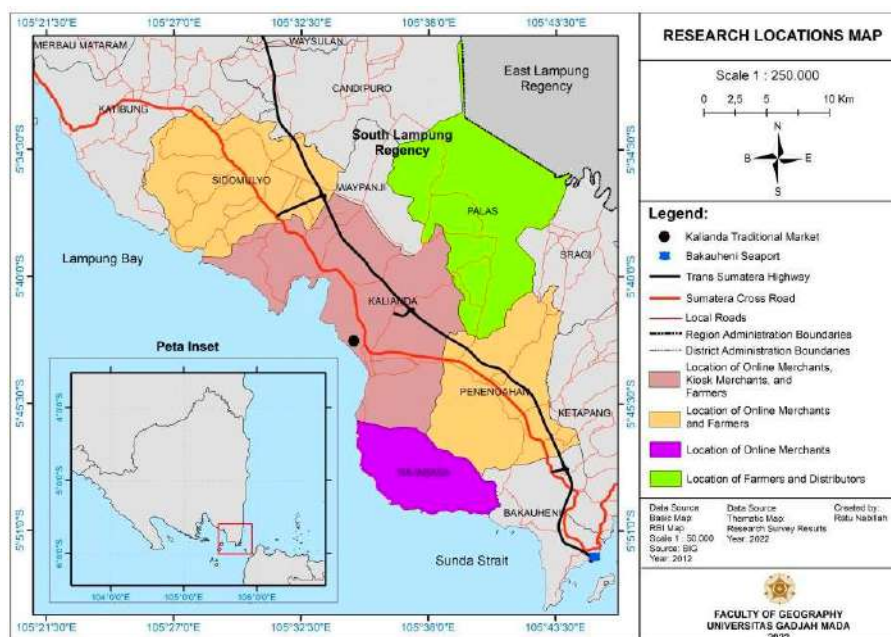


Figure 1. Research Locations Map

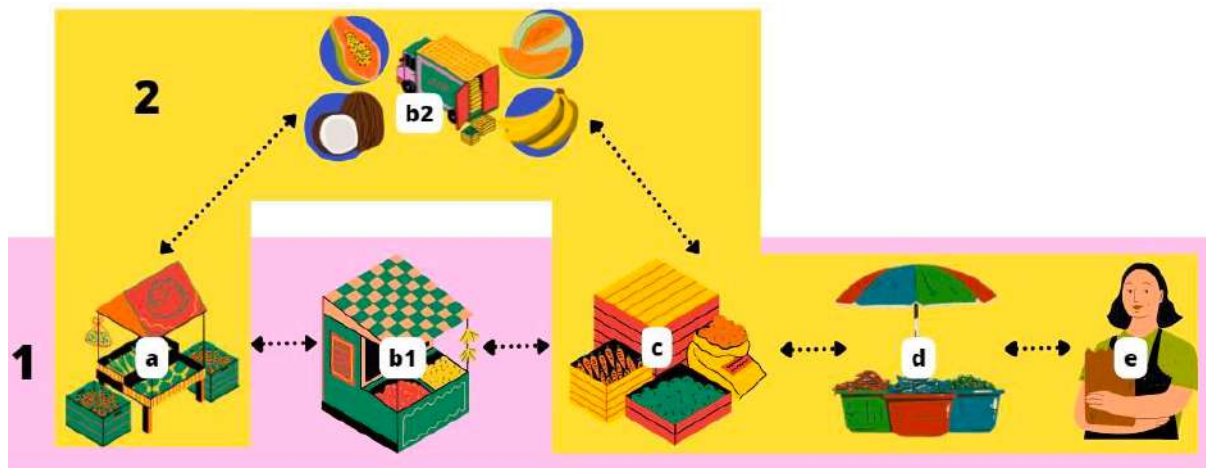


Figure 2. Fruit Sales Scheme (1)

Explanation

- a : Distributor in big cities on a national scale (Java Island)
- b1 : Distributors in big regional cities (Bandar Lampung and Palembang City)
- b2 : Car carrying fruit from South Lampung to Java
- c : Local distributor in Kalianda District
- d : Retailers (small kiosk traders in Kalianda District)
- e : Last buyer (home)

Scheme 1 is a distribution and marketing scheme for imported fruit from abroad and domestically in Kalianda Regency. Fruits imported from abroad include Fuji Wangshan Apples (from China or Taiwan), Black and Green Grapes (Australia or South Africa), Lemons (China), Pears (China), Mandarin Oranges (China), and Dates (The Middle East). Meanwhile, imported fruits domestically include Longan, Durian, Hamlet (Palembang City), Salak (Sleman Regency), Mango (Indramayu Regency), Avocado (Malang Regency), or those obtained from various main markets in Java, such as Medan Oranges and Dragon Fruits (from Tanah Tinggi National Main Market, Tangerang Regency; Rau National Main Market, Serang Regency; Senen National Main Market, Central Jakarta City; and Kramat Jati National Main Market, East Jakarta City).

Scheme 1 is divided into two trading flows. Trade flow 1 (pink) starts from (a) Distributors in large national cities (Java

Island or Palembang City) continues to (b) Distributors in large regional cities (Bandar Lampung and Metro City, Lampung Province) continued to (c) Distributors in Kalianda District, continued to (d) Retailers (small kiosk traders in Kalianda District) and finally the final buyers, for example, home-scale buyers.

Another trade flow in Scheme 1 is trade flow 2 (yellow). Not all goods come from national distributors through Bandar Lampung or Metro City distributors. This usually occurs when there is "reverse transport" (from South Lampung Regency to Java Island). The reverse transportation usually contains the superior fruits of South Lampung Regency, as previously mentioned, namely Melon, Watermelon, California Papaya, Banana, and Coconut. Regarding South Lampung Regency, the car will carry various fruits ordered by local distributors. However, this reverse transport does not occur regularly for multiple reasons; hence, trade flow 1 (pink) occurs more frequently. The main factor that prevents transport from happening periodically is market competition.

As we know, the island of Java is the center of Indonesia, and it has very complex economic activities. It makes various competitions occur. With the same commodity, South Lampung Regency must compete with all regions in Indonesia. The urban market will certainly choose the best grade because the quality of the exchange of goods is one of the most critical things in

rural-urban relations (Sabet & Azharianfar, 2017).



Figure 3. Fruit Sales Scheme (2)

Explanation

- a : Farmers in rural areas
- b : Factory in the big city
- c : Distributor in rural areas
- d : Distributors in big cities on a national and regional scale
- e : Local distributor in Kalianda District
- f : Retailer in Kalianda sub-district and last buyer

Scheme 2 is a distribution and marketing scheme specifically for local fruit. These fruits are categorized as local because the producers are farmers in South Lampung Regency. The local fruits taken in this study were Watermelon, Melon, and Papaya California. These three fruits are always available in Kalianda Market from the production of local farmers. Other locally produced fruits include avocado, mango, rambutan, dragon fruit, and durian. However, these fruits do not always come from local farmers and are often imported from other regions. Two more fruits produced locally are bananas and coconuts, but these two fruits have a marketing flow

that is quite different from other local fruits. Although these three fruits are widely grown by farmers in South Lampung Regency, these tree fruits (Watermelon, Melon, and Papaya California) have a more complex sales flow. Trade flow 3 (blue) explains that this local fruit (a) is grown by rural farmers. Farmers in rural areas said that not all of them sell their commodities directly to big cities at the national, regional, and local levels (Kalianda Market). Most farmers sell it to distributors in surrounding villages (c). Farmers who select this channel are dominated by farmers with a smaller land area than farmers who work directly with the company (b, sales channel 4/orange). Connecting poor farmers to markets is one option to break the vicious cycle of farmer poverty, but it is necessary to overcome various barriers and market imperfections (Meemken & Bellemare, 2019). In the context of this research, farmers face multiple obstacles to accessing the market; that's why distributors are the best option.

Limited land area is the main obstacle they have. In addition, the cropping system

with mixed land (fruit and vegetables) also limits fruit production. Apart from profit reasons, farming with a hybrid system can reduce the risk of damage due to pests or weather (Kehoe et al., 2019), as evidenced by one farmer in Sukatani Village, Kalianda District, who said that he planted Watermelon and Cucumber as anticipation when chilies failed harvest, and it happens. Another obstacle farmers face in reaching the market is the condition of the roads, which are in damaged condition, lack of public transportation, and signal conditions. Meanwhile, adequate infrastructure and various services are prerequisites for reaching the market (Tacoli, 2017; ILO, 2017). The last reason is the time ineffectiveness if these small farmers play with 'many hands.'

"I prefer to take care of the garden. (1) I need much time to sell to the market, so I only sell to distributors near my house, still in this village [IM (initials), one of the hybrid farmers in Sukatani Village, Kalianda District]

Tracer-White (2005) reinforces that the relationship between producers-intermediaries and retailers is based on regional and family-based proximity. The distributors in rural areas are small land farmers, so location-based proximity is a solution to face limited market access. After the farmers sell to distributors in rural areas, they pass them to large markets (d) in Java Island, Palembang, Bandar Lampung, and Metro City.

It should be emphasized that the difference between trade channels 3 or 4 and trade channel 5 is the quality of the commodities sold by the farmers. Commodities distributed in trade channels 3 and 4 are commodities with the best grade because they must meet company collaboration with farmers or big city market standards. It is different from trade channel 5. All distributors in rural areas admit that leftover commodities that do not meet city standards will then be sold to local distributors in Kalianda District (e). Another way to spend commodities that could be sold

better in big city markets is to sell them door to door to kiosk merchants in the village market or display them directly in front of farmers' houses.

The Flow of Fruit Commodities After the Appearance of Online Trades

Indonesians can spend about 8 hours 36 minutes daily to open social media (Wong, 2019). Data from the Internet Service Providers Association (APJII) in 2018 shows that 64% of the approximately 264.16 million population are internet users, and the use of smartphones by Indonesian people is classified as massive users (Akhmadi et al., 2021). This makes online trading an option to survive amid economic circumstances due to the COVID-19 Pandemic. Online trading has a very wide multiplier effect. The immediate impact is the opportunity to improve the community's economy. A study by UNCTAD in Sicat (2015) revealed that online trading could remove Dongfeng Village in Jiangsu Province, China, from a poor village into a town with an income of around \$50 million per month with 400 online shops. The indirect impact of online trade is not only for the community itself but also for the progress of the area they inhabit. Trading fruit with an online system is a solution for 12 of the 23 fruit traders in Kalianda District experiencing economic hardship due to the COVID-19 Pandemic. The online fruit distribution scheme is contained in Scheme 3.

The third scheme starts with fruit obtained from distributors in big cities on a national scale (a) and then proceeds to distributors in big cities on a regional scale (b). However, distributors in big regional cities are sometimes bypassed because direct transactions occur between national distributors and distributors at the local level (c). Then, the online traders (e) have a system to pick up directly from distributors at the local level (Figure 4). They will look for the cheapest fruit from the four distributors. Of course, this route is a promising choice considering the price difference between distributors at the local level and kiosk traders at Kalianda Market (d). Based on the survey results, the price difference between kiosk traders and online traders ranges from

Rp.1.000,00 to 6.000,00. The online traders will take the fruit not only directly from the distributors at the local level but also from kiosk traders at Kalianda Market. This causes online traders to get fruit at the lowest prices to sell because they are actively looking to various sources, both regional distributors (green line) and kiosk traders at Kalianda Market (white line).

The Strengths and Weaknesses of Each Group

The marketing of fresh fruit is as important as its production (Ozkan et al., 2016). In the COVID-19 Pandemic scenario, individuals do not feel safe going out and

buying their own, thus making innovative traders grow to carry out fruit deliveries (Shaikh & Mansoor, 2022). Online traders have good skills in utilizing smartphones and social media. Smartphones that can be completed with social media are their primary 'weapon'. Both are used for fruit searching and marketing their products. Advertising has an essential role in today's highly competitive world of marketing. Advertising is becoming increasingly popular as more and more merchant use it as a 'tool' to get their services to be known by a broader range of consumers (Terkan, 2014; Wawrowski & Otolá, 2020).

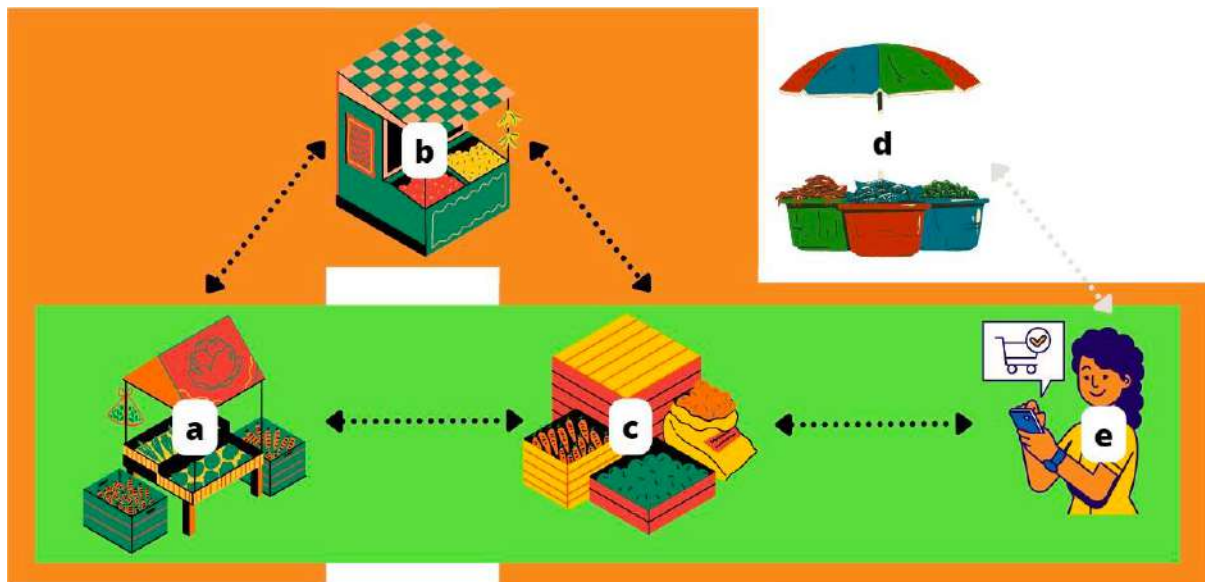


Figure 4. Fruit Sales Scheme (3)

Explanation

- a : Distributors in big cities on a national scale
- b : Distributors in big cities on a regional scale
- c : Local level distributors (Kalianda District)
- d : Kiosk traders at Kalianda Market
- e : Online traders

In addition, smartphones are also used by fruit traders in the case of the Yogyakarta Giwangan Market to obtain market information and communicate various services to consumers (Akhmadi & Fauzan, 2021). Facebook, WhatsApp, and sometimes

Instagram are three applications used by traders in Kalianda District to sell their products through online. Facebook and WhatsApp are two of the applications that they use the most. There are two ways to sell through Facebook. First, they will join various buying and selling groups, such as the "Jual Beli Kalianda dan Sekitarnya", "Jual Beli Online Sidomulyo Katibung, Candipuro, Kalianda, dan sekitarnya", "Pasar Online Kalianda dan Sekitarnya", and "Jajanan Kalianda". Second, they will post manually on their Facebook account. The method used on WhatsApp is that these online traders will upload it on WhatsApp Status then the people who will buy will

automatically reply to it. So far, no particular application is used to sell food online, such

as those in big cities (e.g., HappyFresh, Tanihub, and Sayurbox).

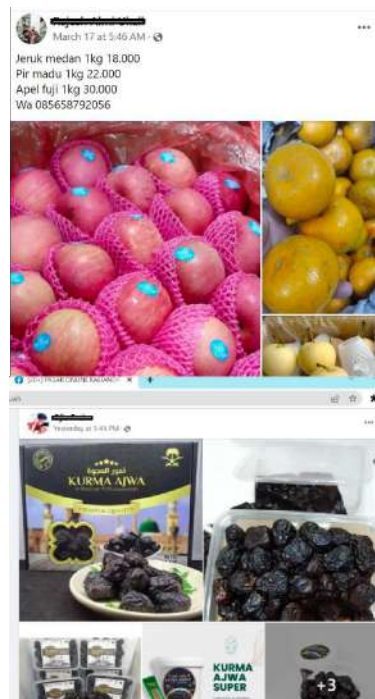


Figure 5. Online Fruit Traders who Utilize Various Facebook Groups

Online traders also have various means of transportation that are always on standby with them, namely motorbikes. Distribution is one of the critical elements of e-commerce (Kovac et al., 2018). Private vehicles are essential considering that until now, Kalianda District does not yet have an application-based online transportation system such as GoJek, Grab, or Maxim. Although many online motorcycles have manual ordering systems (via WhatsApp), not all people know about this because the online motorcycle system in Kalianda District has existed around 2020.

In terms of regional affordability, online traders are superior. Their mobility does not recognize the administrative boundaries of the village or sub-district. For example, one online trader in Rajabasa District can sell fruit to Palas, Penengahan, and Bakauheni Districts. It is different with the kiosk traders; they just stay in place and wait for visitors to come.

As previously explained in the commodity trade flow, the purpose of getting fruit for most online traders is local fruit distributors. Price is the main reason

the fruit they sell is among the cheapest, especially compared to kiosk traders. The second way online traders get the most affordable fruit is by contacting all kiosk traders. So, the online trader can get (for example) Salak from Kiosk Trader A, Mango from Kiosk Trader B, Papaya from Kiosk Trader C, and Avocado from Kiosk Trader D. Each of these was chosen because it sells at the lowest price. When final consumers buy fruit from online traders, they will automatically get the cheapest fruits. The fruit can be delivered to the consumer's doorstep. The affordability of online food shopping can increase access to food for low-income households in both rural and urban areas (Gustafson et al., 2022). However, price is not the only factor that decides people to buy fruit online. Other decisions are saving time and human resources (Sun, 2021), the match between the price and the benefits received (Listyowati et al., 2021), health orientation (Moser et al., 2011), and including reducing the risk of exposure to Corona Virus Disease.

The existence of online traders, who are now increasingly widespread, creates

new competition for kiosk traders. Seven kiosk traders said they are not selling well because of the speed with which online traders took the cheapest fruits, advertised them, and marketed them to the public. The times that continue to develop cannot be blamed because those who can adapt to the times are the ones who will survive. The challenges of micro, small and medium enterprises amid a massive digital economy require players to be information technology literate (Marlinah, 2020). Being creative will help cultivate a positive and critical mentality to solve problems (Ratten, 2020). The emergence of online traders cannot be faulted at all. A solution must be considered to improve the ability of kiosk traders to face all challenges and take advantage of all available opportunities they have (Thukral, 2021).

In contrast to the various advantages that online traders have, as previously described, kiosk traders face many challenges. First, the limited human resources with one kiosk on average are only guarded by one person who is more than 40 years old. Most kiosk guards do have smartphones, but not all of them can use social media. The most commonly used social media is WhatsApp. WhatsApp is the only hope in trying to sell online either through WhatsApp Status or through personal chat, coupled with an unattractive way of posting (for example, blurry photos, an unbalanced ratio between photos and backgrounds, or how to take pictures of products that look unattractive). Visual images are a powerful channel for conveying important information to online shoppers and influencing their choices (Di et al., 2014). Images with good quality always result in more interactions (Li & Xie, 2019). The number of shopkeepers, which is only one person, creates the next obstacle: there are no officers who can deliver fruit. *Ojek* (motorcycle taxi) base is a solution, but the risk that must be taken is losing the product because it can be stolen. This has happened. One kiosk seller admitted that she had lost an order once when delivered by an *ojek* to the consumer's house. The solution they

have been taken is only sending the fruit if there is a trusted *ojek* around them at that time.

5 out of 11 kiosk traders said the third obstacle is that it is difficult to find the lowest price. The tendency to take from 1 distributor to supply the whole fruit is the main cause. However, this is a dilemma. These five traders do not often change distributors because of the informal contract. The kindness has given by the distributor, especially the "pay when the fruits were sold" system, makes the five kiosk traders stay in 1 distributor. 3 out of 5 kiosk traders said that the system was urgently needed. Through this system, the chances of experiencing losses are getting smaller. This is different from the system where kiosk traders have to pay upfront; this causes unsold fruit to be thrown away or sold at meager prices and sometimes causes them not to profit.

Networks tied to informal contracts are based on trust and are used to access market inputs. Trust between trading partners reduces transaction costs to increase trade (den Butter & Mosch, 2003). Market relationships vary widely and have different levels of formalization, the most common network of informal traders being intermediaries (Veldwisch & Woodhouse, 2021). Weng (2015) explains that the community can develop relaxed rules for managing resources; this traditional informality is increasingly integrated with regional and global markets. In addition, transaction costs will increase when they search for various distributors. Worse yet, this kiosk vendor has to pay a kiosk rental fee of Rp.800.000,00 per month.

"The capital has returned and the kiosk is still open made us grateful. We don't think about profit when there is a lot of leftover fruit" [SM (initials), one of kiosk traders at Kalianda Market]

The two advantages that kiosk traders have are the 20 years of experience in selling

and the location of the kiosks in the middle of Kalianda Market, accompanied by the availability of car and motorbike parking spaces right in front of the kiosks. Lish's (2003) research results provide consistent preliminary evidence that market experience will avoid various market anomalies. This is reinforced by Mashuri et al. (2019)'s research results that there is a significant relationship between knowledge and business success.

The final obstacle that is contradictory to online traders is their educational background. High school graduates mainly dominate the latest education of online traders, and 2 of them have a bachelor's degree. In contrast to the kiosk traders, most only graduated from elementary school. This strengthens the research results of Umiyati & Achmad (2021), who state that minimum high school education is one of the factors that cause small business owners to make online sales.

One last category of traders falls outside the previous categories (online or offline trading) because they utilize both online and offline ways. Although the exact number is not known, one thing can be learned from these traders. Based on the random interviews with three traders who sell online and offline, they can use both channels because the kiosk keeper has a partner to sell, and the partner who helps her/him is younger (for example, a sister, child, or husband/wife). The younger partner can sell the commodities online because they have the ability, creativity, and time to operate smartphones.

"I take care of the kiosk. (My) wife is at home, taking care of children while (uploading) 'advertising' on Facebook. If someone orders, she will call me". [EG (initials), one of the kiosks and online traders at Kalianda District].

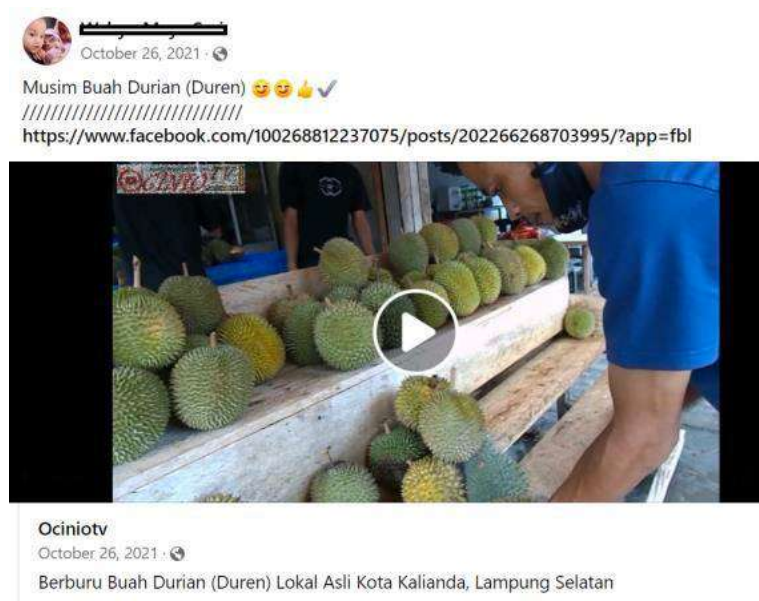


Figure 5. Online and Kiosk Trader (Both)

CONCLUSION

Kalianda Market is a crucial area to see the flow of fruit commodities. 11 fruit traders sell offline (rent a kiosk). The origin of the fruits is dominated by three local distributors still in Kalianda District. In addition, sometimes traders also take directly to regional distributors (in the City of Bandar Lampung and Metro) or national

distributors (National Main Market on Java Island and various fruit-producing districts in Java). The most common way is that the final consumer will buy the fruit they sell by visiting the kiosk/market directly.

The COVID-19 Pandemic has made momentum for digital transformation. The COVID-19 Pandemic has also caused many people to experience a decline in the

economy, so livelihood diversification is essential. One form of livelihood diversification in the Kalianda District is online fruit traders' appearance. The appearance of these 23 online fruit traders led to competition with fruit traders at the kiosk. The main factor that makes kiosk traders lose competitiveness is that the price of fruit sold by online traders is the cheapest fruit. With all their resources (transportation technology, telecommunications, and human resources), they can find and sell the most affordable fruit from various sources immediately. The cheapness of price is the primary preference of society compared to other factors. This condition contrasts with the traders at the kiosk, who cannot sell a variety of fruit at the lowest prices due to limited resources (transportation technology, telecommunications, and human resources).

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