

THE INFLUENCE OF PRODUCT INNOVATION TOWARD CONSUMER PURCHASE INTENTION

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Abstract

The increase of the globalization economic activities, the gradual integration of markets and the continuous evolution of consumer's needs and desires have given firms new challenges that to try to innovate more and more. Under this new atmosphere that features the external and internal company's environment, it becomes necessary for company to fit itself in these changes in order to maintain its market place, and to face the aggressive competition in such an open world market. Hence, this study, The Influence of Product Innovation toward Consumer Behavior helps managements and academicians to understand consumer purchase intention in product innovation. This paper discuss if product innovation able to influence consumer purchase intention. With this understanding, managements and academicians able to plan and strategize before market the product. In addition, this study provides different insight of consumer behavior. This paper would lastly propose a conceptual framework of this study.

Keywords: Product Innovation, Purchase Intention, Consumer Behavior, Innovation, Theory Planned Behavior, Theory of Reasoned Action

INTRODUCTION

Innovation which derives from the Latin "innovation" which means the creation of something new (Johannessen, Oslen & Lumpki; 2001). While some define innovation as Innovation means making new products and offering new services, or adding new value to existing ones (Cassey, Guing; 2007). It is based on the results of new technology developments, new combinations of

existing technology or the utilization of other knowledge acquired by the company (Rajinish; 2008) and Klasus, 2004 define Innovation as the degree to which value is created for customers through enterprise that transform new knowledge and technologies into profitable products and services for national and global markets. It covers a wide range of activities to improve firm performance, including the implementation of a new or significantly improved product, service, distribution process, manufacturing process, marketing or organizational method. According to Schumpeter, there are five areas in which companies can introduce innovation in terms of:

- 1) Generation of new or improved products;
- 2) Introduction of new production process;
- 3) Development of new sales market;
- 4) Development of new supply market;
- 5) Reorganization and/or restructuring of the company.

Schumpeter has clearly distinguished innovation from minor changes in the makeup and/or delivering of products in forms of extension of product lines, adding service components or product differentiation. Innovation is not related to production fields only, but there are other fields and activities which can be innovated.

Product innovation is the adoption of new or significantly improved production methods. These methods may involve changes in equipment or production organization or both. The methods may be intended to produce new or improved products which cannot be produced using conventional plants or production method or essentially to increase the production efficiency of existing products (Engineering and Mathematics (STEM) Enterprise; 2009). Based on Global Innovation Index (GII) 2015 report, Malaysia has ranked 32 out of 141 countries in 2014 Innovation Index with 45.98 score. Besides that, Malaysia's remarkable innovation performance led it to record the highest GII rank among the middle-income countries in 2014. Malaysia has shown a huge potential in innovation due to the fact that organization has now competing to gain competitive advantage through innovation.

Product Innovative and Purchase Intention

Product Innovation is the development of new products, making changes in current product design or using new techniques and means in the current production methods. In other word, product innovative focuses in existing markets for existing products, differentiating through features and functions that currently not offered (Rainey; 2006). Product innovative can be analyzed by looking into the internal side and external side of the product. Internal side, where it depends on knowledge, capacities, resources and the technologies used in the company while

the external side would be the consumers' needs and the owners' expectations towards the company's product.

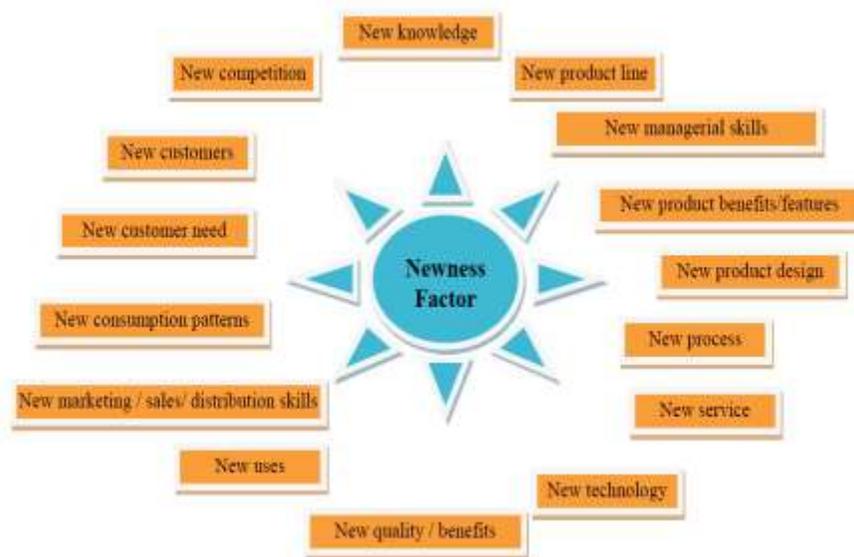
Of course not all product innovations prove to be successful. Often, researchers evoke famous product failures to show that marketing product innovations could be a lottery game: sometimes you win, other times you lose. Cooper (1979) conducted an extensive investigation of success and failure factors for industrial new products. Cooper identified 3 factors that able to describe the innovativeness of the venture: *newness to the firm*; a project that is totally new to the firm which takes the firm into new market and new technology (diversification), *product uniqueness*; a product which is truly unique which the firm introduces the existing market with a unique type of product, and *product uniqueness / superiority*; a product which has significant improvements over previous products making it unique and superior.

Later on, Kleinschmidt and Cooper (1991) found the relationship between product innovativeness and commercial success is U-shaped, by meaning that both high and low innovativeness products are more likely to be more successful than those in-between. There are many ways to measure the successful of a product. Product innovation's contribution to company output can be measured by sales and profits contributed by new products/ services, change in market share and also the degree of companies' knowledge stock. Realizing customers' needs and wants with new characteristics through creating new product pattern with determined measures and features which are not found and realizing the continuance of customers' fidelity towards the brand would eventually increase the company's profit. Realizing customers' needs and wants or providing solutions to the production problems and creating new opportunities to use the new resources would develop the purchase intentions (decide, plan, intend) to purchase the product among consumers; a consumer decision making process.

Booz, Allen, and Hamilton 1982; Olson et al. 1995 separated product innovation into three basic categories: *line extensions* (products still familiar to the business organization but new to the market), *me-too products* (products that are considered new to the business organization but familiar to the market; imitations of competitor's products) and *new-to-the-world products* (products are considered new to both business organization and the market). These different categories of product innovation have lead Danneels et al. (1998) to conduct a research on product innovativeness from the firm's perspective. He tried to clarify the product innovativeness construct and examine its underlying dimensions; to examine the relation product innovativeness with the dimensions; to examine the relation of product innovativeness with the decision to pursue or kill the project; and to examine the relationship between product innovativeness and product performance. Garcia and Calantone (2002) found five dimensions of product innovativeness to influence the decision to market the product and product

performance: market familiarity, technological familiarity, marketing fit, technological fit and new marketing activities. Besides that, they also discover the list of newness factors which describe the product innovation as in figure 1.:

Figure 1: Literature Synthesis of the Newness Factor; adopted from Gracia and Calantone (2002)



Based on this, this study will focus on few newness factors which are product features, product design / product packaging and new quality / benefits / uniqueness.

Product Features Innovation

Chang and Wildt (1994) product features is major decision variables used by marketer to influence the product evaluations and purchase behaviors of potential customers. To effectively make decisions regarding these variables, marketers seek knowledge about how consumers use product attribute information in the evaluations of products. Besides that, many product features can be included in the communication message. Much research focusing on the diffusion of innovations has identified characteristic (e.g., relative advantage, compatibility) of innovations that affect the rate of their adoption (Rogers 1983). Hoyer (1984) mentioned when consumers are asked why they have recently purchased particular products, they typically mention price and performance (product features) as reasons, which are measures of overall value.

Prior research on consumer product adoption, Gatignon and Robertson 1993; McCardle 1985; Meyer and Sathi 1985; suggested that there are two related factors that must be considered in evaluating the impact of a new feature

- 1) The value that the new feature or innovation contributes to enhanced product and
- 2) The uncertainty associated with the performance of the feature when it is added to that product.

Although a buyer must consider the value of an innovation to determine whether to purchase it, buyers may or may not consider the implications of the enhanced product's brand name or its existing level attributes regarding the likely performance of an added feature (Nowlis and Simonson 1996). Thus, a product with relatively inferior existing features and a brand associated with lower perceived quality are expected to gain more with new features added.

Product Packaging Innovation

Packaging is often the last impression to consumer before the final purchase decision is made (Nawaz Ahmad; 2012). As the matter of fact, people are becoming more and more demanding; packaging has gradually shown its important role in serving consumers by providing information and delivering functions. With its different functionality to ease and to communicate with consumers, there is no doubt about increasingly important role of packaging as a strategic tool to attract consumers' attention and their perception of the product quality. According to Nawaz Ahmad; 2012 packaging innovation can provide a number of business benefits which include:

- 1) Tangible representation of brand or company values,
- 2) Significantly enhancement of product delivery, experience or enjoyment,
- 3) Increase the impact at point of purchase and
- 4) New distribution channels or opportunities.

Ulrich R Orth et. al (2010) mentioned that package design is an integral part of projecting a brand's image, which is sometimes designed to convey images of high quality, while at other times signaling affordable price. Besides that, the most attractive or popular design is not necessarily the most effective one at the point of sale, because it may get lost in shelf clutter and/or fail to communicate key messages (point of differences) quickly and clearly (Young, 2008). Hill (2005) mentioned that as individual preferences become more complex and diverse, packaging become the major means of product branding. Packaging also provides a more permanent impression of product brand to the customer. Later on, Siloyai (2006) studied the impact of each different type of products packaging towards consumer behaviour and found that consumer behaviour with high involvement is less influenced by image and visual stimuli. In

such cases, consumers need more information and take more time to make evaluations. Thus, packaging play an important role to market the product features to the consumers.

Product Uniqueness

Consumers' need for uniqueness is defined as an individual's pursuit of differentness relative to others that is achieved through the acquisition, utilization, and disposition of consumer goods for the purpose of developing and enhancing one's personal and social identity. The concept of consumers' need for uniqueness derives from Snyder and Fromkin's (1977) theory of uniqueness. According to this theory, the need to see one as being different from other persons is aroused and competes with other motives in situations that threaten the self-perception of uniqueness. Individuals attempt to reclaim their self-esteem and reduce negative affect through self-distinguishing behaviors.

Snyder and Fromkin (1977) recognize that different individuals evidence varying degrees of uniqueness motivation. Individuals may fulfill their desire to be unique in a variety of ways (Belk, 1988), style of interpersonal interaction (Maslach, Stapp, and Santee, 1985) or the domains of knowledge in which they establish expertise (Holt, 1995); they are likely to vary in their tendency to satisfy their uniqueness motivation through consumer behaviors and possessions. This trait of pursuing differentness relative to others through the acquisition, utilization, and disposition of consumer goods for the purpose of developing and enhancing one's self-image and social image.

Uniqueness theory and counter-conformity research suggest that, for individuals with a high consumer need for uniqueness, satisfaction with self-expressive products diminishes faster, resulting in changes in previously adopted styles or designs and a higher rate of replacement of self-expressive products. McAlister and Pessemier's (1982) theoretical model of variety-seeking behavior suggests that individuals' desire to be distinct from others influences variety seeking through its relationship with consumers' ideal level of stimulation. In other word, consumer would be more likely to purchase unique innovated products and because of consumers' need of uniqueness, companies would innovate their products to stay competitive in the market.

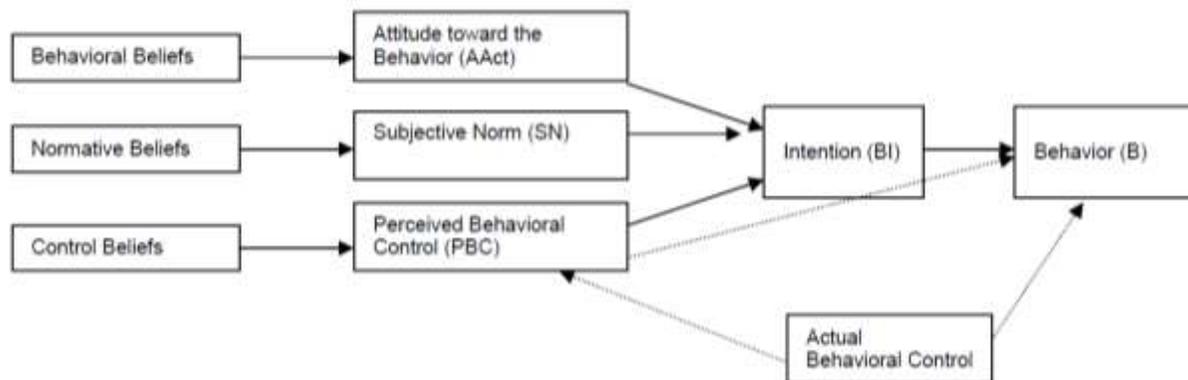
Cognitive Models of Consumer Behaviour

Consumer Behaviour have two major types of Cognitive Models can be discerned. First is the Analytical model, which provides the frame work of explaining the behaviour of consumers. These models identify a plethora of influencing factors, and intimate the broad relationship between factors in consumer decision making. Due to the wide ranging scope, such models are

also known as “grand models” (Kassarjin 1982). The models in Analytical model would be the Theory of Buyer Behaviour (Howard ANDSheth 1969) and the Consumer Behaviour Model (Blackwell, Miniard et al.2001). These models are typically tend to follow the traditional five steps classification outlining problem recognition, information search’ alternative evaluation, choice and outcome evaluation as the key stage in consumer decision process (Erasmus, Boshoff et al. 2001, Schiffman ANKanuk 2007).

The second type of Cognitive Models of Consumer Behaviour is the Prescriptive Model which provides guideline or framework to organise how consumer behaviour is structured (Moital 2007). These models in Prescriptive Model include the order in which elements should appear and prescribe the effect that should be observed given certain casual factors. As such, these models are promise to be useful to practitioners who can ‘measure’ what stimuli should be modified or emphasised to attract a certain consumer response. The most widely referenced and used prescriptive models are the Theory of Reasoned Action (Fishbein ANDAjzen 1975) and the Theory of Planned Behaviour (Ajzen 1985). Theory of Planned Behaviour (TPB) is the extended model of Theory of Reasoned Action (TRA). In this study, we would be using Prescriptive Models; TBP as the ‘measuring structure’ of what stimuli should an innovated product has to attract consumer in purchasing innovated products as shown as diagram below.

Figure 2: TPB Conceptual Diagram; adopted from Ajzen, I (2000)

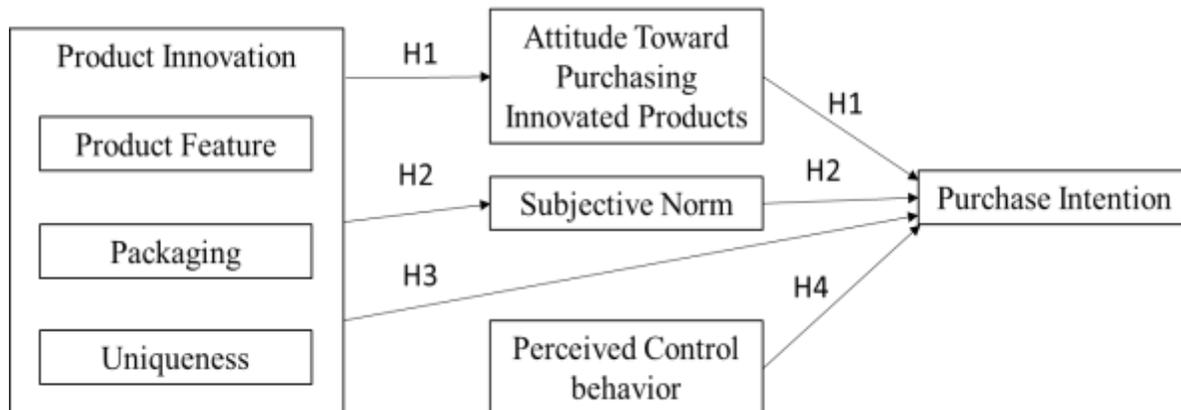


Proposed Conceptual Framework

In order to generate a clear understanding of the effects from each product innovation components towards consumers’ purchase intention, a conceptual model developed that consists of three product innovative components (including packaging, product features and uniqueness) as the independent variables; two variables of transmitted information process (including Attitude and Subjective Norms) as moderator variable; one variable of constant

(which include Perceive Behavior Control) as control variable and one variable of consumer's decision-making process (purchase intention) as the outcome variable which also known as dependent variable. Combining the characteristics of product innovation as independent variables (factors that influences the purchase decision making process) with Theory of Planned Behaviour model, the purposed conceptual model for this research was developed as shown below.

Figure 3: Purposed Conceptual Framework Model.



CONCLUSION

Product Innovation in terms of product features, product packaging and uniqueness are factors that able to indicate an innovated product are identified. However, further study has to be carried out

- 1) To investigate the relationship of product innovative factors toward consumer purchase intention,
- 2) To investigate whether product innovative factors could change consumer's attitude towards product innovative and hence create purchase intention,
- 3) To investigate whether product innovative factors could change consumers' perceptions toward product innovative and hence create purchase intention and
- 4) To identify the controlled factors that influences consumer's purchase intention towards innovated products.

Since this involve investigating consumer behaviour, Theory Planned Behaviour is the best option to understand consumer purchase intention in different dimension such as attitude, subjective norm and perceived control behaviour.

REFERENCES

- Blackwell, R., *et al.*, (2001). *Consumer Behavior*. 9th ed. Orlando: Harcourt.
- Bozinoff, L., (1982). A script theoretic approach to information processing: an energy conservation application. *In: Advances in Consumer Research IX*. Twelfth Annual Conference ed. Missouri: Association for Consumer Research
- Cassey Lee, Lee Chew-Guing, Encouraging innovation in Malaysia: Appropriate sources of finance. *CACCI Journal Vol 1, 2007, Nottingham University. Malaysia campus. P:2.*
- Chang, Tung-Zong and Albert R. Wildt. (1989). "The Number and Importance of Information Cues and the Price-perceived Quality Relationship. "In *1989 AMA Educators' Proceedings:Enhancing Knowledge Development in Marketing*. Eds. Paul Bloom et al. Chicago: American
- Cooper, R.G. (1979): The dimension of industrial new product success and failure, *Journal of Marketing*, 43:93-103.
- Danneels, E., Kleinschmidt, E.J., Cooper, R.G. (1998): Product Innovativeness from the Firm's Perspective: Its Dimensions and their Impact on Project Selection and Performance, ISB Report 21-1998, Institute for the Study of Business Markets, The Pennsylvania State University.
- David.L. Rainey, (2006). Product innovation: Leading changes through Integrated Product Development, Cambridge University Press.P:3.
- Erasmus, A. C., *et al.*, (2001). Consumer decision-making models within the discipline of consumer science: a critical approach. *Journal of Family Ecology and Consumer Sciences*, 29, 82-90.
- Fishbein, M. ed. (1967). *Readings in Attitude Theory and Measurement*. New York: John Wiley and Sons.
- Fishbein, M., (1963). An Investigation of the Relationship Between Beliefs About an Object and the Attitude Toward that Object. *Human Relations*, 16, 233-240.
- Fishbein, M., (1965). A Consideration of Beliefs, Attitudes, and their Relationships. *In: I. D. STEINER AND M. FISHBEIN*, eds. *Current Studies in Social Psychology*. New York: Hold, Rinehart and Winston, 107-120.
- Fishbein, M., *et al.*, (1962). The AB Scales: An Operational Definition of Belief and Attitude. *Human Relations*, 15, 35-44.
- Fishbein, M., *et al.*, (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA.: Addison-Wesley.
- Garcia, R., Calantone, R. (2002): A critical look at technological innovation typology and innovativeness terminology: a literature review, *Journal of Product Innovation Management*, 19: 110-132.
- Gatignon, Hubert And Thomas S. Robertson (1991), "Innovative Decision Processes", in *Handbook of Consumer Behavior*, T.S. Robertson and H.H. Kassarian, eds. Englewood Cliffs, NJ: Prentice-Hall, 316-48
- Hill, Tilley. (2005). Packaging of children's breakfast cereal: manufacturers versus children. *British Food Journal* 104, 766–777.
- Howard, J. A., *et al.*, (1969). *The Theory of Buyer Behavior*. London: John Wiley and Sons, Inc.
- Howard, J. A., *et al.*, (1973). Theory of Buyer Behavior. *In: H. H. KASSARJIAN AND T. S. ROBERTSON*, eds. *Perspectives in Consumer Behavior*. Glenview IL: Foresman,
- Johannessen, J. A, Oslen, B. Lumpki. G.T (2001), Innovation as newness: what is new, how new and new to whom? *European Journal of Innovation Management*.4/1. PP: 20-31.
- Kassarjian, H. H., (1982). The development of consumer behavior theory. *In: Advances in Consumer Research IX*. San Francisco: Association for Consumer Research.
- Klasus Weiermair, (2004). Product improvement or innovation: what is the key to success in Tourism? *OECD*,.P:2.

- Kleinschmidt, E.J., Cooper, R.G. (1991): The impact of product innovativeness on performance. *Journal of Product Innovation Management*, 8: 240-251.
- Maslach, Christina, Joy Stapp, And Richard T. Santee (1985), "Individuation: Conceptual Analysis and Assessment," *Journal of Personality and Social Psychology*, 49 (September), 729–738.
- Mcalister, Leigh And Edgar Pessemier (1982), "Variety Seeking Behavior: An Interdisciplinary Review," *Journal of Consumer Research*, 9 (December), 311–322.
- Mccardle, Kevin F. (1985), "Information Acquisition and the Adoption of New Technology" management Science, 31 (11), 1372-89.
- Moital, M. L., (2007). An Evaluation of the factors influencing the adoption of e-commerce in the purchasing of leisure travel by the residents of Cascais, Portugal. *In: Bournemouth University*
- Nina Michaelidou, Louise Hassan. (2014). New advances in attitude and behavioral decision making models. *Journal of Marketing Management* **30**, 519-528.
- Olson, Eric M., Orville C. Walker, Jr., And Robert W. Ruekert. (1995). "Organizing for Effective New Product Development: The Moderating Role of Product Innovativeness" *Journal of Marketing* 59 (January):48-62.
- Orth Et. AL., (2010). Formation of Consumer Price Expectation based on Package Design: Attractive and Quality Routes. *Journal of Marketing Theory and Practice*, 18(1). Rajinish. Tiwari, Research Project: Global innovation, Hamburg University of Technology (TUHH), Feb:2008.
- Robert. S. Boege. (2009) An innovation Bestiary, Measuring U.S innovation in an Era of policy incoherence, Economic Discontinuity and opportunity, Workshop on Science, Technology, Engineering and Mathematics (STEM) Enterprise: Measures for innovation and Competitiveness.
- Schiffman, L. G., *et al.*, (2007). *Consumer Behavior*. 9th ed. New Jersey: Prentice Hall.
- Schumpeter, Theory of Economic Development (Defining innovation: A new Framework to aid policymakers. *In:www.usinnovation.org/files/defining_innovation807.pdf*. Defining innovation.
- Silayoi, P (2006). Packaging and Purchase Decisions, *British Food Journal*, Vol. 106 No 8, 2006, pp. 607-608.
- Snyder, C. R. (1992), "Product Scarcity by Need for Uniqueness Interaction: A Consumer Catch 22 Carousel?" *Basic and Applied Social Psychology*, 13 (March), 9–24.
- Steenkamp, Jan-Benedict E. And Hans Baumgartner (1992), "The Role of Optimum Stimulation Level in Exploratory Consumer Behavior," *Journal of Consumer Research*, 19 (December), 434–448.
- Young, S (2008). Winning at Retail: Research insights to improve the packaging of children's products, *Young Consumers*, Vol. 5, Issue 1, 2008.