

CHANGE OF CUSTOMER BEHAVIOUR DURING THE COVID-19 PANDEMIC: NEW ZEALAND SUPERMARKET RETAIL INDUSTRY

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ABSTRACT

This investigation aims to analyse problems and growth opportunities caused by various changes in customer behaviour during COVID-19 for the New Zealand supermarket retail industry and the solutions provided to improve customer satisfaction and experience, especially in a panic buying situation. The background of changes in customer behaviour during the pandemic period was analysed and identified key challenges and opportunities faced by the industry. The information and data from this investigation was collected from already published resources. Different solutions and strategies to deal with these key problems were determined based on pricing and product portfolio strategy, the agility and resilience of the supply chain, remote expert service and security system technology, and the development of healthy and sustainable products. Recommendations are included in establishing long-term collaborative relationships with local suppliers, cultivating the digital adaptability of employees, making available organic food to customers, and developing good sustainable practices for the supermarket retail industry.

Keywords: COVID-19, panic buying, retail industry, customer behaviour, supermarket, sustainability.

INTRODUCTION

After arriving in New Zealand in early 2020, COVID-19 quickly spread across the country. The highly infectious and contagious nature of the virus damaged the normal purchasing trend and the retail shopping behaviour of customers (Kim, 2020). Supermarket retailers needed to quickly adapt to the impact of customer demand, including panic buying and the change of various commodity purchase methods. Therefore, changes in the external environment and crisis events were part of the problems faced by the supermarket retail industry, which must be foreseen, prepared for, alleviated, and dealt with (Nocera & Gardoni, 2019).

The purpose of this investigation was to evaluate changes in consumer behaviour in the supermarket retail industry in New Zealand during COVID-19 to identify the core management issues and challenges. For this investigation, the supermarket retail industry in New Zealand was selected as a case study. The current status, situation and issues of the supermarket retail industry during the pandemic period are critically discussed, and potential growth opportunities are determined. Additionally, different possible strategies and solutions based on evidence are discussed. Finally, for the core problems and challenges faced by the supermarket retail industry, this investigation critically evaluated the solutions giving further practical suggestions to improve customer satisfaction and experience.

METHODOLOGY

This investigation is based on secondary data available in published literature. The validity of a literature-based research is dependent on the collection of relevant authentic contemporary information. The

majority of sources used in this investigation are not only current but were also published in the last five years. All information and data used in was extracted from peer-reviewed published sources to ensure the reliability of the findings and conclusions of the investigation. No primary data was collected.

THE CONTEXT OF CHANGE OF CUSTOMER BEHAVIOUR DURING COVID-19

There is no doubt that different types of crises and disasters may affect consumer behaviour. During the COVID-19 crisis, consumers experienced changes in the availability of goods, services and facilities compared to the pre-COVID 19 period and this changed consumer behaviour (Pantano et al., 2020). This section analyses several important factors that influenced consumer behaviour during the COVID-19 pandemic period in the supermarket retail industry, to investigate the industry's managerial problems and future development opportunities.

Behaviour Changes Due to New Zealand Government Rules and Regulations

After the outbreak of the COVID-19 pandemic in 2020, the retail industry underwent great changes and faced numerous challenges. During the lockdown in New Zealand, the only open retail sector was supermarkets. In the meantime, the New Zealand Government introduced some regulations to be implemented by supermarkets to reduce panic and minimise the chance of COVID-19 transmission during shopping (New Zealand Government, 2020).

Change in Government Rules and Regulations

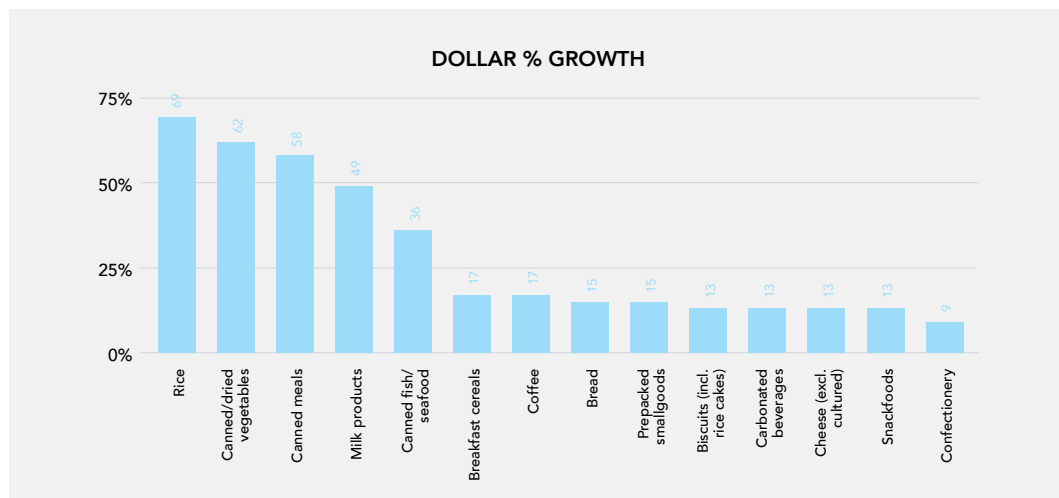
First of all, the New Zealand Government stipulated that all customers, must keep a physical distance of 1.5m to 2m from other customers and employees (New Zealand Government, 2020), as a result, customers were required to shop on their own. Once a supermarket reached its maximum safe capacity, shoppers could only enter and exit the supermarket in a one-in-one-out method, and floor signs indicated that customers should keep a physical distance. In addition, customers must pack their own shopping bags, and the number of checkout operations was reduced so that customers could maintain a physical distance between employees (New World, 2020).

The changes in the shopping process introduced by the government created limited personal mobility and less personal contact, giving customers fewer opportunities to interact with supermarket staff. This process has made customers feel shopping pressure to decrease the contact time with others in the supermarket. Before the COVID-19 pandemic outbreak, most customers with selected items to buy went shopping with a shopping list (Martin-Neuninger & Ruby, 2020). However, because of shopping time constraints, customers did not have sufficient decision-making time to cope with product information in supermarkets and therefore, they relied more on heuristic methods such as brand name, product price, image, colour, and labels to select products (Bialkova et al., 2020). Bialkova reported that during the COVID-19 shopping conditions, the use of these heuristic methods increased, and customers tended to select high-quality and high-profile brands instead of low profile and low-quality products.

Behaviour Changes Due to Panic Buying

After customers' perception of the disaster, their shopping habits and behaviours changed. Because customers are generally worried about the shortage of product supply or the expected sharp rise of product prices, they bought a larger number of products or a wide range of products and this behaviour was called panic buying (Nicola et al., 2020). According to Figure 1 below, in the field of food retail, during the COVID-19 pandemic period, customer demand for rice surged the most (New Zealand Herald, 2020). Based on Figure 1, compared with the previous year, rice sales increased by 69%, sales of canned and dried vegetables increased by 62%, canned meals by 58%, milk products by 49%, and canned fish and seafood by 36%.

Figure 1. Fastest-Growing Food Items during the Lockdown



NOTE. Adapted from New Zealand Herald (2020).

As illustrated in Figure 2, in non-food products, sales of toilet tissues increased by 87% compared with the previous year. In contrast, household cleaners and facial tissues increased by 76% and 67%, respectively. This data confirmed that customers were worried about shortages caused by the COVID-19 pandemic, triggering panic buying. From the perspective of the supermarket retail industry, panic buying usually led to purchasing a large number of necessities, such as cleaning and hygiene products from suppliers (Keane & Neal, 2020). This situation created limits or even eliminated the food supply, resulting in adverse effects, such as increased prices, waste, shortages, excessive consumption, and uneven distribution of products (Hassen et al., 2020). The most impacted vulnerable customer groups were the elderly and the poor because they could not access products as usual (Basari et al., 2020). In addition, some customers stored food and purchased more goods each time to reduce store visits, thus restricting their perceived risk of exposure to COVID-19 (Cranfield, 2020). This behaviour change was due to social isolation directives and changes in the future and uncertainty increased customer's fear and anxiety and affected their commodity purchase patterns and food consumption (Niles et al., 2020).

Figure 2. Fastest-Growing Non-Food Items during the Lockdown

diagram missing

NOTES. Adapted from New Zealand Herald (2020).

Retail suppliers in New Zealand imposed restrictions to try to reduce price increases and reduce the impact of panic buying around basic goods (Martin-Neuning & Ruby, 2020). For example, supermarket retailers limited the number of items purchased during each shopping visit, including toilet paper, minced meat, eggs, milk, pasta, disinfectant, and soap. Additionally, retailers reduced the opening hours of supermarkets and required customers to continue shopping as before the COVID-19 lockdown to resist impulse buying (Martin-Neuning & Ruby, 2020). Nevertheless, these policies usually had the reverse effect because the sudden supply shortage further increased public fear and led to highly unreasonable hoarding and preparation activities (Keane & Neal, 2020). Therefore, panic buying hindered the function of normal supermarket supply chains and posed a great challenge to the supermarket retail industry (Hobbs, 2020).

Behaviour Changes Due to the Impact on the Unemployment Rate

COVID-19 is more than just a health crisis, it has led to a serious global economic and financial recession, and it also increased unemployment and poverty around the world (Hassen et al., 2020). According to Statistics New Zealand (2020a), during COVID-19 pandemic in June 2020, the New Zealand unemployment rate reached 4.0%, the number of people without a job increased by 37,000, the number of employed persons decreased by 11,000. Working hours dropped to a record 10.3%, which led to a significant decrease in personal and family incomes (Cranfield, 2020). Meanwhile, Statistics New Zealand (2020b) pointed out that with the reduction of COVID-19 alarm levels, the unemployment rate would gradually increase, which means that New Zealand would still face a serious unemployment problem in the long term. Knowledge of income continuity is essential to comprehend how customers responded to the COVID-19 pandemic and the impact of changes in their consumption behaviour, thereby affecting the amount of food consumed and the kind of goods purchased (Cranfield, 2020). For example, during the COVID-19 pandemic, customers tended to focus first on meeting basic physiological needs, thus shifting spending to a large consumption of necessities, such as food and cleaning products, and reducing non-essential and durable goods, such as household appliances (Forbes, 2017). In addition, customers paid more attention to the price of goods, and they expressed their preference for low-cost retailers rather than shifting loyalty to their preferred supermarket retailers and turned more to the demand for value for money. For example, sizeable multi packaging may provide the best value, but it may not be affordable for cash strapped customers because they were forced to buy products in smaller packages, and brand loyalty in various categories declined (Basen, 2014).

Behaviour Changes Due to Increase in Online Shopping

Due to the perceived risk of physical shopping in supermarkets and the fear of contracting COVID-19, customers' purchase mode rapidly shifted to online shopping (Deloitte, 2020). Statistics New Zealand (2020a) pointed out that, during the COVID-19 lockdown, retail sales for supermarkets and grocery stores had strong growth compared with other retail sectors, benefiting from the strong demand for online business, providing a wide range of products and door-to-door delivery advantages. In response to the COVID-19 pandemic, digital technology played a vital role in maintaining daily life (Schilirò, 2020). Hence, by accelerating the maturity of online data technology, the COVID-19 pandemic may have become a turning point for online retail in New Zealand supermarkets, providing better convenience and experience for customer (Kim, 2020). For instance, supermarket retailers launched the first nationwide e-store supermarket. Therefore, the online supermarket retail website service and ease of use became a new focus of customer attention (Countdown, 2020a).

In addition, CERT NZ indicated that the cybercrime of online shopping increased 42% over the same period last year during COVID-19 (Tom, 2020). According to Hossain et al., (2018), cyber security, customer information security, and protection significantly impacted customer online shopping decisions. Based on the same authors, during this period, customers were concerned about the protection of their personal data and information, especially the fraud and abuse of credit and debit cards (Hossain et al., 2018). To succeed in online shopping, supermarket retailers had to keep the security, privacy, trust, and reliability of online customers (Neger & Uddin, 2020).

Customers' Focus on Healthy Living

The COVID-19 pandemic changed people's lifestyles and eating habits, shifting customer behaviour to healthier and more sustainable lifestyles, and eating habits (Cohen, 2020). According to Kuijpers et al. (2020), customers in New Zealand were more concerned about their health during the COVID-19 pandemic period. Evidence suggests that consumption behaviour appeared to favour healthy food and dietary supplements to enhance their immune systems, which led to increased consumption of supermarket retail products such as vegetable food, fruit, dairy products, and bottled water, while the consumption of alcohol and snacks decreased (Kuijpers et al., 2020). The reason was that the consumption of fruits, vegetables, and whole grains, in addition to the limited intake of saturated fat, trans fat, sugar and salt, could also have helped to maintain good health and prevent diseases (Borsellino et al., 2020). However, due to panic buying, a great quantity of food hoarding activities led to food waste (Hassen et al., 2020). Therefore, some customers focused on reducing food waste to improve food security (Shafiee-Jood & Cai, 2016). Therefore, customers attached greater importance to health and provided an attractive way for sustainable practices. Supermarket retailers should strategically take advantage of this opportunity to meet the needs of customers, in particular those searching to buy healthier and more sustainable foods.

Based on the above discussion on several factors affecting customer behaviour during the COVID-19 pandemic, four key managerial issues for the supermarket retail industry were identified:

- Due to the New Zealand regulations and the decrease of family and personal incomes, customers paid more attention to the choice of high-quality and high-profile, or low-price commodity brands in their decision making when purchasing goods.
- The shortage of supermarket necessities and cleaning products supply chains were caused by customer' panic buying.
- Customers expected that online websites could provide high-quality services and would provide a better network of security and customer information protection in an online environment.
- Customers focused on healthier and more sustainable products.

SOLUTIONS TO IMPROVE CUSTOMER SATISFACTION AND EXPERIENCE

Investigating managerial problems caused by the change of customer behaviour as a result of the COVID-19 pandemic, this section suggests several solutions and strategies to assist supermarket retailers to improve customer satisfaction and experience.

New Pricing and Product Portfolio Strategies for the Supermarket Retail Industry

Before COVID-19, customers were increasingly inclined to choose product brands and promotional products (Gázquez-Abad et al., 2017). Although customers did not think that they spent more time on pre-planning, there were differences between various customer segments (Puellas et al., 2016). Households and low-income customers were more likely to be one of the market segments that looked for coupons and promotional activities (Puellas et al., 2016). On the other hand, other customers made a list to use when shopping (Martin-Neuning & Ruby, 2020). They were not prepared for the normal market, and they chose products with high quality and high profiles (Bialkova et al., 2020). They were usually made up of high-income customers (Puellas et al., 2016).

Retailers could modify the product mix in supermarkets according to the needs of high-income customers' market segments, which was in line with their current preference for heuristic shopping (Basari et al., 2020). For example, retailers could delete mineral water that was not well known among customers. They could increase the brand of mineral water that customers were familiar with and in great demand. Retailers could try to purchase well-known brands of food and health products and put them in the most prominent places in the supermarket, which could reduce the decision-making time of customers. The combination of these

strategies would meet the needs of customers and improve their satisfaction and increase the sales volume and reduce the expenditure on promotional products (Basari et al., 2020).

It was suggested that supermarket retailers choose cost-based pricing strategies to provide lower-priced necessities to meet the needs of the low-income customers (Grewal et al., 2011). For example, supermarket retailers could use innovative technologies such as Radio Frequency Identification (RFID) and tags and eye-tracking technology to carry out electronic display pricing, so that they could deploy real-time pricing according to product availability (Grewal et al., 2011). As such, customers tended to look for the lowest price for any product they needed. Therefore, retailers could offer exclusive discounts and customised quotations through loyalty programmes, such as offering corresponding discounts based on the original lower prices, to attract those customers and enhance their loyalty.

It is suggested that supermarket retailers should continue developing their own brand for necessities. Supermarket own brand is that these retailers launch a brand to acquire a single brand identity (Kumar et al., 2017). Kumar et al. stated that the aim was for supermarket retailers to easily attract those customers who are price-sensitive. For example, a supermarket is committed to the continuous development of its own brand's essential series, to ensure that it can provide easily identified high-quality daily necessities to meet customer needs at a low price (Countdown, 2016). The reason is that supermarket retailers can cooperate with their proprietary product technicians and product suppliers to produce and develop products at lower prices, which will also provide supermarket retailers with opportunities to control product availability and quality (Basari et al., 2020).

Improving the Resilience and Agility of the Supply Chain

During the COVID-19 pandemic, the unpredictable shortage of goods and demand patterns had a serious effect on the operation of the supply chain and caused a lasting impact (Hobbs, 2020). Supermarket retailers could not use the traditional supply chain disruption preparation, mitigation, and recovery strategies to plan recovery, because these strategies were simply inadequate to cope with this the COVID-19 pandemic situation (Ivanov, 2020). On the contrary, supermarket retailers need to use their unique assets and capabilities, and constantly adjust and develop their capabilities to make the supply chain more resilient and agile, to better manage daily necessities such as food and toilet tissues otherwise customer satisfaction and experience may be negatively affected (Pettit et al., 2013).

The following are strategy and solution suggestions for supermarket retailers to predict and mitigate the risks and interruptions to the supply chain.

Achieve Flexibility by Adding Additional Suppliers

Supermarket retailers in New Zealand can increase procurement from local suppliers to design and deliver key products and services through a localised end-to-end supply chain resilience and may help to build supply chain resilience (Pettit et al., 2013). However, most of the cleaning and hygiene products in New Zealand supermarkets, such as hand sanitiser and masks, are purchased abroad (Kuijpers et al., 2020). According to a market survey of products in supermarkets in New Zealand, 70% of cleaning and hygiene products come from China and Southeast Asia (Kuijpers et al., 2020). Hence, supporting cleaning and hygiene products produced by local suppliers would help to reduce unexpected outsourcing costs and reduce supply chain risks (Stentoft et al., 2015). For example, supermarkets supported more than 400 new and independent local vendors, which provided 3000 new products during the COVID-19 pandemic, further relieving product supply pressure (Countdown, 2020).

Share Key Information and Knowledge and Create Cooperation of Joint Efforts

This cooperation refers to the process in which supermarket retailers and suppliers interact through formal and informal exchanges of meaningful and timely information to obtain common interests or mutual

benefits (Bode et al., 2011). Information sharing can also be completed differently such as through marketing promotion plans, inventory levels and point of sale data sharing (Jie et al., 2015). However, to be agile, visibility is required to gain knowledge about the actual changes in constant current changes, so that the supply chains can respond actively or passively (Wieland & Wallenburg, 2013). For instance, a supermarket retailer has created a new application called Compass, which allows their local suppliers to closely monitor the sales of their products at any site (Countdown, 2020). Compass used historical sales patterns to calculate daily sales expectations for each product at each site and generate alerts for local suppliers to quickly identify and fix potential shortages or other problems (Countdown, 2020).

Develop Remote Expert Service and Security System Technology

In the whole online shopping process, customers expect supermarket retailers to provide higher levels of service (Parise et al., 2016). If staff cannot answer questions quickly, online customers will reduce their satisfaction and even give up buying. At present, no supermarket retailer in New Zealand provides online real-time customer support chat to provide immediate help for customers in terms of service (Martin-Neuning & Ruby, 2020). For this purpose, it is suggested that supermarket retailers could develop and provide remote expert service technicians. Remote experts are real people located in remote places who can provide instant services to online customers (Parise et al., 2016). Remote experts can appear on a user-owned mobile device via videos embedded in supermarket retailers' mobile apps or .com store pages.

Supermarket retailers can apply remote expert service technicians to assist customers from pre-purchase until any time after purchase. Although real-time text chat can bring higher sales conversion rates, in contrast, real-time video chat can bring an immersive experience to the end-users, making customers feel like they are shopping in the supermarket. Therefore, it is possible to transform and upgrade the customer experience to a new level (Scholz & Smith, 2016). For example, during a video chat in the consideration stage, customers who encounter specific product issues can instantly contact and consult remote experts, who can answer product queries, explain different product choices, and provide product-specific advice.

In addition, customers need to consider whether to trust the online shopping website transaction system has security and privacy, and then they can purchase online. Therefore, in the face of the rising trend of cybercrime and cyber security problems in online shopping during the COVID-19 pandemic period, there are various tools that can help supermarket retailers to protect their online websites from cybercrime attacks (Petrenko & Makoveichuk, 2017). Some of the tools for monitoring cyber-attacks include software tools, such as Security Information and Management Systems (SIEM), Intrusion Detection Systems (IDS) and Intrusion Protection Systems (IPS). These tools are a type of customer data protection technology used to detect and avoid unauthorised access, viruses and malware, and data theft (Petrenko & Makoveichuk, 2017). Meanwhile, they collect security logs, combine IDS and SIEM rules in the integration process, use network security intelligence to analyse trends and specify remediation strategies according to global cyber-attack vectors to implement daily monitoring (Pratt, 2017). These tools can help solve the risk of information theft and money loss during online shopping.

Develop Health and Sustainable Products with the Crown Research Institute

In the new era of COVID-19, it can be predicted that customers will increasingly look for new health and sustainable products to enhance their immune systems in the future (Kuijpers et al., 2020). Therefore, it is suggested that New Zealand supermarket retailers should increase their research and development investment in food and nutrition. This can be achieved by establishing a partnership with Plant & Food Research. This is a Crown Research Institute supported by the New Zealand Government committed to the design and development of new functional food beneficial to human health and well-being (Plant & Food Research 2020). Supermarket retailers and other organisations cooperate should develop functional food fortified with bioactive compounds and antioxidants to support customers' immunity and meet their current health needs (Galanakis, 2020). For example, reducing the cost of meat produced in sterile laboratories, thereby reducing the cost of food waste restoring and reusing in the food chain and developing

large new food supply chains based on insects and microalgae (Galanakis, 2020). Meanwhile, to support the public campaign on the purchase of healthier products and the awareness of sustainability, supermarket retailers must also require food producers and suppliers to provide greater transparency in labelling and reliability, to ensure accurate and comprehensive information about the sustainability of products in the production process, which further enhances the reputation of the supermarket retail industry or organisation. (Borsellino et al., 2020).

RECOMMENDATIONS

This section critically evaluated solutions and made some credible, concrete, and feasible suggestions. These recommendations may be decisive and will help the supermarket retail industry to improve customer satisfaction and experience.

Establish Long Term Collaborative Relationships with Local Suppliers

Stank et al. (2011) proposed an extended supply chain collaboration model, including the organisation of relationship links, information integration, coordination, and resource sharing. It emphasised that a stable and reliable supply chain relationship is critical to enhancing the cooperation of the supply chain (Hobbs, 2020). This cooperative supply chain relationship has established long-term cooperation and trust relationship between supermarket retailers and suppliers and has the flexibility in response to demand or unexpected supply interruption changes (Hobbs, 2020). This would effectively utilise and merge the resources of both parties and integrate information and material flow well (Cao & Zhang, 2011).

First, the trend should be to create long-term relationships with suppliers rather than short-term contracts. The reason is that the surge in demand caused by the COVID-19 pandemic panic buying may be a short-term problem in most cases. Although New Zealand supermarket retailers may increase local suppliers through short-term contracts as demand increases. Once the status quo is restored and demand declines, supermarket retailers may reduce their dependence on and number of local suppliers to squeeze the supply chain to improve cost efficiency. This process can be predicted, and it will harm the contractual relationship between retailers and suppliers (Hobbs, 2020). In addition, the supply chain performance of most small-scale local suppliers in New Zealand is weak and it would appear there is considerable potential for improvement, because most of them have insufficient cooperation and support from supermarket retailers (Banomyong, 2018). Therefore, under such circumstances, it is recommended that supermarket retailers establish long-term cooperative local supplier relationships as an integral part of their retail business, and explore various cooperation channels, including a joint improvement plan, supplier integration in product design, and profit and risk-sharing. These channels will further improve the supply chain performance of local suppliers and strengthen long term collaborative relationships between supermarket retailers (Cao & Zhang, 2011).

Secondly, supermarket retailers and local suppliers can also be prepared to invest heavily in information and communication technologies to establish long-term collaborative relationships, including the Web Internet and Business to Business (B2B) electronic point of sale (EPOS). The advantage is that it can ensure information sharing and integration between many local suppliers and supermarket retailers and provide a better platform for them to participate in and solve problems, such as product shortages and product demand change prediction (Prajogo & Olhager, 2012). Information sharing is important, but its impact on the supply chain also depends on the quality of the shared information. The impact of incorrect or delayed information on functions may adversely affect on supply chain efficiency (Jie et al., 2015). Hence, effective and suitable information and communication technology connections provide them with real-time and accurate supply chain information, including inventory level, delivery status, production planning and scheduling (Ivanov, 2020). This helps to promote the consistency of business forecasting and scheduling between supermarket retailers and local suppliers, thus achieving better long-term collaboration (Prajogo & Olhager, 2012).

Cultivate the Digital Adaptability of Employees

According to Parise et al. (2016), although from the customer perspective, today's smartphones and laptops are equipped with increasingly powerful cameras and video software, making remote expert service technology popular. In supermarket retail, the cost of expanding video conferencing systems, large screens, high-resolution displays, and bandwidth across physical supermarkets, branches and sites continues to decline, making this solution feasible and available in New Zealand. However, this solution also encounters some challenges. One of the main obstacles is the need to coordinate remote experts to provide online services to customers on-demand (Parise et al., 2016). Therefore, it is critical to have professional and sufficient remote experts. This improvement would make it necessary for New Zealand supermarket retailers to train and improve their employees' digital adaptability in advance to meet customers online satisfaction. Customer satisfaction can be improved if the remote experts from supermarkets are trained to recognise the interaction preferences of customers and adapt their behaviours to meet the preferences of the customers (Olsen & Skallerud, 2011). It is recommended to cultivate employees' online social style, sales strategy, oral communication, and body language communication skills to improve customer satisfaction. Meanwhile, it is recommended that supermarket retailers increase salaries, and the recruitment plan focuses on professional online remote experts, which could improve the quality of applicants for retail positions and increase the potential for daily sales revenue (Rippé et al., 2016).

Good Sustainable Practices

During the COVID-19 pandemic, changes in customer behaviour prompted customers to buy more than necessary amounts of food, which greatly exacerbated global food consumption. Meanwhile, the increased intake of animal protein in diet habits and the increasing dietary habits of processed food products harm the natural environment and human health (Thøgersen, 2014). Therefore, it is recommended that supermarket retailers promote feasible and reliable sustainable practices to meet these challenges. Such sustainable practices need to consider environmental protection and respect for biodiversity and ecosystems and provide customers with economically equitable and affordable, nutritious, safe, and healthy food (Borsellino et al., 2020).

Furthermore, the consumption of new and innovative organic food is a key factor in protecting the environment and promoting the health and well-being of future generations, which also meet the health needs of customers during the COVID-19 pandemic period. It is warmly welcomed and loved by customers, thus promoting sustainable production and consumption patterns (Bryła, 2015).

In addition, an important factor is that New Zealand has many Crown Research Institutes undertaking sustainable food research, such as AgResearch and Plant & Food Research, which undoubtedly has unique advantages for the supermarket retail industry in New Zealand, because of their geographical location. Therefore, it encourages the transmission of information to promote the practice of sustainable development, thus achieving more meaningful innovation (Pavlovich & Akoorie, 2010). By establishing public-private partnerships with Crown Research Institutes, it is possible to raise income in the food value chain, provide more uses for food waste, and develop new products that can bring health and well-being to customers (Pavlovich & Akoorie, 2010).

CONCLUSION

In conclusion, the arrival of COVID-19 and considering the problems and challenges brought about by changes in customer sentiment and customer behaviour may lead the New Zealand retail industry to future development prospects and opportunities. Because New Zealand Government (2020) regulations and the rise in the New Zealand unemployment rate during COVID-19 led customers to change in customers specific ways of shopping in supermarkets. They tended to use simple heuristic methods for shopping, such as product brand and price. Due to the uncertainty of the future and the fear of contracting COVID-19, the panic buying behaviour of customers generated, and aggravated the supply pressure on some food

and cleaning products. In addition, during the COVID-19 pandemic period, the trend of online shopping in supermarkets was introduced. However, online shopping needed better services to meet customers' needs and protect the information security of online customers. Customers also concentrated on the purchase and consumption of healthier and sustainable food.

In light of evidence ascertained from literature searches, to improve customer satisfaction and experience, this investigation proposed several strategies to deal with these problems. The New Zealand supermarket retail industry will need to enhance the resilience and agility of its supply chains, including the increase of local suppliers and the establishment of cooperation through information sharing. As well as supermarket retailers need to update product pricing and product portfolio strategies, develop remote expert services and security system technologies, and develop new healthy and sustainable products in collaboration with Crown Research Institutes.

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