

WeChat's Effect on Online Purchase Intention of Fast Moving Consumer Goods

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ABSTRACT

The purpose of this study is to explore WeChat's effect on fast moving consumer goods (FMCG) online purchase intention among Chinese people in New Zealand. In this study, a quantitative research method is employed to collect primary data through an online survey with a questionnaire from 139 respondents in New Zealand. The findings reveal that WeChat is widely used by Chinese in New Zealand with more than half of the respondents using WeChat's online shopping function. The WeChat users are mostly young people. When using WeChat to purchase, users in New Zealand are concerned about the interface on WeChat shopping, the recommendation of WeChat, the security and confidentiality of personal information on WeChat. These factors are highly correlated with online purchase intention. WeChat users agreed that WeChat is a convenient, easy to use payment method. These two parameters are highly correlated with online purchase intention. On the contrary, WeChat users do not agree with product information and other unfamiliar customers' recommendation to buy FMCG through WeChat.

KEYWORDS

Chinese Customers, Fast Moving Consumer Goods (FMCG), New Zealand, Online Purchase, WeChat, WeChat Moments, WeChat Payments

INTRODUCTION

The WeChat is impacting various areas of the economy and online shopping globally. To a certain extent, WeChat has impacted both traditional shopping and online shopping, especially for FMCG (Fast Moving Consumer Goods). FMCG refers to products which are sold promptly at a relatively low price such as food, beverage, clothing, health care products, cosmetics, and other low-value consumables (Ali & Gawli, 2020; Anouk Zeeuw van der & Aurisicchio, 2019; Brierley, 2002; Meera et al., 2017). FMCG can have relatively small profit margins, but they are generally sold in bulk. As a result, the total revenue from these products is very substantial. FMCG has a relatively short life cycle and needs to maintain a fast turnover rate to ensure that products are not eliminated (Pourhejazy et al., 2019). Online shopping of FMCG is increasingly replacing traditional physical store sales.

The WeChat has not only benefitted for shopping but has also played a vital role in changing the online consumer behaviour of Chinese buyers. Consumers receive more benefits from the convenience of online shopping for FMCG with WeChat. In 2011, the second year from WeChat was created, Tencent Co. launched a commercial functional module for WeChat which has played an increasingly important role in online business. It has impacted traditional online business which has changed consumers' habits, and cognitive attitudes towards FMCG online shopping (Trekels et

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al., 2018). Before WeChat, Chinese people were used to doing online shopping from Amazon and Taobao. With this new form of online business, Chinese people who lived out of China spend less time on online shopping using WeChat (Widjajanta et al., 2018).

Historical Background

WeChat is a Chinese multi-purpose messaging, social business and mobile payment application. By 2019, it has become one of the world's largest stand-alone mobile apps by monthly active users, with over one billion monthly active users. In addition, to use in China, it is also one of the most popular messaging apps that are widely used among overseas Chinese (Tencent Annual Report, 2020). With the improvement of the WeChat function, WeChat Business is one of the latest mobile social network business models (Li, 2015). Depending on the instant messages, free video calls, group chats, information sharing on WeChat Moments, WeChat attracts many companies and the self-employed people selling their products on WeChat. For example, Lancôme set up an official enterprise WeChat account for its offline beauty advisors to build direct connections with consumers (Ho et al., 2020).

WeChat is not only a social communication tool but also a multi-purpose platform, which can meet a lot of needs, such as SMS, shopping, paying utilities (Zhou, 2020). Therefore, WeChat is not limited to personal life, Chinese conduct business on WeChat. In order to access the potential market and gain a market share of more online trading platforms, WeChat offers more customized solutions (Seetharaman & Osawa, 2016). For instance, the WeChat team developed a dedicated application for work purposes called WeChat work (functional module of WeChat just for enterprise). Sales and customer service staff of commercial organizations having daily conversations with team members (customers) about business transactions through WeChat (Osawa & Mozur, 2013). WeChat work provides enterprises with more powerful communication tools, unified management of internal and external contacts, and specialized plug-ins to simplify business operations. Full functionality requires an additional fee to enable businesses or self-employed people to have access to all features and settings to conduct business activities. WeChat work can be a powerful addition to business tools to simplify operations and communications in business management (J. Wu, 2014). WeChat has a strong iterative ability to adapt to the rapid development of modern online business and make the updated progress to support online business activities.

WeChat Business helps to make profits with less input and lower investment as compared to the traditional e-business like Amazon.com and Alibaba, which attracts individuals to join in online shopping (Li, 2016). Any ordinary denizens and merchants can make profits by selling commodities through the WeChat platform (Y. R. R. Chen, 2017). According to Tencent Annual Report (2018), in the next two years, WeChat's sales staff is expected to exceed one million, which will provide at least 100,000 direct employment opportunities for China. WeChat is becoming the largest network professional population on social media. With the development of WeChat online trading platform, WeChat trading platform will be more streamlined, convenient for users to promote, to achieve a win-win situation among sellers, consumers and WeChat (Tencent Annual Report, 2018). By December 2018, WeChat online business participants had reached 80 million. Under the premise of improving consumers' shopping experience, WeChat shortened the time of commodities selection, improved the transaction rate, and improved the shopping willingness of Chinese consumers (Yanhong Chen et al., 2019).

Ever since WeChat was created in 2011, Tencent has been continuously improving WeChat's social media functional modules to expand commercially (Lawrence, 2016; Zhao et al., 2017; Yujie Chen et al., 2018). WeChat attempted to commercialize and cooperate with external strategic partners (Chen et al., 2018). By these two ways, WeChat has become a powerful online trading platform with strong vitality. Since WeChat has launched WeChat payment function in August 2013, WeChat has also successively launched WeChat red envelope, WeChat fingerprint payment and WeChat Face ID payment services in 2014, 2015 and 2017 respectively. These financial services modules and functions have helped WeChat dramatically expand its user base (S. Zhao et al., 2019).

External Strategic Expansion of WeChat to Support Online Business

After establishing the dominance of social communication tools in China, WeChat began to seek strategic cooperation with large companies and institutions in various fields outside to expand online business functions and scale. From 2015, WeChat has made rapid progress in various consumption scenarios, bringing convenient offline life experience to users and more business opportunities to merchants and partners. Yang (2018) found WeChat has been planning and promoting for multiple industries, and has fully opened its capacity to service providers. WeChat has rapidly penetrated into various services of users: shared equipment, airline tickets, catering, water and electricity fees, smart retail, travel, hotel reservation, freight. In particular, WeChat has achieved real closed-loop management in the purchase, sales and freight of retail goods due to its involvement in the retail and freight fields. WeChat ensures consumers to buy desirable products through WeChat's one-stop service.

WeChat is also expanding the market outside China, and actively seeking strategic cooperation with overseas banks, credit cards, merchants and other large-scale companies and institutions. As of 2018, WeChat has been widely used in Southeast Asia, Russia and India. WeChat has attracted about 80 million users in Asia, including markets such as Indonesia, Singapore, Malaysia, the Philippines and India (Martin & Osawa, 2016). WeChat is also available in Japanese and Korean languages in addition to English. WeChat chooses developing markets first, and then mature markets; First Asia, then Europe and America.

From 2016, WeChat has begun to invest 100 million RMB (Chinese currency) to reach strategic cooperation with a number of banks and financial institutions, such as Master Card, VISA card, China's top ten commercial banks, China Power Grid, China's top five airlines, Michelin guide, Michelin restaurants, and top 5 hotels group in Asia, to promote WeChat globally overseas (Strumpf, 2018). All the above internal functional improvement and external strategic cooperation make WeChat become an extraordinary competitive online business platform (Murmah & Zhu, 2021; Yang et al., 2017). WeChat is a relative preferred sales platform due to its strong relationship with end-users. WeChat is suitable for attracting customers' purchase intention than other social media, such as microblog and e-commercial platform.

Effect of WeChat on the Intention of FMCG Online Shopping

Internet and the rise of online sales have greatly promoted the demand for fast-moving consumer goods. For example, 80 per cent of Americans uses the Internet for shopping. Among them, about 85% of Internet users use multiple Internet shopping methods, such as Internet professional shopping platform Amazon.com and WeChat (Cheng & Qiu, 2017). More and more consumers browse WeChat to obtain information about products they are interested in and place orders for them. WeChat, due to its inherent convenience in functional design and retention of customers, especially its special appeal to Chinese users, makes it a very useful tool to enhance the intention of online FMCG sales in Chinese community (Khalifa & Liu, 2007; Lingtao Gu & Mu, 2018).

Strengths and Weaknesses of WeChat for FMCG online shopping

At present, WeChat has become a significant market of micro-content and its influence is no less than traditional mass business. Moreover, every browse, comment and downloading of video or audio by users is a reflection of micro-content. When conducting an audio or video query, the audio or video with many clicks, collections and comments appear on the homepage first. The selection of information is more diversified, and how to get the data required in the sea of information seems to be the common problem of people in this era (Sherrick, 2016). Although WeChat is growing fast, it still has some weaknesses in the online business. Ming-Shen et al. (2007) found that WeChat has captured nearly 67% of China's instant messaging software market through rapid growth. However, outside China, due to the short entry time and the failure to disclose server information, WeChat has not developed rapidly. In Europe and the United States, WeChat's inability to reach an agreement with local banks prevents WeChat payment methods from being used in these regions, which is one

of the serious constraints on WeChat's globalization. Secondly, WeChat pays more attention to the user needs of the biggest Chinese market in terms of human-computer interaction (Chakraborty et al., 2016). Some obvious Chinese-style human-computer interaction interfaces, such as the more closed settings of the circle of friends, give more consideration to the usage habits of Chinese users. This encourages users outside China choose more interactive and open social communication software such as Facebook and WhatsApp, which are more suitable for westerners. These problems, if not problem-solved, will seriously affect the promotion and popularization of WeChat in the world (W.-Y. Wu et al., 2016). Teng and Laroche, (2007) believed that individual's behaviour was determined by behavioural intention, which was jointly determined by the individual attitude towards commodities and perceived usefulness of information system. Attitude reflects the feeling of liking or disliking of online shopping platforms, which is jointly determined by perceived usefulness and perceived ease of use. Perceived usefulness refers to the degree to which an individual believes in the product or services, while perceived convenience refers to the degree to which an individual expects to use the product or service to achieve the purpose.

Research Questions

This study discusses the relationship between the WeChat and the online purchase intention of FMCG. The first research question is "Is WeChat used by Chinese for online purchase of FMCG in New Zealand? The second research question is What is the impact of WeChat on online purchase intention of the FMCG in New Zealand? This study offers a major contribution to the field of human-computer interaction by exploring the role of a popular non-Western social and communication application (WeChat) in purchase intention of FMCG.

MATERIALS AND METHODS

This study examines the relationship between the potential factors affecting Fast Moving Consumer Goods (FMCG) online purchase intention and WeChat. A conceptual framework is constructed based on the UTAUT. Seven factors are considered as independent variables to impact the use of WeChat and Fast Moving Consumer Goods (FMCG) online purchase intention. The demographic factors of age, gender, nationality, WeChat usage, information about online shopping with WeChat and willingness of using WeChat for online shopping are moderators of the independent variables.

In this study, a quantitative research method is employed to collect primary data through an online survey. An instrument is developed after a discussion with a group of Chinese who use WeChat for online shopping. This brainstorming and UTAUT model guided the development of the questionnaire for data collection. After getting the permission of the ethics committee, data was collected from the Chinese. Since the present research focuses on the online purchase intention of fast moving consumer goods of the Chinese ethnic groups living in Aotearoa New Zealand (NZ), the sampling frame consists of 247,770 Chinese people living in Aotearoa New Zealand as of 2018 census (Stats NZ, 2018). A total of 204 questionnaires were collected through online survey, among which 12 people did not agree with the questionnaire consent form, 35 participants chose that they never used WeChat, and 157 questionnaires were actually valid.

The data was collected through non-probability sampling. The reason for using purposeful non-probability sampling technique is that it provides a logical explanation for the selection of the sample size as representative of the study population (Battaglia, 2008). In the current study, since the focus of the study is limited to Chinese people living in the region of Aotearoa New Zealand, only Chinese people could participate in the data collection in the form of a sample. In this case, purposeful non-probability sampling has proven to be effective to administer the questionnaire for data collection. The Chinese respondents were connected through Facebook and WeChat. After the initial group completed the questionnaire, they were asked to spread the QR code of the questionnaire

among social networks and asked new respondents to repeat the process until the sample size reaches the target sample size.

Before conducting the survey, the questionnaire used was approved by the ICL Ethics Approval. An online questionnaire survey was utilized in this research. Participants clicked the URL of questionnaire or scan the QR code to log in to the survey website. Google form was used to distribute questionnaires.

Hypotheses Development

The hypotheses were developed to measure the relationship between the WeChat and the purchasing intention of FMCG in Aotearoa New Zealand. The seven hypotheses are presented as follows:

Effort Expectancy

Effort expectancy in the UTAUT refers to expectations of how easy it is to use the technology (Venkatesh et al., 2003). In this study this refer to the friendly interface of WeChat for purchasing goods online. The effort expectancy has an impact on the decision to do online shopping (Celik, 2016; Tarhini et al., 2017). Considering this, and based on the theory of the UTAUT, we suggest the following hypothesis:

Hypothesis One: The friendly interface of WeChat has an effect on the online purchase intention of FMCG in Aotearoa New Zealand

Performance Expectancy

The performance expectancy in the UTAUT refers to the degree of confidence that using the system can help improve job performance (Venkatesh et al., 2003). For WeChat, the performance expectancy can be regarded as a user's expectation of the benefits of using the app (Walrave et al., 2020), such as prompt notifications of possible information and instructions about online shopping and what to do next. Individuals who have more positive expectations about the WeChat's advantages may be more likely to use it. According to the theory of UTAUT, we formulate the following hypothesis:

Hypothesis Two: The advantages of WeChat regarding easy, convenient, and accessible anytime has an effect on the online purchase intention of FMCG in Aotearoa New Zealand.

Convenient Payment Methods of WeChat

Ease in payment is a factor influencing online shopping behavior (Usha, 2014). WeChat is one of the largest social media in China which is transaction-focused social commerce platform as it has WeChat payment function. WeChat was originally launched as a chatting mobile application with the function of sharing personal status. However, a payment and funds transfer function was established for transaction in 2013 (J. Sun et al., 2016). WeChat has a unique function of making transaction if a user buys something online.

Hypothesis Three: The convenient payment methods of WeChat has an effect on the online purchase intention of FMCG in Aotearoa New Zealand.

FMCG Product Information

Internet is a very important channel for finding information about products (Bednarz & Orelly, 2020). A customer who wants to buy FMCGs can go online on site, read and compare the product information, and purchase from the site that offers the best price (Rajesh, 2018). WeChat marketing has gradually become a vital part of e-commerce, sellers provide product information needed by the

customers and also learn the market and customers' needs in the process of promoting their products. The following hypothesis is formulated:

Hypothesis Four: The useful FMCG product information on WeChat has an effect on the online purchase intention of FMCG in Aotearoa New Zealand.

Social Influence

Social influence is defined as the influence of others on the decision to use a new system, as described in the UTAUT (Venkatesh et al., 2003). The impact of others' beliefs about using new technology is particularly evident in early use (Walrave et al., 2020). As for customer online shopping behaviour, social influence could be addressed under the impact of people (i.e. family, friends, colleagues, and official manufacturer) whom customer could ask about online shopping (Giao et al., 2020; Koch et al., 2020; Lee & Ma, 2012; Semila & Rajesh, 2019; Te'eni-Harari & Hornik, 2010) WeChat is used for chat with family, friends, colleagues that may influence purchase intention of FMCG through WeChat (Algharabat, 2014; Kim, 2019; Zhou, 2020). Taking this into account, and based on the theory of UTAUT, we hypothesize that:

Hypothesis Five: The recommendation from family group chat, friend group chat, colleague group chat, and official manufacturer group chat of WeChat has an effect on the online purchase intention of FMCG in Aotearoa New Zealand.

Security and Confidentiality of Information

Digital applications always involve data security and confidentiality issues, and the same applies to using technology for shopping. The users need to provide personal information when they register. Thus, cyber attackers might compromise these data. Unauthorized access may also be related to businesses or advertising companies. Many companies use data to process and mine consumer information to improve customer satisfaction, however, this data mine can cause privacy concerns (Bandara et al., 2020; Demmers et al., 2021; Pappas, 2018; Saura et al., 2021). Therefore, multiple safeguards are required to ensure privacy and prevent data loss and unauthorized access. One way to ensure privacy and data security simultaneously is to have the data encrypted and stored on users' mobile phones. This information is shared only when requested of the users. Another way to keep data safe is to store only anonymized and aggregated data. However, there may be some security attacks, such as Bluesnarfing, Playback Attack, Wireless Device Tracking, and Carryover Attack. For example, Bluesnarfing accesses and steals sensitive data stored in a user's memory, such as pictures, videos, contact lists, emails, calendars, and international mobile device IDs (IMEI), by connecting with a Bluetooth-enabled device. IMEI is a 15-digit unique identifier for a mobile phone that can be exploited to transfer all incoming calls to the attacker's device (Sowmiya et al., 2021). Taking this into account, and based on the theory of UTAUT, we hypothesize that:

Hypothesis Six: The security and confidentiality of information in WeChat have an effect on the online purchase intention of FMCG in Aotearoa New Zealand.

Electronic Word of Mouth (eWOM)

The rapid advancement and development in internet technologies have made a significant increase in eWOM communications and connectivity as a useful medium to search for relevant information (Daowd et al., 2020; Yusuf et al., 2018). eWOM is ongoing positive or negative information and statement exchange process made by former, current, or potential consumers about a product, service, brand, or company, which is available through the Internet to a multitude of individuals (Daowd et

al., 2020; Leong et al., 2021; Yusuf et al., 2018). Online shoppers find eWOM to be a vital means for opinions and reviews because they can look for new information including details of products and products/ services' information (Erkan & Evans, 2016). For instance, consumers are more likely to share negative experiences than positive ones, and eWOM is more powerful than any advertisements and personal sales. Consumers collect and develop credibility from e-vendors' websites to ensure online confidence (Daowd et al., 2020; Erkan & Evans, 2016). The information shared on the Internet is used to judge the quality of products (Ismagilova et al., 2021). Consequently, comments and reviews through online platforms are considered trustworthy so that they can decide to purchase (Lien & Cao, 2014). In the context of shopping of FMCGs through an online platform, eWOM including leaving comments and reviews on the purchasing platform. This simply means that if consumers receive satisfactory quality of FMCGs, they may engage in positive reactions and feedback. In contrast, when consumers receive unsatisfactory quality of FMCGs, they may engage in negative reactions and feedback. Therefore, the influence of eWOM on purchase intention of FMCGs through online platforms is another factor worth studying. The researcher proposes the following hypothesis.

Hypothesis Seven: The customers' recommendation in WeChat has an effect on the online purchase intention of FMCG in Aotearoa New Zealand.

Questionnaire Valid Response Rate

A total of 204 questionnaires were collected through online survey, among which 12 people did not agree with the questionnaire consent form, 35 participants chose that they never used WeChat, and 157 questionnaires were actually valid, accounting for 77% of response rate of receiving filled questionnaires as shown below in Table 1:

Table 1. Response rate of survey

| Statistics | | | |
|------------|---------|-----|-------|
| | | N | % |
| N | Valid | 157 | 77.0% |
| | Invalid | 35 | 17.2% |
| | Missing | 12 | 5.9% |

| Validation Test | | | |
|-----------------|-------|-----------|---------|
| | | Frequency | Percent |
| Cases | Valid | 157 | 77.0% |
| | Total | 204 | 100% |

Reliability Analysis of Questionnaire

Reliability analysis was one of the criteria to check whether the questionnaire was meaningful. The reliability of the questionnaire was calculated by SPSS as 0.92. In generally speaking, the reliability coefficient of the scale was above 0.9, which means the reliability of the scale is very good. After the reliability analysis, the subsequent research based on the data collected from the questionnaire is valuable and significant.

Table 2. Reliability statistics of questionnaire

| Case Processing Summary | | | |
|-------------------------|-----------------------|-----|------|
| | | N | % |
| Cases | Valid | 157 | 77% |
| | Excluded ^a | 47 | 23% |
| | Total | 204 | 100% |

^a Listwise deletion based on all variables in the procedure.

| Reliability Statistics | |
|------------------------|------------|
| Cronbach's Alpha | N of Items |
| 0.92 | 19 |

FINDINGS

Age of the Respondents

As shown in Table 3 below, 29.7% of the respondents involved in this survey are younger than 30 years old, 55.7% are between 30 and 40 years old, and 14.6% are older than 40 years old. According to the data, the vast majority of respondents are under the age of 40. This is also evident from the Table 1 that 32.3% of the respondents are female, 64.1% are male, and the remaining 3.6% are reluctant to reveal they are true gender. Table 1 also shows that 82.3% of the respondents are Chinese, while the remaining 17.7% are non-Chinese. Chinese with foreign identities are not excluded. Statistically, the overwhelming majority of participants are Chinese. WeChat is the most significant social media application which explicating attracting the younger generation (Nawaz et al., 2020).

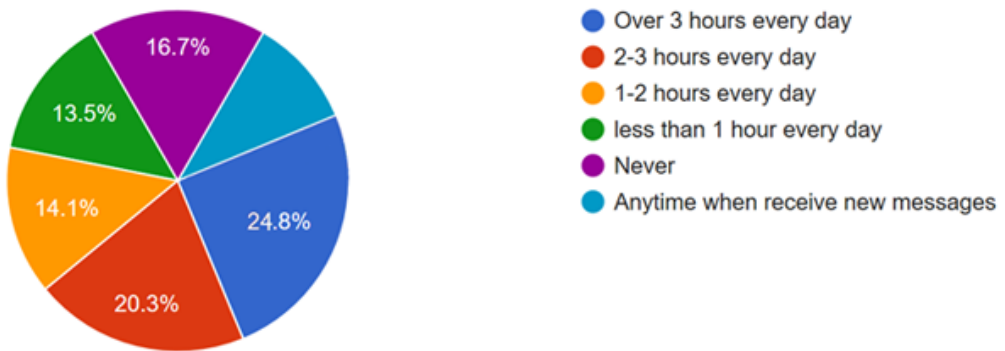
Table 3. Demographic information of the respondents

| Variables | Values | % |
|-------------|---------------------|------|
| Age | 20-24 | 11.5 |
| | 25-29 | 17.2 |
| | 30-34 | 18.8 |
| | 35-39 | 21.0 |
| | 40-44 | 15.9 |
| | 45-49 | 8.9 |
| | 50+ | 7.0 |
| Gender | Male | 32.3 |
| | Female | 64.1 |
| | Don't want to share | 3.6 |
| Nationality | Chinese | 82.3 |
| | Non-Chinese | 17.7 |

Use of WeChat per Day

As shown in Figure 1 below, about one-quarter of the respondents used WeChat more than 3 hours every day, 34.4% are between 2 hours to 3 hours every day, and 13.5% of respondents used WeChat no more than 1 hour every day. In particular, 10.6% of the respondents used WeChat almost every day. In addition, only 16.7% of respondents never used WeChat. The respondents who choose never use WeChat have been excluded from further analysis.

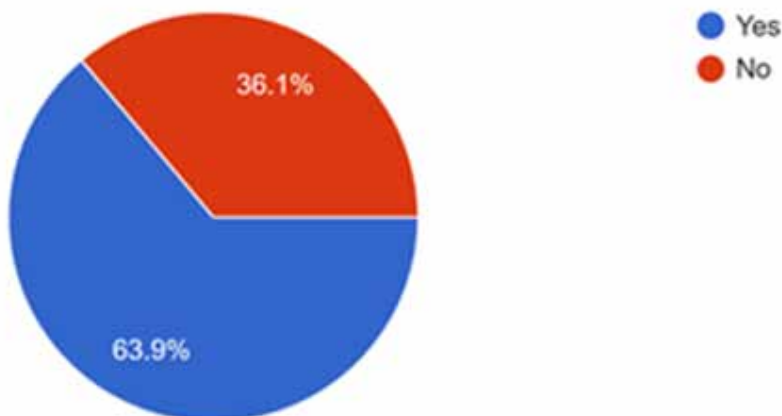
Figure 1. Use of WeChat per day



Information About Online Shopping with WeChat

Figure 2 shows that 63.9% of the respondents know the online purchase of WeChat, while 36.1% do not know the online purchase of WeChat.

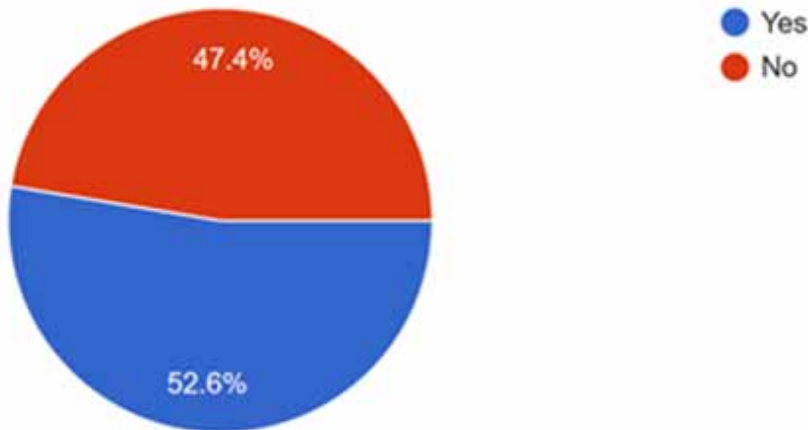
Figure 2. Awareness about online purchase with WeChat



The Willingness of Online Purchase through WeChat

Figure 3 shows that 52.6% of the respondents are willing for online shopping with WeChat in next one year, and 47.4% are unwilling to do online shopping with WeChat in next one year.

Figure 3. Willingness of online purchase with WeChat



It can be concluded from the data above that the majority of participants in this survey are young female Chinese. Almost all of the respondents use WeChat for more than one hour a day. More than half of the participants knew that online shopping was available on WeChat and was willing to use WeChat for online shopping within one year.

Hypotheses Testing

The hypotheses were tested through correlation analysis, so as to determine the correlation between the variables studied. After correlation analysis and screening, regression analysis was used to confirm whether the relevant hypothesis is valid. If the target data set does not satisfy these assumptions, the results of regression analysis will be biased. According to statistics, all analyses were quantified to ensure the objectivity of the results.

Correlation Analysis

Table 3 describes the correlation analysis results of the respondents' views on the proposed factors, using the Pearson Correlation. It indicates that many factors impact on each other. For example, intention of online shopping of fast moving goods is significantly correlated to friendly interface of WeChat, effort expectancy, WeChat payment, product information and suggestions given on WeChat by family, friends or social influence, facilitation conditions, concerns about personal information security and electronic word of mouth.

Each hypothesis is discussed and the conclusion of correlation is drawn by analyzing the quantitative data.

Table 4. Correlation analysis

| | Sig. (2-tailed) | Online purchase intention |
|---|------------------------|----------------------------------|
| Friendly interface of WeChat | 0.000 | .510** |
| Advantages of WeChat regarding easy, convenient, and accessible anytime | 0.000 | .712** |
| Payment method of WeChat | 0.000 | .843** |
| Useful FMCG product information on WeChat | 0.008 | .212** |
| Recommendation from chats of WeChat | 0.000 | .902** |
| Security and confidentiality of information in WeChat | 0.000 | .679** |
| Customers' recommendation in WeChat | 0.004 | .392** |

** . Correlation is significant at the 0.01 level (2-tailed)

As shown in Table 4, there is a significant correlation between online purchase intention and the friendly interface of WeChat. In addition, according to Pearson Correlation in Table 3, there is a positive correlation between the two variables with an intensity of “0.51”. Hence the null hypothesis $H1_0$ ‘The friendly interface of WeChat has no effect on the online purchase intention of FMCG is rejected.

There is a significant correlation between online purchase intention and the advantages of WeChat regarding easy, convenient, and accessible anytime. In addition, according to Pearson Correlation, there is a positive correlation between the two variables with an intensity of “0.712”. Hence $H2_0$ ‘The advantages of WeChat regarding easy, convenient, and accessible anytime has no effect on the online purchase intention of FMCG in Aotearoa New Zealand’ is rejected.

The hypothesis $H3_0$ ‘The convenient payment methods of WeChat have no effect on the online purchase intention of FMCG in Aotearoa New Zealand’ is also rejected as shown in Table 4 that there is a significant correlation between online purchase intention and the convenient payment methods of WeChat. In addition, according to Pearson Correlation, there is a positive correlation between the two variables with an intensity of “0.843”.

The statistical result of $H4_0$ ‘The useful FMCG product information and suggestion of WeChat have no effect on the online purchase intention of FMCG in Aotearoa New Zealand’ shown in Table 4, the significance level is “0.008”. This indicates that the null hypothesis $H4_0$ is accepted “where there is no linear correlation between independent variables and dependent variables” is bigger than average probability “0.005” (Kask, 1979). It shows that there is a weak correlation between online purchase intention” and the useful FMCG product information and suggestion of WeChat. In addition, according to Pearson Correlation, there is a positive correlation between the two variables with an intensity of “0.212”.

According to Table 4, there is a significant correlation between online purchase intention and the recommendation from family group chat, friend group chat, colleague group chat, and official manufacturer group chat of WeChat “. Hence the null hypothesis $H5_0$ ‘The recommendation from family group chat, friend group, chat, colleague group chat, and official manufacturer group chat of WeChat has no effect on the online purchase intention of FMCG in Aotearoa New Zealand’ is rejected. In addition, according to Pearson Correlation, there is a positive correlation between the two variables with an intensity of “0.902”.

The significance level is “0.000” for the null hypothesis $H6_0$: ‘The security and confidentiality of information in WeChat have no effect on the online purchase intention of FMCG in Aotearoa New Zealand’. This indicates that the probability of hypothesis $H6_0$ where there is no linear correlation between independent variables and dependent variables” is “0”. Therefore, it can be concluded logically that there is a significant correlation between online purchase intention and the security and confidentiality of information on WeChat “. In addition, according to Pearson Correlation, there is a positive correlation between the two variables with an intensity of “0.679”.

As shown in Table 4, the significance level for $H7_0$: ‘The customers’ recommendation in WeChat has no effect on the online purchase intention of FMCG in Aotearoa New Zealand’ is “0.004”. This indicates that the probability of hypothesis $H7_0$ where there is no linear correlation between independent variables and dependent variables nearly equals to average probability 0.005 (Kask, 1979). Therefore, it can be concluded logically that there is an atypical correlation between online purchase intention and the customers’ recommendation in WeChat”. In addition, according to Pearson Correlation, there is a positive correlation between the two variables with an intensity of “0.392”. This result is similar to the findings of other studies that identify the impact of eWOM to influence customers’ intention to buy (Daowd et al., 2020; Erkan & Evans, 2016; Ismagilova et al., 2021; Leong et al., 2021).

Regression Analysis

In this section, regression analysis results are shown in Table 4 to discuss and analyze the seven hypotheses from multiple dimensions. By analyzing the quantitative data, each hypothesis is discussed and the conclusion of correlation is drawn.

Table 5. Regression analysis

| Independent Variables ^a | Unstandardized Coefficients | | Standardized Coefficients | t | Model | ANOVA | |
|---|-----------------------------|------------|---------------------------|--------|-------------------|--------|-------|
| | B | Std. Error | Beta | | Adjusted R Square | F | Sig. |
| (Constant) | 1.877 | 0.306 | | 6.133 | 0.164 | 31.613 | 0.000 |
| Friendly interface of WeChat | 0.462 | 0.082 | 0.412 | 5.623 | | | |
| (Constant) | 1.709 | 0.264 | | 6.464 | 0.652 | 54.417 | 0.000 |
| Advantages of WeChat regarding easy, convenient, and accessible anytime | 0.486 | 0.066 | 0.51 | 7.377 | | | |
| (Constant) | 1.678 | 0.248 | | 6.778 | 0.855 | 64.655 | 0.000 |
| Payment method of WeChat | 0.528 | 0.066 | 0.543 | 8.041 | | | |
| (Constant) | 2.893 | 0.269 | | 10.737 | 0.039 | 7.291 | 0.008 |
| Useful FMCG product information on WeChat | 0.201 | 0.075 | 0.212 | 2.7 | | | |
| (Constant) | 2 | 0.231 | | 8.664 | 0.808 | 52.305 | 0.000 |
| Recommendation from chats of WeChat | 0.463 | 0.064 | 0.502 | 7.232 | | | |

Table 5 continued on next page

Table 5 continued

| Independent Variables ^a | Unstandardized Coefficients | | Standardized Coefficients | t | Model | ANOVA | |
|---|-----------------------------|------------|---------------------------|--------|-------------------|--------|-------|
| | B | Std. Error | Beta | | Adjusted R Square | F | Sig. |
| (Constant) | 2.012 | 0.243 | | 8.279 | 0.453 | 46.195 | 0.000 |
| Security and confidentiality of information in WeChat | 0.425 | 0.062 | 0.470 | 6.797 | | | |
| (Constant) | 2.435 | 0.230 | | 10.590 | 0.148 | 28.182 | 0.004 |
| Customers' recommendation in WeChat | 0.374 | 0.070 | 0.392 | 5.309 | | | |

a. Dependent Variable: Online purchase intention

As shown in Table 5, the significance of regression analysis for hypothesis 1 is “0.000”. That means the friendly interface of WeChat has no effect on the online purchase intention of FMCG in Aotearoa New Zealand of null hypothesis $H1_0$ is “0.000”. This leads to the conclusion the friendly interface of WeChat has an effect on the online purchase intention of FMCG in Aotearoa New Zealand. For hypothesis 2, the significance of regression analysis is “0.000”. Hence the null hypothesis $H2_0$ is rejected. This leads to the conclusion the advantages of WeChat regarding easy, convenient, and accessible anytime has a significant effect on the online purchase intention of FMCG in Aotearoa New Zealand.

The significance of regression analysis for $H3_0$ is “0.000”. This leads to the conclusion the convenient payment methods of WeChat effect on the online purchase intention of FMCG in Aotearoa New Zealand. As shown in Table 5, the significance of regression analysis for $H4_0$ is “0.008”. This leads to the conclusion that the useful FMCG product information and suggestion of WeChat has almost no effect on the online purchase intention of FMCG in Aotearoa New Zealand.

The null hypothesis for $H5_0$ is rejected as the significance of regression analysis is “0.000”. This leads to the conclusion that the recommendation from family group chat, friend group chat, colleague group chat, and official manufacturer group chat of WeChat have an effect on the online purchase intention of FMCG. The significance of regression for $H6_0$ is “0.000”. This leads to the conclusion the security and confidentiality of information in WeChat have an effect on the online purchase intention of FMCG in Aotearoa New Zealand. As shown in Table 5, the significance of regression analysis is “0.004”. That means the customers' recommendation on WeChat has no any effect on the online purchase intention of FMCG in New Zealand as null hypothesis $H7_0$ is accepted. This means the customers' recommendation in WeChat has almost no effect on the online purchase intention of FMCG in New Zealand. This is a quite interesting and unexpected finding of this study. However, this finding is similar to the study conducted by Liu et al. (2021) that interpersonal relationship influences the purchase through WeChat.

Bar Graphs

Figure 4 shows that 32.5% of participants chose the neutral option and did not share their opinion. Respondents who agreed and strongly agreed were about 30% higher than those who disagreed. As for the proposition of the friendly interface of WeChat influences the online purchase intention of FMCG in New Zealand, the majority is the consents. This is also consistent with the result of correlation and regression analysis of hypothesis H1.

Figure 4. Friendly interface of WeChat

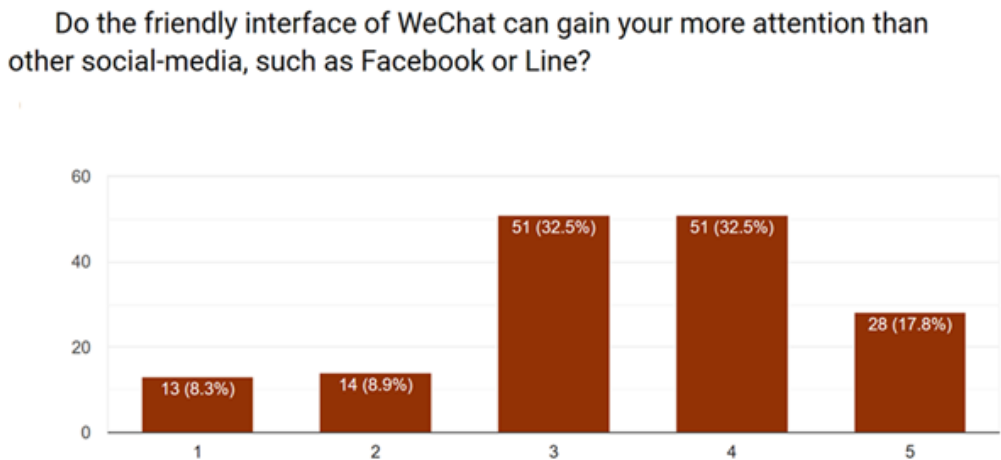


Figure 5 below shows that 69.4% of participants agreed about the advantages of WeChat regarding easy, convenient, and accessible anytime, 43.3% of participants agreed that the customers' recommendation has an impact on the purchase intention of FMCG. This is also consistent with the result of correlation and regression analysis of hypothesis H2 and H7.

Figure 5. Advantages of WeChat for providing information

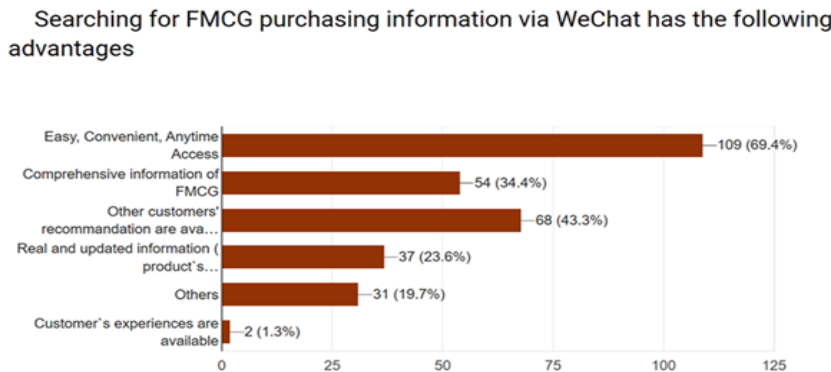


Figure 6 below showed that over 64% of participants agree with the option that the convenient payment methods of WeChat have an effect on the online purchase intention of FMCG in New Zealand. This is also consistent with the result of correlation and regression analysis of hypothesis H3.

Figure 6. Convenient payment method through WeChat

Do you feel more convenient with the payment methods of WeChat than other social-media, such as Facebook or Line?

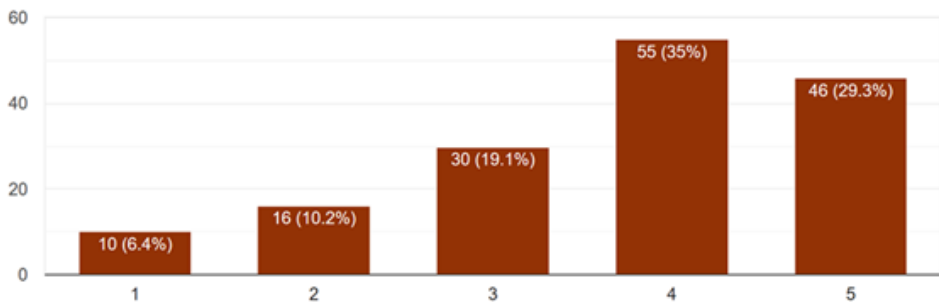
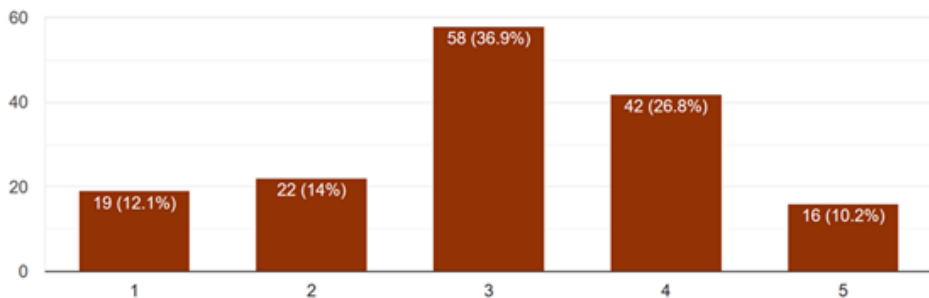


Figure 7 below shows that 37% of participants agree that the useful FMCG price information and suggestion of WeChat has no effect on the online purchase intention of FMCG in New Zealand, 36.9% of participants chose neutral. 26.1% of respondents disagree or strongly disagree with the proposition. This is also consistent with the result of correlation and regression analysis of hypothesis H4.

Figure 7. Price information provided through WeChat

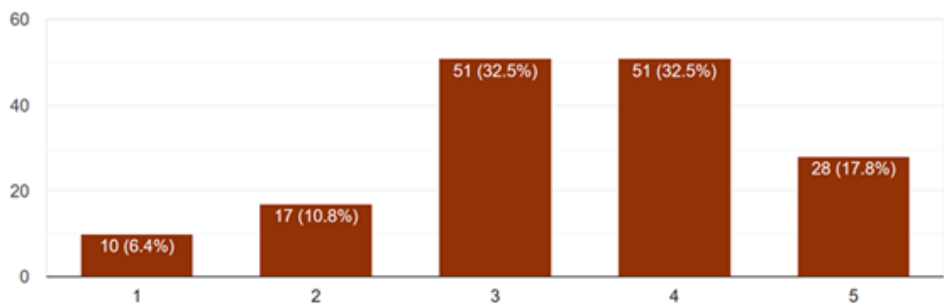
Do you get more price discount information by WeChat than other social-media, such as Facebook or Line?



The data shows that 50.3% of participants agree that the security and confidentiality of information on WeChat has an effect on the online purchase intention of FMCG in New Zealand, 32.5% of participants chose neutral. 17.2% of respondents disagree or strongly disagree with the proposition. This is also consistent with the result of correlation and regression analysis of hypothesis H6.

Figure 8. Security and confidentiality of information

Do the potential risk of personal information disclosure by online shopping with WeChat influence the FMCG purchasing intention?



The results of these studies showed that WeChat exerted increasing influence on online purchase intention of FMCG, especially among Chinese customers. This study determined the strong correlation between WeChat and online purchase intention among Chinese in New Zealand.

WeChat's interactive interface, convenience, means of payment, content related to FMCG, the diversity of WeChat discussion group function, special moment publishing function and unique comments function are all crucial to online purchase intention. The recommendation from family group chat, friend group chat, colleague group chat, and official manufacturer group chat of WeChat" are strongly correlated. In addition, it is found that the advantages of WeChat regarding easy, convenient, and accessible anytime and the security and confidentiality of information in WeChat also impact online purchase intention. The only exception is the security and confidentiality of information on WeChat". According to Karunakaran et al. (2018), on account of network security is considered as the biggest potential concern of online shopping. However, in New Zealand, due to the National Cyber Security Centre for network security protection and supervision, the security level of online payment is high enough (Keymer, 2011).

It is found that the useful FMCG product information and suggestion of WeChat has no effect on the online purchase intention. This survey result is contrary to some existing studies on WeChat and online purchase intention in China. Nowadays, more and more "We-Media" are emerging on WeChat. One of the main functions of the "We-Media" is to promote products and conduct WeChat marketing plan. The content marketing generates traffic and sales through the spread and promotion of product features and information in WeChat (Ming, 2017). In China, the useful FMCG product information and suggestion of WeChat affected online purchase intention seriously.

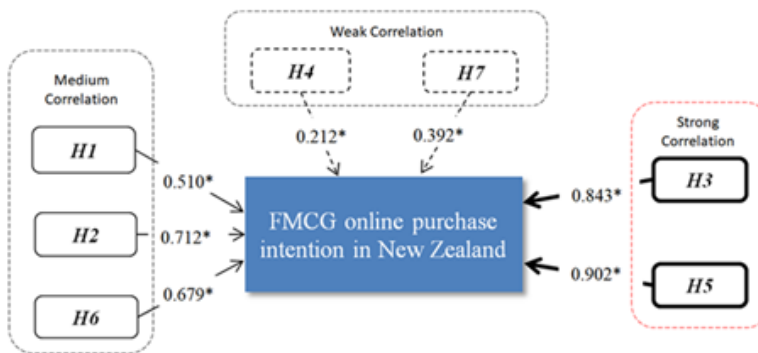
Another one of weak correlation is between "The customers' recommendation in WeChat" and "online purchase intention". Among New Zealand WeChat users, they would rather to choose believing family members or friends' recommendation than to trust a stranger's suggestion (Larson,

2016; Siddiqui et al., 2019). Because the growing number of fake or misleading recommendation regarding to online shopping with WeChat has seriously affected consumers' trust. To sum up, these two result are totally different with the existing research.

WeChat is widely used by Chinese in New Zealand; with more than half of user using WeChat's online shopping function. The WeChat users are mostly young people. When using WeChat to purchase, users in New Zealand are concerned about the interface on WeChat shopping, the recommendation of WeChat moments and the security of using WeChat shopping. These factors are highly correlated with online purchase intention. In addition, WeChat users in New Zealand are very concerned about the convenience and payment method of WeChat. These two parameters are highly correlated with online purchase intention. On the contrary, WeChat users in New Zealand do not agree with product information, advertising and other unfamiliar customers' recommendation.

To sum up, through correlation and regression analysis, three of the seven assumptions related to online purchase intention of FMCG from WeChat have medium correlation, two assumptions have strong correlation and the other two are weakly correlated. The analysis is as shown in figure 9 below:

Figure 9. Summary of regression analysis result about seven hypothesis



* Pearson Correlation

H1 The friendly interface of WeChat

H2 The advantages of WeChat regarding easy, convenient, and accessible anytime

H3 The convenient payment methods of WeChat

H4 The useful FMCG product information and suggestion of WeChat

H5 The recommendation from family group chat, friend group chat, colleague group chat, and official manufacturer group chat of WeChat

H6 The security and confidentiality of information in WeChat

H7 The customers' recommendation in WeChat

DISCUSSION

This study determined the strong correlation between WeChat and online purchase intention for FMCG among Chinese living in New Zealand. WeChat's interactive interface, convenience, means of payment, content related to FMCG, the diversity of WeChat discussion group function, special moment publishing function and unique comments function are all crucial to online purchase intention which are in line with the studies conducted by (Yanhong Chen et al., 2019; Linwu Gu & Wang, 2018; Ming-Shen et al., 2007; Siddiqui et al., 2019; Tang et al., 2021b).

The present study found that the convenient payment methods of WeChat and the recommendation from family group chat, friend group chat, colleague group chat are strongly correlated with online

purchase intention. This finding of the study is consistent with the current studies of WeChat's influence on online purchase intention that more convenient online payment of WeChat attract the users' purchase online intention (Alberto Valdés-Cuervo et al., 2021; Lingtao Gu & Mu, 2018; Hossain & Zhou, 2018; Ma et al., 2018; Mombeuil & Uhde, 2021; Shao et al., 2019; Tang et al., 2021a). The emergence of WeChat pay has brought the mobile payment to its peak (Liangxu, 2020). WeChat payment is cash free, and it is a faster, safer, and more convenient way for customers to pay for goods or services enhance the purchasing intentions by improving the customer experience of shopping (Y. Sun et al., 2021). According to Zhang et al. (2020), consumer purchase intention is significantly positive related by flexibility or convenience provided by WeChat. This finding is line with the present study.

It is also found that the friendly interface of WeChat, the advantages of WeChat regarding easy, convenient, and accessible anytime and the security and confidentiality of information in WeChat are generally positively correlated with the online purchase intention, which means these characteristics of WeChat play a certain role in influencing and promoting the purchase intention of FMCG. This finding is in line with Linwu Gu and Wang (2018) which states the WeChat friendly interface enable group members to exchange information that impact selling, buying and swapping of products on WeChat.

The security and confidentiality are not considered as the biggest potential concern of online shopping. Due to the National Cyber Security Centre for network Security protection and supervision is high in New Zealand. The security level of online payment is high enough (Keymer, 2011). The online shopping consumers have a higher awareness of network security.

This finding is very important to consider in the context of New Zealand where security and privacy of information are not considered a hurdle in online shopping whereas numerous studies reveal that privacy risk, privacy control, and security significantly influence consumers' trust which consequently impact consumers' purchase intention (Pizzi & Scarpi, 2020; Song et al., 2021; M. Y. Wang et al., 2019; X. Wang et al., 2019). Consumers regard disclosure of privacy without consent lose their trust and make them no longer anonymous (Massara et al., 2021; Prince, 2018). Once private information is disclosed, it threatens the data integrity and security of users, which may lead to malicious attacks on users. Online customers have certain expectations for network privacy, especially for the protection of information from unknown third parties. In social networks, disclosure of private information affects the trust of users, therefore, people develop an attitude of resistance when they perceive that their privacy and freedom are controlled by others and hence it may impact their purchasing intention of FMCGs while using WeChat. Because the growing number of fake or misleading recommendation regarding to online shopping with WeChat has seriously affected consumers' trust. However, the finding of the present study reveals that it has less impact on the Chinese customers living in New Zealand. Currently, more and more We-Media are emerging in WeChat. One of the main functions of the "We-Media" is to promote products and conduct WeChat marketing plan. The content marketing generates traffic and sales through the spread and promotion of product features and information in WeChat (Lei, 2021; Ming, 2017; Romano, 2020).

The findings of the study also revealed that the useful FMCG product information and suggestion on WeChat has weak correlations with online purchase intention which means this factor has no effect on the purchase intention of FMCG. This survey result is contrary to some existing studies exploring the products information and referrals on WeChat and online purchase intention. In China, the useful FMCG product information and suggestion of WeChat affected online purchase intention (Yanhong Chen et al., 2019). Another one of weak correlation is between the customers' recommendation on WeChat and online purchase intention. Among New Zealand WeChat users, they would rather to choose believing family members or friends' recommendation than to trust a stranger's suggestion. This finding is in line with the studies of (Dieudonne et al., 2016; Larson, 2016; Liu et al., 2021).

CONCLUSION

This can be concluded that WeChat is used by Chinese in New Zealand; with more than half of the respondents using WeChat's online shopping function. The WeChat users are mostly young people. When using WeChat to purchase, users in New Zealand are concerned about the interface on WeChat shopping, the recommendation of WeChat moments and the security of using WeChat shopping. These factors are highly correlated with online purchase intention. In addition, WeChat users in New Zealand are very concerned about the convenience and payment method of WeChat. These two parameters are highly correlated with online purchase intention. On the contrary, WeChat users in New Zealand do not consider product information and other unfamiliar customers' recommendation while deciding to purchase any product.

IMPLICATIONS

WeChat, due to its inherent convenience in functional design and retention of customers, especially its special appeal to Chinese users, makes it a very useful tool to enhance the intention of online FMCGs sales in Chinese community. Through noting the data by respondents, it is evident that Chinese in Aotearoa-New Zealand seems to be using WeChat for shopping FMCGs due to its friendly interface and convenient accessibility anytime. The effective social media mechanism of WeChat may be an effective marketing tool to target not only Chinese for selling FMCGs but also all the people of Aotearoa-New Zealand. Therefore, this finding could improve the businesses' confidence to make more efforts in doing marketing activities through WeChat official account by different types of content (e.g., FMCG product information on WeChat, Customers' recommendation etc.), in turn, increasing customer engagement, product awareness and brand loyalty.

For this research, the findings claim many aspects that are important for any industry nationally and internationally to consider. WeChat usage is a power tool for communication at various levels and contexts. This study has shown that for the Chinese market, selling and buying FMCGs to Aotearoa-New Zealand is a purposeful direction to consider especially due to the present situation of pandemic of COVID-19.

LIMITATION

The following two limitations affected the research.

- 1) The influence of government policies in China on the social media cannot be excluded in the process of scientific investigation and analysis. One effect is that Tencent Co. is an Internet company based in China. Tencent Co. must strictly comply with China's cyber security laws and regulations. This will have severe limitations for users in New Zealand to use WeChat. For example, for the survey question about WeChat security, users of WeChat in China and New Zealand gave completely different answer. This will result in some consequences of this research contradicting current existing research results on WeChat in China. Additionally, in China, some competitors of WeChat cannot carry out business activities, such as Facebook, WhatsApp and Line. This phenomenon also forces Chinese in New Zealand to ignore these potential options when doing online shopping. This makes data analysis without some reference.
- 2) Another limitation is the theoretical difference of the distribution of survey participants. The sample selection of participants in this survey was not evenly distributed in New Zealand. Therefore, the generalization ability of the research results outside scope is weak. In other words, the findings are less general. Since it was made clear at the beginning of the study that the majority of participants in this study were from Auckland, it meant that the regional concentration of participants slightly reduced the universality of this study for the whole New Zealand. Although

from the participant data, this survey is in line with the standard survey process. However, in terms of the distribution of participants, this survey mainly focused on the Auckland area and did not cover the whole country.

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