

THE SUSTAINABLE CONSUMPTION OF SLOW-MOVING CONSUMER GOODS IN OMNICHANNELS

Issarin Kulchitaphong, KMITL Business School
Mariusz Urbański, Czestochowa University of Technology
Singha Chaveesuk*, KMITL Business School
Wornchanok Chaiyasoonthorn, KMITL Business School

ABSTRACT

Omni-channel is a revolution in the retail business in the social media age. The use of big data and digital technologies has transformed business models, customers can purchase products through a variety of channels. Entrepreneurs must develop a business strategy for managing channels of interphase with customers, especially about information systems that connect business networks on Omni-channels. Slow Moving Consumer Goods (SMCG) rely on highly engaged customers' behavior, learning and lifestyle such as complex consumer decisions under the Omni business network. This study illuminates the keys to sustainability and success in a highly competitive market. It illustrates the sustainable consumption model of SMCG in the Omni-Channels to realize relationships, frameworks to establish new norms, and ascertain the consistency of the model strategy. It also explores the impact of the theoretical and practical implications of SMCG sustainability to entrepreneurs, and to present a guideline for further academic and professional development.

Keywords: Consumer Goods, Digital Technologies, Competitive Market

INTRODUCTION

Decision making by consumers in the selection of products is a faster process today. The influence of technology has made it possible for brands to market products using omni-channel networks. (Ewerhard et al., 2019) opined that omni-channel retailing is the use of combination of channels to promote, market, and sell goods and services to consumers. They outline that what is new in the process is the integration of channels in sales and marketing to consumers, and an increased number of retailers have adopted this strategy. Slow Moving Consumer Goods (SMCG) refer to products that indicates highly engaged customers' behaviors, learning and lifestyle. This includes sophisticated consumer decisions (Hamiln & Wilson, 2004). Example of products in SMCG include home furnishing, household appliances and office supplies. Now a days, consumers have admitted to slowing down their decision making on the commodity consumption of products (Weiss et al., 2010). Customers can conveniently select a purchasing channel through completed information technology which can enable and share information across all channels at any time (Gallino et al., 2017; Mazur & Wieczorek, 2012). Omni-channel customers can use different or multiple channels simultaneously during their purchases (Lazaris & Vrechopoulos, 2014; Štefko & Pollák, 2011)

Modern omni-channel management is presented to evolve omni-channel context research in terms of service quality (Dabija & Lung 2019; MacCarthy et al., 2019); consumer behavior (Xu & Jackson, 2019); product returns (Zhang et al., 2018; Radhi & Zhang, 2019); and pricing (Zhang et al., 2017; Gupta et al., 2019). Omni-channel is the era of channel aggregation that allows entrepreneurs to enable data sharing to meet customer needs (Frazer & Stiehler, 2014). Customers will be able to view sales history and marketing channels of all retailers, regardless of

the channel. It creates a good and smooth shopping experience for customers (Herhausen et al., 2015). Therefore, the store space has changed through the growth of the internet and the online trading system.

LITERATURE REVIEW

Omni-channel is the synergy between channels to optimize channel performance and create a better customer experience (Verhoef et al., 2015), where channel integration can reduce impact and profitability in a competitive advantage for entrepreneurs (Herhausen et al., 2015). Order prediction and product delivery are in the closest location to the customer. It is another way to quickly respond to customer demand for products (Lee, 2016). Utilizing digital shopping data to analyze the customer demand can enhance the brand image (Blom et al., 2017), while the introduction of online technology can serve the operation of Omni-channel services for enabling customers to place orders. Self-made goods will be able to increase the efficiency of management both service and cost (Gao & Su, 2018). There is an increased trend of customers to shop online today, but in-stores still play an important role in the platform because in-store personnel can also be representative of the online store (Abrudan et al., 2020; Verhagen et al., 2018).

Several studies show important factors influencing sustainable consumption behavior, such as norms, intentions, motivation, beliefs, values, and attitudes (Ajzen et al., 1991; Lee, 2014). The principle of “Triple bottom line” emphasizes environmental quality, social justice, economic prosperity (Balderjahn et al., 2013), which is to balance with the three dimensions, environmental, social, and economic perspectives creating business growth. Environmental stewardship and contribution to surrounding society and operations with transparency create a sustainable competitive advantage for business in the future. The consumer centric approach to sustainability is the theory of sustainable consumption behavior using sustainability factors (Sheth, Sethia & Srinivas, 2011). It called a holistic measure based on the concept of Mindful Consumption (MC). The key is conscious thinking and conscious behavior. According to a literature review of age, gender, income and education relationships (Thompson & Kidwell, 1998; Ross et al., 2000; Robinson & Smith, 2002). They demonstrated behavioral properties related to quirks. Demographic factors affecting sustainable consumption behavior are unclear. It was found that women buy more local organic products than men, but some studies contend that sexual factors may not influence purchases. While the results of the study showed that more educated people tend to buy organic products and are willing to pay extra for organic products. Some studies contend that studies do not affect buying behavior. The objective of this research is to create the model of the sustainable consumption of slow-moving consumer goods in the Omni-channel. The research questions require an answer to form the structural model as follows:

- What factors influence SMCG customer decision on Omni Channels?
- How does Omni Channel exist in a SMCG’s competitive market?

RESEARCH METHODS

This study has utilized the (Hair, 2006) theory to determine the sample sets. The research population consists of SMCG shopper both online and offline platforms. The Structural Equation Model (SEM) in AMOS program has been considered to analyze the eighteen observed and seven latent variables relationships (Schumacker & Lomax, 2010) with the total sampling size of 363 participants using stratified random sampling technique with proportion comparison method to collect 360 datasets to ensure the accuracy and completeness. The respondents were selected based on practical experience with SMCG products shopping through online and offline channels

into three groups (Shopee, Lazada & Facebook). The majority of Thailand population uses digital technology, e-commerce, and in the recent era, mobile devices have gained tremendous growth opportunities in the online marketplace. Amongst the most popular online platforms in Thailand includes Shopee (75.60%), Lazada (65.50%), Facebook (47.50%), Line (38.90%), Instagram (21.80%), and Twitter (5.70%) (ETDA, 2020).

The questionnaire for data analysis with a five-point rating scale was used to prove the question and consider the content and consistency of the research by five experts, easy-to-understand determination, and detail review to verify the reliability and accuracy of with the IOC index and Cronbach's alpha. For statistical analysis and to study error-specific factors to measure the relationship between latent and observed variables, the Confirmatory Factor Analysis (CFA) (Brown, 2006) was used to analyze survey factors and multiple regression were included together. The Structural Equation Model (SEM) was used to examine the relationship between observed variables to the extent of fit and tolerance, both internal and external variables (Ullman, 2001). This research was with the consent of all respondents and the questionnaire in the survey was approved by the Ethics of Human Research. This study has no policy to divide the personal information with others to protect the dangers and dignity of the participants.

RESULTS & DISCUSSIONS

The socio demographic information of Slow-Moving Consumer Goods (SMCG) in the research surveyed and aggregated the respondents as shown in Table 1.

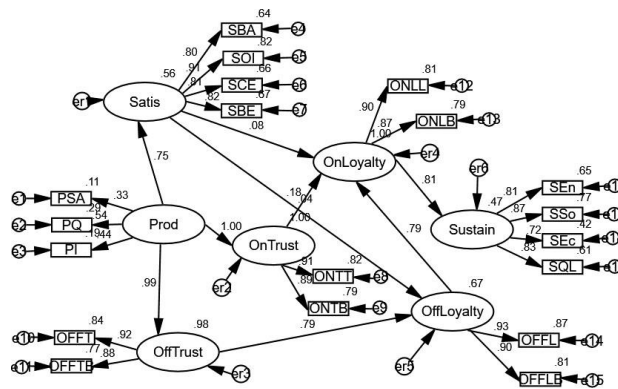
Gender	N	%
Male	179	49.3
Female	184	50.7
Total	363	100.0
Age		
18-22 years	8	2.2
23-40 years	194	53.4
41-55 years	134	36.9
56-70 years	27	7.4
Total	363	100.0
Education		
Below a bachelor's degree	37	10.2
A bachelor's degree	238	65.6
Higher a bachelor's degree	88	24.2
Total	363	100.0
Online shopping experience		
1-3 years	164	45.2
4-6 years	160	44.1
7-9 years	20	5.5
10-12 years	12	3.3
13-15 years	3	0.8
More than 15 years	4	1.1
Total	363	100.0
Offline shopping experience		
1-3 years	15	4.1
4-6 years	141	38.8
7-9 years	64	17.6
10-12 years	12	3.3
13-15 years	11	3.0
More than 15 years	120	33.1

Total	363	100.0
Purchase frequency		
Once a month	138	38.0
once a bi-week	99	27.3
1-3 times a week	39	10.7
4-6 times a week	7	1.9
Everyday	6	1.7
Once per 6 months	74	20.4
Total	363	100.0
Purchasing value per bill		
Less than 1,000 baht	32	8.8
1,001-5,000 baht	242	66.7
5,001-10,000 baht	67	18.5
More than 10,000 baht	22	6.1
Total	363	100.0

According to the measurement fit model of CFA, accepted value of Chi-square is equal to 77.459, and Chi-square/df is equal to 0.842. Moreover, AGFI=0.956, GFI=0.979, and CFI=1.000 that all pass the criteria because of the index range greater than 0.9. RMR=0.005 and RMSEA=0.000 that all passes the criteria to be within the index range, and lower than 0.05.

Structural Equation Model

A review of the relevant literature on the causal relationship about the SMCG model of sustainability in the Omni Channel illustrates the Structural Model as follow.



**FIGURE 1
STRUCTURAL EQUATION MODEL**

The AMOS model analysis technique was used to test all hypotheses in this study by comparing and showing the t-statistic values of 1.95 (significance 0.05). The hypotheses testing results are presented in Table 2 below.

Hypotheses Testing	DE	Results
H1: Product=>Satisfaction	0.747	Accept
H2: Product=>Online Trust	0.998	Accept
H3: Product=>Offline Trust	0.991	Accept

H4: Satisfaction=>Online Loyalty	0.112	Accept
H5: Satisfaction=>Offline Loyalty	0.038	Reject
H6: Online Trust=>Online Loyalty	0.179	Accept
H7: Offline Trust=>Offline Loyalty	0.788	Accept
H8: Offline Loyalty=>Online Loyalty	0.793	Accept
H9: Online Loyalty=>Sustainable Consumption	0.812	Accept

H1: The customer shopping experience is the result of satisfaction with the products and services of the customer (Ziaullah et al., 2014), while the satisfaction of the customer arises from the relationship between product quality and customer loyalty (Noor et al., 2019).

H2: Credibility often has good product physical characteristics that has a direct impact on Trust (Corritore et al., 2003). Encouraging online buyers of trust to be satisfied with value creation and intermediary relationship enhancement that is the proactive efforts in response to sustainable business performance (Yongrok & Do., 2019).

H3: A key factor in the long-term relationship between retailers and customers is to nurture trust by responding to customers with good quality products and services (Zhou, 2011) which may have cultural differences of trust (Jengchung et al., 2015). The study shows that customers may have significantly different opinions about the system and the quality of the information.

H4: The emphasis on product brand experience has influenced online brand loyalty, especially in multi-channel retailers (Imran & Zillur, 2016). In multichannel retailers, the integration of the online and the offline to OMNI technology and channel strategy are created a relationship of brand experience and trust in online brand loyalty (Marco et al., 2019).

H5: Repurchasing and recommending others to buy as same place are due to the satisfaction and willingness of customers (Chen & Wang, 2016). Marketing activities are less important than the role of customer retention by offline salespeople (Sany & Maha, 2016). But some researchers argued that customer engagement can increase satisfaction (Muhammad et al, 2016). Even with high satisfaction but unable to increase loyalty because the relationship of satisfaction and loyalty are very complex (Sobihah et al., 2015).

H6: Online trust has a huge impact on customers (Kim & Prabhakar, 2000). An important of e-commerce development process is the development of online trust and online loyalty. Customer's role is a critical role for proving the causal relationship between online trust and online loyalty (Honglei et al., 2015), as well as the customer's intent and expectations to buy online (Reichheld et al., 2000).

H7: The positive relationship between the retailer and the customer's repeat purchase intent behavior that shows the offline trust and offline loyalty (Dabholkar & Sheng, 2012). Therefore, customers can lead to trust and loyalty. It shows a higher level of shopping satisfaction (Kang et al., 2004). It can be concluded that customer loyalty is a key factor in repeat purchases (Meng et al., 2011).

H8: Researcher has confirmed the relationship between offline loyalty and online loyalty (Jones and Kim, 2010). Interactions to build loyalty in OMNI-channel and online assessments are the result of offline service assessments (Sabiote & Román, 2012). It is a correlation between online and offline channels, so that, the transaction process, such as online product searches, can be linked to the frequency of in-store purchases (Farag et al., 2007)

H9: Maintaining repeat customers are a result of satisfaction and loyalty to the core activities of retailers with customers (Shao et al., 2019). The key to building sustainable consumption of customers is commitment, attention, and responsiveness to their online shopping experience and to achieve the relationship between satisfaction, loyalty and value in the customer's perspective (Reema, 2019).

Direct and Indirect Effects

A positive direct effect was only one variable on the OMNI-channel model of SMCG. The online loyalty is a coefficient of 0.812. Other variables, a positive indirect effect have five variables on the OMNI-channel model of SMCG, namely: products, satisfaction, online trust, offline trust, and offline loyalty with coefficients of 0.698, 0.067, 0.145 0.507, and 0.644, respectively, are shown in Table 3.

Table 3			
DIRECT AND INDIRECT EFFECTS			
Variable	Direct Effects	Indirect Effects	Total Effects
Product		0.698 (0.747*0.082*0.812)+(0.998*0.179*0.182)+(0.991*0.788*0.793*0.812)	0.698
Satisfaction		0.067 (0.082*0.082)	0.067
Online Trust		0.145 (0.179*0.812)	0.145
Offline Trust		0.507 (0.788*0.793*0.812)	0.507
Online Loyalty		0.812	0.812
Offline Loyalty		0.644 (0.793*0.812)	0.644

CONCLUSION

The combination of theoretical implications was proved this research such as OMNI-channel (Verhoef et al., 2015; Herhausen et al., 2015; Lee, 2016), Slow-moving consumer goods (Hamiln & Wilson, 2004; Weiss et al., 2010), and Sustainable Consumption (Balderjahn et al., 2013; Kot et al., 2019). There are three main ideas in the research scope for SMCG sustainability across the OMNI-channels. The results of this study assorted that satisfaction, online trust and offline loyalty had a significant direct influence on SMCG's online loyalty. The SMCG group of products cannot be indirectly influenced by satisfaction as other products. Another thing is very interesting. Leading to sustainability goes through loyalty online. This truly represents the OMNI-channel, and in the end, online loyalty leads to sustainable consumption with direct influence. This study found that the online and offline channels are complex because the product group in the test are complicated when making a purchase and are completely non-replaceable. Therefore, the SMCG product range must be based solely on direct influence for online loyalty only to lead to a sustainability model. There is no direct relationship between online and offline channels because customers have separate attitudes towards purchasing channels. Only the relationship between online loyalty and offline loyalty is correlated. Therefore, it can be concluded that 1) satisfaction does not affect the purchasing channel 2) trust cannot be correlated between online and offline, and 3) loyalty is correlated between online and offline channels. Ultimately, online loyalty is the last variable before leading to completely sustainable consumption. As a result of this research, entrepreneurs can define strategies and goals to create mechanisms and actions to achieve customer needs, satisfy customers, build trust, accumulate loyalty, and lead to sustainable consumption in the end.

REFERENCES

- Abrudan, I.N., Dabija, D.C., & Grant, D.B. (2020). Omni-channel retailing strategy and research agenda. *Contributions to Management Science*, 261–280.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Dabija, D.C., & Lung, L. (2019). Millennials versus Gen Z: Online shopping behaviour in an emerging market. *Applied Ethics for Entrepreneurial Success: Recommendations for the Developing World*, 1–18.
- Ewerhard, A., Karel, S., & Ulf, J. (2019). Consumer decision-making of slow moving consumer goods in the age of multi-channels. *The International Review of Retail, Distribution and Consumer Research*, 29, 1-22.

- Frazer, M., & Stiehler, B.E. (2014). Omnichannel retailing: The merging of the online and off-line environment. *In Global Conference on Business and Finance Proceedings*, 9(1), 655-657.
- Gallino, S., Moreno, A., & Stamatopoulos, I. (2017). Channel integration, sales dispersion, and inventory management. *Management Science*, 63(9), 2813–2831.
- Gao, F., & Su, X. (2018). Omni channel service operations with online and offline self-order technologies. *Management Science*, 64(8), 3595–3608.
- Gupta, V.K., Ting, Q.U., & Tiwari, M.K. (2019). Multi-period price optimization problem for omnichannel retailers accounting for customer heterogeneity. *International Journal of Production Economics*, 212, 155-167. Doi 10.1016/j.ijpe.2019.02.016
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. (2006). *Multivariate data analysis*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Hamiln, R.P., & Wilson, T. (2004). The impact of cause branding on consumer reactions to products: Does product/cause ‘fit’ really matter? *Journal of Marketing Management*, 20(7-8), 663–681.
- Herhausen, D., Binder, J., Schoegel, M., & Herrmann, A. (2015). Integrating bricks with clicks: retailer-level and channel-level outcomes of online–offline channel integration. *Journal of Retailing*, 91(2), 309-325.
- Kot, S., Haque A.U., & Kozlovski, E. (2019). Strategic SCM’s mediating effect on the sustainable operations: Multinational perspective. *Organizacija*, 52(3). 219-235.
- Lazaris, C., & Vrechopoulos, A. (2014). From multi-channel to “omnichannel” retailing: Review of the literature and calls for research. *In the 2nd International Conference on Contemporary Marketing Issues (ICCM)*. Athens: Greece.
- Lee, C.K.H. (2016). A GA-based optimisation model for big data analytics supporting anticipatory shipping in Retail 4.0. *International Journal of Production Research*, 55(2), 593–605.
- Lee, K. (2014). Predictors of sustainable consumption among young educated consumers in Hong Kong. *Journal of International Consumer Marketing*, 26, 217-238.
- MacCarthy, B.L., Zhang, L., & Muyldermans, L. (2019). Best performance frontiers for buy-online-pickup-in-store order fulfilment. *International Journal of Production Economics*, 211, 251-264.
- Marco, S., Francesco B., Fabrizio D., & Marco D.M., (2019). Technology adoption for the integration of online–offline purchasing Omnichannel strategies in the retail environment. *International Journal of Retail & Distribution Management*, 47(5), 474-492.
- Meng, S.M., Liang, G.S., & Yang, S.H. (2011). The relationships of cruise image, perceived value, satisfaction, and post-purchase behavioural intention on Taiwanese tourists. *African Journal of Business Management*, 5(1), 19-29.
- Radhi, M., & Zhang, G. (2019). Optimal cross-channel return policy in dual-channel retailing systems. *International Journal of Production Economics*, 210,184-198.
- Robinson, R., & Smith, C. (2002). Psychosocial and demographic variables associated with consumer intention to purchase sustainably produced foods as defined by the Midwest food alliance. *Journal of Nutrition Education and Behavior*, 34(6), 316-325.
- Ross, S. E., Hemati, N., Longo, K.A., Bennett, C.N., Lucas. P.C., Erickson, R.L., & MacDougald, O.A. (2000). Inhibition of adipogenesis by Wnt signaling. *Science*, 289, 950-953.
- Schumacker, R.E., & Lomax, R.G. (2010). *A beginner's guide to structural equation modeling (3rd edition)*. Routledge/Taylor & Francis Group.
- Sheth, J.N., Sethia, N.K., & Srinivas, S. (2011). Mindful consumption: a customer centric approach to sustainability. *Journal of the Academy of Marketing Science*, 39, 21-39.
- Štefko, R., & Pollák, F. (2011). Virtual social networks and their utilization for promotion. *Polish Journal of Management Studies*, 4(2), 126-134.
- Verhagen, T., Dolen, W., & Merikivi, J. (2018). The influence of in-store personnel on online store value: an analogical transfer perspective. *Psychology and Marketing*, 36(3), 161–174.
- Verhoef, P.C., Kannan, P.K., & Inman, J.J. (2015). From multi-channel retailing to omni-channel retailing. *Journal of Retailing*, 91(2), 174–181.
- Weiss, M., Martin, K.P., Martin, J., & Kornelis, B. (2010). Analyzing price and efficiency dynamics of large appliances with the experience curve approach. *Energy Policy*, 38, 770-783.
- Wójcik-Mazur, A., & Wieczorek, K. (2012). Distribution management in company X. *Polish Journal of Management Studies*, 6, 196-205.
- Xu, X., & Jackson, J.E., (2019). Examining customer channel selection intention in the omni- channel retail environment. *International Journal of Production Economics*, 208, 434-445.
- Zhang, J., Onal, S., & Das, S. (2017). Price differentiated channel switching in a fixed period fast fashion supply chain. *International Journal of Production Economics*, 193, 31-39.
- Zhang, J., Xu, Q., & He, Y. (2018). Omni channel retail operations with consumer returns and order cancellation. *Transportation Research Part E: Logistics and Transportation Review*, 118, 308-324.