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Fighting Two Infection Diseases: The Tales of Local Meat Vendors in dealing with COVID-19 and ASF

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ABSTRACT

The COVID-19 Pandemic has practically affected businesses all over the world, whether they are small, medium, or macro enterprises. The business community was in survival mode and attempting to recover. In addition to the interruptions caused by the pandemic, the African Swine Fever (ASF) struck numerous nations. The goal of this paper is to look into the experiences of local meat vendors as they dealt with the ASF outbreak and the COVID-19 pandemic. This qualitative phenomenological research involved ten pork meat vendors in the Southern Philippines who participated in the key informant interviews (KII). The data from the interview analysis is used to achieve what is called phenomenological psychological reduction. Ethical concerns, such as maintaining

confidentiality and anonymity, were taken into account. Pseudonyms replace the original names to maintain anonymity in this work. Before conducting the interview, the informants read the full content of the informed consent before signing it. Participants were also allowed to use the language they felt comfortable with. This investigation uncovered the following major themes relating to local meat vendors: a huge reduction in income; dealing with government regulations; fear of viruses; and the threat of competition. Two themes emerged for their coping strategies: innovation and strengthening customer loyalty. This study also found that it was difficult for the local meat vendors to cope with the two contagious illnesses (COVID-19 and ASF), but they had to do so to survive and make a livelihood.

Keywords: Meat vendors, African Swine Fever (ASF), COVID-19, Philippines.

INTRODUCTION

The COVID-19 pandemic has created chaos in almost all aspects of human society. Businesses all over the world are severely affected. First, the COVID-19 pandemic affected the agricultural sector and food supply (Siche, 2020). It is also a threat to animal breeding (Ding et al., 2021). However, while the world was still dealing with the pandemic, another virus, African Swine Fever (ASF), emerged (Fanelli et al., 2022). African Swine Fever (ASF) is a highly infectious and fatal illness that can affect both domestic and feral pigs (Luskin et al., 2021). It is a highly infectious viral illness that affects domestic and feral pigs and has a fatality rate of up to 100% (Schulz et al., 2019). It poses little threat to human health but has catastrophic consequences for pig herds and the agricultural economy. The swine fever has created more pressure on the food supply and security of citizens in the affected areas (Deaton & Deaton, 2020; Laborde et al., 2020; Doi et al., 2021). In the Philippines, the Department of Agriculture (DA) first discovered the presence of ASF in Davao Occidental and Davao City in February 2020 (Palicte, 2020). When local governments in the Philippines started to loosen the lockdown measures they had put in place to stop the spread of COVID-19, officials became worried that the ASF would spread as food products, especially pork, are moved from one place to another.

According to Angeles-Agdeppa and Custodio (2020), pork is only second to rice as a source of dietary energy for Filipino working adults. As of 2021, it is thought that African swine fever (ASF) has killed more than one-third of the Philippines' pig herds (Kedkovid et al., 2020). This threatens food security in the Philippines - a country that is already struggling because of the COVID-19 outbreak's effects on the economy. Thus, farms in the Philippines experienced significant losses due to the African swine flu pandemic. In the year 2019, when the epidemic expanded across the Philippines, the region is said to have lost almost \$20 million each month (Cruz, 2019).

The majority of pork marketed in the Philippines comes from tiny backyard farms, thus, the loss of pork disproportionately impacts small farmers. Selling home-raised pigs is a common and lucrative method for Filipino residents to earn a livelihood. Numerous backyard growers are dispersed around the nation without as much official oversight. The loss of backyard pork production has secured the incapacity of households that largely depend on pig production for their income and nourishment. This has also made it harder for the government of the Philippines to use zoning and other methods to stop African Swine Fever. Furthermore, with ill pigs exhibiting signs such as spleen, liver, and kidney lesions, the value of pork declines, hence decreasing the revenue of local farmers. In

addition, one of the disease's distinguishing characteristics is a dramatic surge in pig fatalities on a certain farm. ASF is infectious and has a high death rate, allowing it to eradicate large numbers of sick pigs simultaneously. Thus, with these double pandemics of both COVID-19 and ASF, it is the local meat vendors who suffer the most.

This paper describes local meat vendors' lived experiences, focusing on the pork vendors in selected municipalities in the southern Philippines affected by the ASF and COVID-19 pandemics. Furthermore, the implications of both outbreaks for the pork industry are still poorly explored. The study's findings contribute to the body of literature on how government and local meat vendors deal with the impact of a pandemic on the pork industry and its implications for the economy and food supply.

PORK INDUSTRY AND VIRUS OUTBREAKS

Several viral outbreaks have already occurred in the past. These outbreaks, as expected, had devastating consequences for the pig industry (Gallardo et al., 2015; Pejsak et al., 2014). Porcine Reproductive and Respiratory Syndrome Virus (PRRSV), Porcine Epidemic Diarrhoea Virus (PEDV), Foot-and-mouth Disease Virus (FMDV), and African swine fever virus are the most well-known swine viruses (ASFV). In the last 20 years, these viruses have spread quickly and caused many countries huge economic losses.

Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) is an enclosed virus with about 15.4 kb of single-stranded genomic RNA (Rossow, 1998). The virus belongs to the *Arteriviridae* family. In terms of PRRSV molecular epidemiology in Asia, the 2006 discovery of a PRRSV2 strain in China, dubbed "highly pathogenic PRRSV" (HP-PRRSV), might be regarded as a milestone for the virus. Prior to 2006, PRRSV2 was prevalent in a number of Asian nations. The CH-1a-like strains are also regarded as typical Chinese PRRSV2 strains (Rossow, 1998). In 2006, HP-PRRSVs, such as the JXA1 strain, were found, resulting in the first HP-PRRS epidemic in China. With a high death rate, infected pigs developed symptoms of severe, high-grade hemorrhagic fever and cyanosis. In 2009–2010, a second China-HP-PRRS epidemic occurred (Zhang et al., 2018). This epidemic was brought on by PRRSV2 strains that differed genetically from the 2006 HP-PRRSVs. Since their appearance in 2006, HP-PRRSVs have proliferated and become the predominant strains in a number of Southeast Asian nations, including Vietnam, the Philippines, Thailand, Cambodia, Laos, and Myanmar (Zhang et al., 2018). Notably, the first outbreaks of HP-PRRSV outside of China were reported in 2007 in Vietnam and later in 2008 in the Philippines (Zhang et al., 2018). In China and Southeast Asian countries, HP-PRRSV seems to be getting worse in China and countries because infected pigs are crossing borders without permission and private farms don't have good biosecurity.

Porcine Epidemic Diarrhoea Virus (PEDV) is an enclosed virus with about 28 kb of single-stranded genomic RNA (Than et al., 2020). The virus belongs to the *Coronaviridae* family and the *Alphacoronavirus* genus. It is yet unknown where the new PEDV strains originated. Before 2005, the majority of PEDV complaints in Asia originated from China and South Korea. The majority of detected viruses were of the classical strain. In Thailand in 2007, Vietnam in 2009, China in 2010, and South Korea in 2013, however, major PEDV epidemics caused by non-S INDEL developing strains were first documented (Than et al., 2020). The virus has spread to other Asian nations. PEDV is prevalent in several Asian nations. Inadequate management of gut feedback, gilt acclimatisation, and biosecurity are likely major contributors to viral transmission in the same herds. PEDV is largely spread through the faecal-oral route, and sick pigs shed

massive quantities of the virus for seven to nine days (El-Tholoth et al., 2021). Transmission may occur via direct contact with sick pigs or indirect exposure to their faeces, which can survive in cold, moist organic matter for up to one month. Virkon S and other popular disinfectants destroy the infection. PEDV may also be transmitted by the air, sperm, and blood plasma.

Foot-and-mouth Disease Virus (FMDV) is a non-enveloped virus with an estimated 8.4 kb single-stranded RNA genome (Domingo et al., 2020). The virus belongs to the family *Picornaviridae*, genus *Aphthovirus*. Within two to three days of exposure, symptoms of the disease might manifest and can continue for up to ten days. Foot and mouth disease (FMDV) is a severe, highly infectious, economically important viral illness of animals. The illness affects pigs, cattle, sheep, goats, and other ruminants with cloven hooves. It is a transboundary animal disease (TAD) that has a significant impact on livestock output and disrupts regional and global traffic in animals and animal products. Despite the difficulties in treating FMDV, there have been just two outbreaks of serotype C since 1996, in Brazil and Kenya in 2004 (Domingo et al., 2020). The FMDV virus may be transferred by intimate contact, animal-to-animal transmission, long-distance aerosol transmission, and fomites, or inanimate items, most often food and motor vehicles. The virus may also reside on the clothing and skin of animal handlers, such as farmers, as well as in standing water, raw food leftovers, and feed additives containing infected animal products (Brito et al., 2017). FMDV may potentially be transmitted to cows through the sperm of sick bulls. Control strategies include quarantine and destruction of both diseased and healthy (uninfected) cattle, as well as export prohibitions of meat and other animal products to non-infected nations. The latest to emerge in recent years is the African Swine Fever (ASF) (Kedkovid et al., 2020).

ASF is an encapsulated virus with about 170–193 kb of genomic DNA. The virus belongs to the *Asfarviridae* family (Xiong et al., 2021). African swine fever (ASF) is one of the worst viruses that afflict pigs and wild swine. ASF may be transmitted by direct or indirect contact. In addition, the virus has been demonstrated to be very resistant in the environment and to remain for extended periods of time in infected foods or pig products, making environmental decontamination difficult. When contaminated blood is involved, disinfection is of utmost importance because blood carries a larger concentration of dangerous viruses than oral and nasal secretions and faeces. Recent research has shown that ASFV in faeces can be passed on to navel pigs through an indirect route, but this can only happen for a short amount of time. Despite the history of pandemics, many farmers and traders lack awareness about the virus (Dione et al., 2017; Woonwong et al., 2020). Furthermore, improper slaughtering processes and inadequate food storage (Dione et al., 2016) were major risk factors that may contribute to various contaminations and virus spread (Abdullahi et al., 2016).

Consumers are naturally fearful and hesitant to buy pork because of the ASF phenomenon. Some of them avoided buying pork because of the price (Mason-D’Croz et al., 2020), but primarily because of inconvenience and food safety (Gwin & Lev, 2011). For traders or meat vendors, they were on the losing end. The problem was the inability to continue exporting live pigs and pork (Mussell et al., 2020). When outbreaks come, like ASF, the traders or meat vendors suffer the most, as their livelihood depends on the pork business.

ASF during COVID-19 Pandemic

The novel COVID-19 virus, initially identified in China in late 2019 and proclaimed a worldwide pandemic by the World Health Organization on March 11, 2020, has shook society and altered people's lifestyles (Cvetković, 2020). This has had a significant impact on healthcare systems and the global economy. However, the COVID-19 pandemic may have altered other facets of African swine fever's (ASF) introduction into ASF-free nations. Due to the virus's transmissibility, the ASF has continued to spread to new locations since December 2019. Animal diseases may have been harder to stop and control because of COVID-19 lockdowns, which may have helped the disease spread further.

ASF is not considered a new disease; in fact, it has been around for decades and has made its way to several continents, including Europe. African swine fever (ASF) is a transboundary animal disease (TAD) affecting species of the *Suidae* family (Lewis & Roth, 2021). ASF is a highly infectious viral illness with significant (95-100%) fatality rates in both farmed and wild pigs (Lewis & Roth, 2021). Initially identified in East Africa in the early 1900s, the virus migrated to Europe in the late 1950s and has lately wrought havoc in a number of Asian nations (Simberloff, 2013). The outbreaks have bad effects on the economy, especially for farmers whose jobs depend on the global pig industry and for consumers who have to pay more for pork.

The genotype I ASF virus (ASFV) was first reported in Portugal in 1957 before spreading to Western European countries: Spain (1960), France (1964), Italy (1967), Malta (1978), Belgium (1985), and the Netherlands (1986) (Danzetta et al., 2020). European countries successfully eradicated the disease in 1995, with the exception of the island of Sardinia, Italy, where the genotype I ASFV has been endemic since 1978. Genotype II ASFV was introduced in Europe, in Georgia, in 2007 and then slowly spread to neighbouring countries (Armenia, Azerbaijan, Russia, and Belarus) (Sauter-Louis, 2021). In 2014, the first cases of wild boars were reported in Lithuania. Cases were subsequently reported in Estonia, Latvia, and Poland, and more recently in the Czech Republic (2017), Romania (2017), Hungary (2018), Bulgaria (2018), Belgium (2018), and Slovakia (2019) (Martínez-Avilés, 2020).

In 2020, Germany reported its first case of a wild boar (Sauter-Louis et al., 2021). Since its initial report on January 15, 2019, in Mongolia, eleven outbreaks affecting 105 farms or households have been recorded in six regions, including the capital, Ulaanbaatar. More than 10% of the total pig population (3,115 pigs) has died or been killed as a result of ASF outbreaks (Sariga & Deepa, 2021). The first ASF outbreaks were reported in Malaysia (Sabah State) in both wild boars and domestic pigs in February 2021, followed by Sarawak State in Sibu Division in January 2022 and Serian Division in February 2022. ASF was found in the states of Melaka, Pahang, Perak, Johor, and Negeri Sembilan on the Malay Peninsula (Kurz, 2021).

Since the Indonesian Ministry of Agriculture (MoA) identified an ASF outbreak in North Sumatra Province in 2019, ASF has been officially verified in 10 out of 34 provinces: Sumatera (Lampung, North, South, and West), Riau, Java (Central, West, and Yogyakarta), Bali, and East Nusa Tenggara (Dharmayanti, 2021). ASF has been confirmed in the Western Kalimantan Province of Borneo. In the province of Central Kalimantan, samples also proved positive. The Department of Livestock Development (DLD) of Thailand confirmed ASF in Bangkok's pet pigs in January 2022 (Thanapongtharm,

2022). As of August 30, 95 cases of African swine fever (ASF) had been reported in 31 provinces and special administrative regions.

As of July 2022, ASF outbreaks had happened in 53 provinces, 704 cities/municipalities, and 3832 barangays in the Philippines (Food and Agriculture Organization of the UN. 2022). The first outbreak was confirmed by the Philippine Department of Agriculture (DA) to have happened in July 2019. Without a cure or a vaccine, the only way to stop the spread of the disease is to strictly follow and keep an eye on the steps that have been suggested.

The COVID-19 and ASF pandemics have disrupted the food supply chain (Aday & Aday, 2020; Hobbs, 2020; Pu & Zhong, 2020; Singh et al., 2020). For example, the Canadian pork industry is affected, with implications for pork supply for Canada and the United States of America (McEwan et al., 2020), the latter being the importer of the former's pork products. Moreover, the pandemic could impact animals' health as farmers and those in the veterinary services would be quarantined or limited in terms of movements (Gortázar & de la Fuente, 2020). On a positive note, the COVID-19 pandemic, because of movement restrictions, reduces ASF transmission risk. For example, in Japan, the risk of spreading ASF in the country from China was minimised because illegal entries of people carrying food products were also minimised (Sugaira et al., 2020). Another view was reducing meat consumption due to people's perception of viruses coming from animals and changing healthy eating habits during the COVID-19 pandemic (Attwood & Hajat, 2020). Hence, the COVID-19 pandemic could either lessen the spread of ASF and even improve people's drive for a healthy lifestyle through a change in food choices.

For ASF, there are positive and negative consequences of the COVID-19 pandemic. However, it is bad news for the meat vendors and traders. They already suffer from the loss of sales and income due to the COVID-19 pandemic. In addition, their way of life is in danger because of the ASF and the COVID-19 pandemic

METHODS

The study employed a descriptive phenomenological qualitative design to study the experiences of local meat vendors as they dealt with the ASF outbreak and the COVID-19 pandemic in the Southern Philippines. According to Giorgi and Giorgi (2003), this specific design describes the experiences being lived through very carefully. The data from the interview analysis is used to achieve what is called phenomenological psychological reduction. Ten local meat vendors in the Southern Philippines willingly participated in the semi-structured interviews. They were selected based on the following criteria: The informants must be local meat vendors: (1) they must live in a city/municipality in Southern Mindanao; (2) they must be meat vendors inside the wet market, which means they have their own stall; (3) they must be the owners of their businesses; and (4) they must have experienced the impact of ASF and the COVID-19 pandemic.

The main sources of data were the semi-structured key informant interviews (KII). The seven-step method of Colaizzi (1978), as used by Tudy and Gauran-Tudy (2020), was used to analyse the data. As a qualitative inquiry, trustworthiness was observed by ensuring credibility, transferability, dependability, and confidentiality, as asserted by Guba (1981). Ethical concerns were considered, such as upholding confidentiality and anonymity. Pseudonyms replace the original names to maintain anonymity. Before conducting the interview, the informants read the full content of the informed consent before signing it. Participants were allowed to use the language they felt comfortable with.

Lastly, the participants and the researchers were well aware of the growing cases of the pandemic today. Thus, there was strict compliance with basic health protocols.

RESULTS

Based on the study's purpose, we presented the results into three cluster-discussions on the challenges faced by local meat vendors in the wet market and their strategies.

Challenges Faced by Local Meat Vendors

Huge Reduction of Income

All of the local meat vendor participants shared about the huge reduction of income because of the COVID-19 pandemic. Moreover, it was amplified when ASF hit their area. They witnessed how their sales gradually plunged while the costs of doing business cannot cope with their income. One of the participants shared:

It was very difficult for me up to this day because of a continuous drop in sales. Before, I could sell up to two whole pigs a day. But now, even half of it is very difficult to market. There is a big difference now in terms of income. It can barely support my family if ever there is any at all. (Maria, Transcript 2, Page 1, Lines 3, 7-9).

Dealing with Government Regulations

Though their business is considered essential, permitting them to continue selling meat, they could not go away with government protocols that affected their transportation, workforce, and usual customers. For example, a participant described how the COVID-19 pandemic worsens the situation:

During the ASF outbreak, my income was still quite good, considering that people from faraway areas could still travel and buy our products. However, when the government imposed border lockdowns, it restricted potential customers traveling from one place to another (Amor, T1, P3, L82, 84-85).

Fear of the Virus

Though ASF did not pose a direct threat to their health, the participants were afraid of contracting the virus. Moreover, they recognized the glaring fear of their customers because of ASF. It was difficult on their part to explain to the customers that their meat is safe and clean. The paranoia, both for COVID-19 and ASF, was too much for the customers to feel. Maria observed a usual situation in the market wherein people tend to fear the presence of both viruses:

There was really discrimination against our product because they would feel hesitant to buy. Some would say, "We will not buy that product. It might have the virus on it (Maria, T2, P1, L31-32).

Threat of Competition

The participants recognized the leveling up of competition was because of the COVID-19 pandemic. Many of the traders used online platforms to promote and sell products. Even ordinary citizens can sell meat products even without securing National Meat Inspection Service (NMIS). Jocelyn expressed her worries about the flourishing of meat sellers using the internet:

We were greatly affected during this COVID due to the disruption it brought. The rise of online selling also contributed to the decrease of income by meat vendors here in the wet market (Jocelyn, T9, P2, L-65-66).

Strategies Made By Local Meat Vendors

After analyzing all their responses, three emerging themes were identified: innovation, quality assurance, and customer loyalty.

Innovation

The majority of the participants found ways to be innovative to cope with the challenges. They created value-added products like turning the excess or unsold raw meats to tocino (bacon) and the like. These processed products were ready to cook and more saleable during the pandemic. They established small stores located in their homes as it is permitted temporarily. Most importantly, they also recalibrated their strategy by utilizing social media. One meat vendor, who also employed online marketing, shared:

With this pandemic, we now use social media by posting our products online. Besides that, we also made processed products such as chorizo, tocino (bacon), shumai (steamed dumplings) (Ryan, T10, P2, L57-58).

Strengthening Customer Loyalty

The strengthening of customer loyalty was the common response from the informants. They invested more strengthening good relationship with their regular customers. They ensured the best quality and safety of products. But, they put much effort into ensuring their customers are satisfied. Ryan expressed how important it is to establish a good relationship:

With this pandemic, I learned how to value my customers more. You should treat your customers very well and take care of them. Besides that, offering discounts to those who fell short in the budget is my means to build a strong relationship with customers (Ryan, T10, P2, L 86-92).

DISCUSSION

The simultaneous outbreaks of ASF and COVID-19 create so much havoc in the lives of people in the Philippines. These two infectious diseases result in panic and feelings of uncertainty, particularly those in the pork industry. The COVID-19 pandemic is already putting so much pressure on the pork industry worldwide (D'Souza & Dunshea, 2021; Hayes et al., 2021; McEwan et al., 2020). Like in the Philippines, the ASF outbreak is a big challenge for the meat vendors, resulting in lost potential income (Mason-D'Croz et al., 2020). The experiences of the participants corroborated the experiences of other people who saw the dramatic changes in how businesses thrive during a pandemic (Donthu & Gustafsson, 2020). The COVID-19 pandemic aggravated the situation, which further decreased the potential income of meat vendors. People stopped buying food because of fear of the ASF. Simultaneously, the COVID-19 pandemic prevented people from going to the market for fear of getting infected in a crowded place. The result was a big drop in sales and income for meat vendors.

While the meat vendors are dealing with the impact of ASF on their livelihood, the government's health protocols push them to the wall. The government made sure the virus would not spread. Crowded places, like public markets, are considered hot spots for

virus spreaders. People, regardless of status, job, or business, need to follow the government restrictions. In short, there is no other way for the meat vendors to follow government orders for their safety and the safety of their customers. They also have legitimate fear because of the viruses, but they have to convince the customers that their products are clean. Like ASF, customers are naturally very concerned about food safety during an outbreak (Gwin & Lev, 2011). These vendors are in a tough and challenging situation, unprecedented in the history of the pork industry. Added to their concern is the pressure to embrace technology as competition stiffens due to online marketing and selling. The pandemic gives birth to a business opportunity for anyone who wants to sell anything, including meat products, using the internet. During the COVID-19 pandemic, these underground businesses did well even though they didn't have the right permits to do so.

Despite the challenges, the meat vendors managed to find ways to cope with the situation. With unsold fresh products, they resorted to turning these into still valuable ones. This move is favourable for both the vendors and the customers. Customers want to store more food, and these by-products are the easy answer while giving vendors additional potential income. Adding processed meat products is feasible even before the pandemic. However, with unsold meat increasing day after day, meat vendors find a way to sell their products still.

The vendors still feel lucky to continue doing business by relying heavily on customer loyalty. Exploring marketing efforts like brand equity and consumers' perception is vital to meat products' success (Groenewald et al., 2014). Their strategy is to strengthen the relationship with their *suki* (repeat customers). Their loyal customers are their lifeline in business. Getting their trust, especially during a pandemic, is crucial for their survival.

THE IMPLICATIONS OF THE STUDY

The stories of the meat vendors in the Philippines are sources of rich information for the government, customers, and other meat vendors. Their struggles and coping strategies in fighting ASF and COVID-19 are worth reflecting on with lessons that can positively or negatively affect when similar outbreaks could happen in the future. For the government, the study's findings give the impression of how important it is to provide needed support for the pork industry when ASF strikes. Knowing the necessity of a food supply for the people, the government cannot afford to allow the industry to collapse. Supporting this industry during an ASF outbreak, much more when it happens during another pandemic, is crucial for its survival.

For the customers, the meat vendors' stories provide them with a picture of how the vendors survive in a crisis while providing food for them. These stories could help them support and understand the situation. They also get assurance about the food products' safety and quality. In the end, customers would still be able to buy from the vendors and keep buying their goods.

For other meat vendors, learning from the participants' struggles and coping strategies in this study gives them a view on how to mitigate and ensure they continue to survive and earn a living. The findings could help them weather the crisis, which could happen in the future.

LIMITATIONS OF THE STUDY

On the one hand, the findings enlighten meat vendors' lived experiences during the ASF outbreak and the COVID-19 pandemic. It is something that can attract the attention of the government, customers, and other meat vendors. On the other hand, the study's findings using qualitative design cannot be generalised to describe all meat vendors' actual situation in the entire Philippines or anywhere in the world. Meat vendors in other parts of the world might have a different experience, even if they also experience problems with two infectious diseases. Hence, further research can be done, particularly on the impact of the food supply on pork products, when ASF strikes amid another pandemic.

CONCLUDING REMARKS

The findings of the study expose the grim reality of meat vendors fighting against two infectious diseases. The informants' stories reveal the experiences of how meat vendors in any country deal with the impact of ASF and the COVID-19 pandemic. Indeed, it is not easy to do business in times of double health crises: ASF and the COVID-19 pandemic.

The study elucidates the challenges encountered by local meat vendors in the Southern Philippines, specifically the huge reduction in income, dealing with government regulations, fear of viruses, and competitors' threats. However, they tried to cope with these challenges through innovation and the strengthening of customer loyalty. Based on the results, the government should do more to help, customers should be more understanding and loyal, and other meat vendors should learn from what happened.

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