

Product Innovation's Determinants of Chinese Family Business in Chiangmai and Consumer Socioeconomics

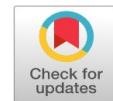
NUTTHANEE KITDUMRONGTHUM^{1*}, PUSANISA THECHATAKERNG²

^{1, 2} Faculty of Business Administration, Maejo University, Chiangmai, Thailand

Abstract: This paper tries to answer the research question; customers influence product innovation factors. As a sample 400 small family, Chinese business customers were collected data using questionnaires in Chiangmai province. The results show that most customers are females with more than 40 years and 31-35 years of age. T-test confirms that socioeconomic factors of customers influence product innovation factors. Moreover, customers' socioeconomic or demographic factors, age, and occupation are significantly related to product innovation in three categories; line extensions, Me-too products, competitor's products, and new-to-the-world products. There is a limited number of innovation studies in authentic Chinese moon cake of Chinese family-owned businesses, despite the importance of innovation. That is product innovation that influences customers' buying.

Keywords: Product innovation, Chinese family business, Chinese moon cake, factors, Chiangmai

Received: 12 April 2018 / Accepted: 16 May 2018 / Published: 18 June 2018



INTRODUCTION

Family businesses are economic drivers of countries increasing income and employment. These family businesses especially Chinese family businesses are the key form of enterprise (Gersick et al., 1997), particularly souvenir sector realizing 22.4 billion Baht of Thai market value with 35,000 entrepreneurs (Kasikorn Thai, research center, 2016). Chinese family businesses have received a lot of attentions in the studies since the last decades but there are still some interesting points such as Chinese family business producing specific Authentic Chinese moon cake till the fourth generation in Chiangmai, Thailand. Uh Chang Seng is the only family left who has been producing Authentic Chinese moon cake in Chiangmai since 1897. One hundred twenty one years ago, since the first started to establish business of the founder, this family business has been being through from generation to generation while the other family businesses were closed down because of un-adaptation. Entrepreneurs in family business are in highly competitive markets, innovative products become important for entrepreneurs to survive (Boonpradub & Thechatakerng, 2015; Celik, Kunt, Rennie, & Akinci, 2017). Product innovation has been seen as an alternative tool for family business to survive. Product innovation reveals changes in finish product or service presented by the firms, while process innovation embodies changes in the way firms produce finish products or services (Boonpradub & Thechatakerng, 2015; Cooper, 1998). Product Innovation is the change of new goods, product design or using new methods in the current production. In the same way, product innovative aims to offer differentiating via functions and features in current markets for current products (Escalante, Turvey, et al., 2006; Gundry, Kickul, Welsch, & Posig, 2003; Irai & Lu, 2018). Besides, product innovative can be observed into both the internal and external sides of the product. Internal side depends on technologies, resources, knowledges, and capacities used in the firm whereas the external side explains the needs of customers and the expectations of owners to the firm's product (Seng & Ping, 2016). Nevertheless, there are some interesting points such as product innovations that need to

*Corresponding author: Nutthanee Kitdumrongthum

†Email: kitd.nutthanee@gmail.com

be discovered. One of these points is that there is limited number of studying innovation in authentic Chinese moon cake of Chinese family-owned businesses, despite the importance of innovation. That is, product innovation which influences customers buying (Seng & Ping, 2016). This paper, then tries to answer the research question; what product innovation factors are influenced by customers?

LITERATURE REVIEW

Product Innovation and Customers' Socio-economy

Product innovation is the acceptance of new or enhanced production methods. These production methods can include changes in both of tool or production parties. Product innovation is divided into three groups: line extensions which means products still familiar to the firm but new to the market, me too products which products are new to the enterprise but well known to the market, imitations of rival's products and new to the world products which mean products are new to both enterprise and the market (Baruah, 2008, 2008; Ghiasy, Hosseini, Malekmohammado, & Hosseini, 2009; Seng & Ping, 2016; Booz & Hamilton, 1982).

The socioeconomic or demographic factors that determine customers in the study include: age, gender, and occupation. Demographic factors; society and economic factors are related to and influence to each other (Pannell, Malcolm, & Kingwell, 2000; Mannan & Haleem, 2017). Gender and Age of customer, gender is recognized for all customers in the study. Boonpradub and Thechatakerng (2015) and Bosma, Van Praag, De Wit, et al. (2000) claimed that males prefer the product changing than females. Age is likely to change in reaction to economic motivations, by the age distribution of the population and other demographic effects. Though, demographic examination has the gain of classifying population trends that may affect individual decision making in the short and medium term future (Peterson, 1994; Pranee & Papapankaid, 2017). Occupation, the occupational groups would have specific awareness in products and services. Then, products and service can be adapted for that occupational groups by a family business (Boonpradub & Thechatakerng, 2015; Irai & Lu, 2018; Kotler, Ang, & Tan, 2003). From literature: Socioeconomic or Demographic factors and product innovation factors, we proposed that

H1: Product innovation factors are influenced by socioeconomics of customers

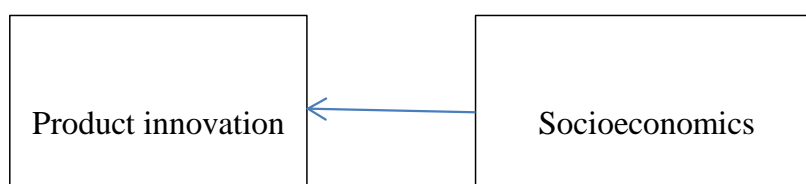


Figure 1. Research model

RESEARCH METHOD

To test hypothesis, 400 customers who bought authentic Chinese moon cake from Uh Chang Seng shop were conducted an empirical study. This customer group was requested to answered questions involving to characteristics. Furthermore, determinants of product innovation are influenced by customers were also asked.

Validity

Validity issues was intrinsic in this study. We involved only customers who bought authentic moon cake from Uh Chang Seng shop in Chiangmai province. This could be limited the results.

Later, we interpreted information to test hypothesis, as well as investigated documents, synthesized information and observed customers in the study. Moreover, customers were requested to answer questionnaires. After we gained all the data, questionnaires were tested the reliability by Cronbach's Coefficient Alpha (Peterson, 1994), then we examined the data through social statistic program.

RESULTS AND DISCUSSION

Descriptive information of consumers

Socioeconomic or demographic factors of customers

This section provides the demographical characteristics of customers.

i) Demographic factors of customers:

Gender, Age and Occupation: 400 customers were asked and answered questionnaire. Of the 400 customers, 295 (64.8%) were women and 141 (35.3%) were men. Both women and men were more than 40 years of age and between 31-35 years old in the similar number. Moreover, 171 (42.8%) of customers worked in private company, 84 (21%) worked on their own accounts which in this study we defined as entrepreneurs and 75 (18.8%) worked in the government sectors (showed only 3 of 6 ranks)

Product innovation factors

We divided product innovation factors into three groups; line extensions, me too products, and imitations of competitor's products and new to the world products.

i) Line extensions:

Line extensions in this paper we offered 4 variables; adaptation of taste from original taste to be diversified taste of moon cake, moon cake model design to attract customers, different size of moon cake, and colorful moon cake.

The results show that customers pay more attention in more choice of the taste (4.20), different size of moon cake (3.92), and colorful moon cake (3.87) respectively.

ii) Me too products:

Me too products explained products that new to the enterprise but familiar to the market. They were consisting of new package design, using new technology in production, up to date material, and Brand design to recognize product identity.

The results clarify that using new technology in production process (3.92) and brand design to recognize product identity (3.90) could be attracted customer attention.

iii) Imitations of rival's products and new to the world products:

This category consists of 4 variables; product events at the site, product delivery to customers door, package innovation, and longer shelf life of product but the authentic taste still remains.

For this part customers show that they prefer to buy beautiful and useful package innovation (4.03) and like to buy moon cake that has longer shelf life and still remained fresh authentic taste (3.90) as well. Furthermore, an up to date of product design was still effected by customers (3.89) (See Table 1).

Table 1: Product innovation factors

Line Extensions	Mean	SD
adaptation of taste from original taste to be diversified taste	4.20	.831
different size	3.92	.786
moon cake model design to attract customers	3.87	.820
Me-too products		
Brand identity	3.92	.690
New technology using	3.90	.761
up to date material	3.89	.630
Imitations of competitor's products and new-to-the-world products		
Package innovation	4.03	.670
long life shelf of product but the authentic taste still remains	3.90	.710
up to date of product design	3.89	.630

Hypothesis

We proposed our hypothesis that

H1: Product innovation factors are influenced by socioeconomics or demographics of customers

This paper, the impact of variables was analyzed; gender, age, and occupation.

Table 2 explains socioeconomic or demographic factors of customers do influence to product innovation. This study notices significant relationship between genders, age and occupation by using T-test to analyze these variables. From socioeconomic factors of customers, we counterpointed with mentioned variables, the study expected that; gender, age, and occupation should influence to product innovation. The study shows H1 is confirmed. *t*-test illustrates that age and occupation level are significantly related to product innovation (.000, .000) while there is no significant relationship with gender. By age influences to product innovation in the area of line extensions with the sub-variable ; moon cake model design to attract customers (.000), the results by LSD testing explain that customers who are between 31-35 years of age prefer to have up to date product design. In addition, age does influence to product innovation in the category of competitors products and new-to-the-world products with the sub-variable imitations; package innovation. LSD also demonstrated that customers with 31-35 years of age are attracted by innovative package as well. Moreover, Occupation does influence to product innovation in the area of line extensions with the sub-variable; adaptation of taste from original taste to be diversified taste. LSD provs that customers who work with private sectors and entrepreneurs like innovation product with diversified tastes.

Table 2: Results of Hypothesis

H1: Product innovation factors are influenced by socioeconomics of customers	Result
Gender	unsupported
Age	supported
Occupation	supported

CONCLUSION

As the whole, empirical did in this paper discover the important context about product innovation exploited by family business owner, in the area demographic factors of customers. This paper exposed the significant to what demographic factors of customer do influence to product innovation. The results confirm that most of product innovation variables; line extensions, me too products and Imitations of competitor’s products and new to the world products were influenced by customers socioeconomic.

For Hypothesis test; Product innovation factors influenced by socioeconomics of customers, are confirmed by single sample t-test. Socioeconomics of customers; age and occupation showed significantly related to product innovation in three categories; line extensions, Me too products and competitor’s products and new to the world products which were consistent with [Seng and Ping \(2016\)](#). Besides, age of customers did influence to product innovation, as [Boonpradub and Thechatakerng \(2015\)](#) explained that younger people preferred more innovative product than older people, but older people could get advantages from their experiences. In addition, occupation; did influence to product innovation in the area of line extensions with the sub-variable; adaptation of taste from original taste to be diversified taste especially customers in the career of staffs in private sectors and entrepreneurs ([Seng & Ping, 2016](#)).

Recommendations

We suggest since the analyses discovered compounded effects could significant product innovation boosting activities, the future research should examine variations across customers of Chinese family business in more details. Some important limitations that should be expanded in future research as we were tapered to a database that limited information on just customers of one Chinese family business although this family would be established since last 121 years, some important innovative implements, the results is limited. The drivers of product innovation could become different. Future studies should be examined more customers from other family businesses, as well as the other factors by also including market and process innovation.

REFERENCES

- Baruah, B. (2008). *Agribusiness management, its meaning, nature and scope, types of management tasks and responsibilities* (Vol. 13). Retrieved from <https://bit.ly/2Vr3jS0>
- Boonpradub, W., & Thechatakerng, P. (2015). Brand endorsement by celebrity in thailand: 7ps of marketing mix and the impact of brand alliance. *International Journal of Trade, Economics and Finance*, 6(1), 8-13. doi:<https://doi.org/10.7763/ijtef.2015.v6.433>
- Booz, & Hamilton, A. . (1982). *New products management for the 1980s*. New York, NY: Booz, Allen & Hamilton.
- Bosma, N., Van Praag, M., De Wit, G., et al. (2000). *Determinants of successful entrepreneurship* (Tech. Rep.). Amsterdam, Netherlands: University of Amsterdam.
- Celik, H. K., Kunt, G., Rennie, A. E. W., & Akinci, I. (2017). Non-linear fem-based shattering simulation of shelled edible agricultural products walnut shattering by nut cracker hand tool. *International Journal of Technology and Engineering Studies*. doi:<https://doi.org/10.20469/ijtes.3.40006-2>
- Cooper, J. R. (1998). A multidimensional approach to the adoption of innovation. *Management Decision*, 36(8), 493–502. doi:<https://doi.org/10.1108/00251749810232565>
- Escalante, C., Turvey, C., et al. (2006). Innovation and entrepreneurship in rural communities: Early business survival challenges for the agribusiness entrepreneur. In *Southern Agricultural Economics Association Annual Meetings*, Orlando, FL.
- Gersick, K. E., Gersick, K. E., Davis, J. A., Hampton, M. M., Lansberg, I., et al. (1997). *Generation to generation: Life cycles of the family business*. Boston, MA: Harvard Business Press.
- Ghiasi, F. G., Hosseini, S. J. F., Malekmohammado, I., & Hosseini, M. (2009). Factors influencing the entrepreneurship in irans agricultural cooperatives. *Australian Journal of Basic and Applied Sciences*, 3(2), 1170–1176. doi:<https://doi.org/10.2307/1349032>
- Gundry, L., Kickul, J., Welsch, H. P., & Posig, M. (2003). Technological innovation in women-owned firms: Influence of entrepreneurial motivation and strategic intention. *The International Journal of Entrepreneurship and Innovation*, 4(4), 265–274. doi:<https://doi.org/10.5367/000000003129574324>
- Irai, P., & Lu, A. C. C. (2018). Exploring the relationship among psychological safety, knowledge sharing, and innovation. *Journal of Administrative and Business Studies*, 4(3), 126-135. doi:<https://doi.org/10.20474/jabs-4.3.1>
- Kotler, P., Ang, S. H., & Tan, C. T. (2003). *Marketing and management: an asian perspective*. Upper Saddle River, NJ: Prentice Hall.
- Mannan, B., & Haleem, A. (2017). Understanding major dimensions and determinants that help in diffusion & adoption of product innovation: using ahp approach. *Journal of Global Entrepreneurship Research*, 7(1), 1–24. doi:<https://doi.org/10.1186/s40497-017-0072-4>
- Pannell, D. J., Malcolm, B., & Kingwell, R. S. (2000). Are we risking too much? perspectives on risk in farm modeling. *Agricultural Economics*, 23(1), 69–78. doi:[https://doi.org/10.1016/s0169-5150\(00\)00058-x](https://doi.org/10.1016/s0169-5150(00)00058-x)
- Peterson, R. A. (1994). A meta-analysis of Cronbach's coefficient alpha. *Journal of Consumer Research*, 21(2), 381–391. doi:<https://doi.org/10.1086/209405>
- Pranee, S., & Papapankaid, C. (2017). Factors affecting purchasing decision of community products in ranong province. *International Journal of Business and Administrative Studies*, 3(2), 79-83. doi:<https://doi.org/10.20469/ijbas.3.10005-2>
- Seng, L. C., & Ping, N. S. (2016). The influence of product innovation toward consumer purchase intention. *Journal of Economics, Commerce and Management*, 4(4), 773–782.