

PRODUCT DEVELOPMENT AND PRODUCT INNOVATION OF TEH HIJAU CAP POHON KURMA (A Study on PT Panguji Luhur Utama)

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Abstract

This research aims to explain and analyze product development strategy and product innovation of Cap Pohon Kurma Green Tea. Descriptive method with qualitative approach is a type of research used by researchers. The purpose of this research so that researchers can describe the actual situation in accordance with reality, digging and analyzing more deeply related to product development strategy and product innovation by using observation, interview and documentation in data collection techniques. The results of this study indicate that the process of product development should be done pro-active with still pay attention to financial performance of company (financial performance) so that what is expected by consumer in market can also fulfill expectation from shareholders (stockholders).

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1.0 Introduction

As the level of intense competition and technological advancement can not be avoided, a product will grow to a point where the product will be difficult to distinguish from one to another. To deal with these conditions, the approach that companies must take is to redesign the company's approach and strategy. In order to win in the competition, when selling its products, the company not only considers product quality alone, instead they also must consider the strategy improvement. Innovation is one of the strategies to increase product sales, where quick and precise innovation will help the product to be one step ahead of competitors' products (Han, 1997, p.22-23).

By doing innovation, the company can expect to create a product that is completely new or other than the previous one or make a product that is a refinement of a pre-existing product. In consuming a product, consumers not only look at the value or function of a product required, but consumers also pay attention to whether the selected product have added value or excess compared to other similar products. This expectation should be understood by the manufacturer as a foundation for innovation. The development of successful innovation will be the right strategy to maintain the position of the product in the market, because most of the competitor's products appear static from year to year. (Steve Kensing, 1997, p.60).

The study of Luke and Ferrell (2000, p.239) states that marketing and innovation are seen as drivers of economic growth and a major component of competitive advantage. Innovation is part of a

framework that connects aspects of corporate culture with the ability to innovate and improve performance. It is further revealed that the development of effective product innovation and strategy become the determinant of a company's success and survival, although it is not an easy task. Product innovation development requires effort, time and capability including the magnitude of risk and the cost of failure one of determining factors of the competitive advantage of a company is the success of product innovation. Therefore a product innovation must have advantages compared with other similar products. The superiority of product innovation is critical in a highly competitive global market environment. These advantages can not be separated from the development of product innovation that will result in market advantage which will win in competition. Product development can increase product innovation success, in the development of a company, it is required to have a research and product development that can follow the development of existing technology, has a high innovation power, and able to produce products based on consumer expectations (Song and Weiss , 2001, p.61).

In addition, the conditions that must be met by a company in order to achieve success in the competition is trying to achieve goals to create and retain customers. In order for that purpose to be achieved, each company must strive to produce and develop products according to the desired consumer with reasonable price. Thus, every company must be able to understand consumer behavior in the target market, because the survival of the company as an organization that seeks to meet the needs and desires of consumers is very dependent on consumer behavior (Tjiptono, 1997).

The sharp brand competition has recently forced the marketer to provide a better appeal than its competitors. It is understandable, because of the existence of various brands to make consumers benefit. When consumers choosing a brand, it is indicate a product quality. There is no doubt that product quality influencing consumer purchasing decisions. Acceptable product quality is a key element affecting consumer buying behavior.

Consumer goods business competition has demonstrated its distinctive shape, which is the competition to increase brand equity and expand sales to volume through the mastery of distribution channels along with the increase of product quality. In other side, the efforts to develop products through *product development* and *product innovation* becoming very decisive and very critical especially in the era of increasingly faster and always subject to change following the *trend setter* lifestyle.

Since the end of the decade, many manufacturers of *consumer goods* began to improve its services in order to achieve *consumer satisfaction* that has always been the main goal of the company. Even today many companies are implementing higher corporate goal, which is *customer delightness*. Many companies are trying to delight their customers by developing new products and making product innovations.

It also happens in green tea commodity. Consumption of green tea or black tea experiencing an interesting trip to be listened and followed so that when Indonesia is about to enter the business arena, it is needed to study about the development of the market and consumer behavior that directly consume this tea. People in Japan have long been drinking tea for healthy living concepts culture. Thus the *value concept* of green tea products in the Japanese public minds has been so *favorable* and able to support the growth of green tea beverage industry. When green tea is considered as a product with a competitive advantage and is a core competence of the Indonesian nation then it is worth efforts to improve the existence of green tea products, so that it becomes an opportunity to dominate the market segments that are loyal in consuming Indonesian green tea.

The market situation of beverage industry is currently characterized by a very fierce competition and tight in both the domestic market and international market. Products of beverage industry on the market consists of various types of products: 1) carbonated beverage industry, for example Coca Cola, Pepsi, Soda F & N and others, 2) non carbonated beverage industry, eg Sosro tea, Ultra Jaya milk, Punch, and others, 3) alcohol beverage industry, for example Greend Sand, Shandy, etc. Based on the data from the Ministry of Indonesia, there are more than fifty green tea manufacturer in Indonesia. Almost the entire production process of green tea is administered tradisionally which always processed with the technology inherited from generation to generation to develop more sophisticated products.

Green tea is a kind of tea which production process does not undergo the process of fermentation, while black tea is a kind of tea which the process of production undergo the process of fermentation. Tea agro industry in Indonesia has been started since the 18th century and tea commodities have been recorded as a significant foreign exchange of the country in the national economy. However, in line with the decline in the area of crops, Indonesia's tea production also continues to decline. If in 2008 tea production still amounted to 137 499 tons, in 2009 fell to 136 481 tons and in 2010 only 129 200 tons.

As a producer of foreign exchange, in 2008 recorded export value of processed tea amounted to US \$ 162.8 million, in 2009 amounted to US \$ 174.4 million, and in 2010 reached US \$ 184.9 million or 6% increased from 2009. 70% Indonesian tea is exported so that Indonesia is the sixth exporter of world tea after Kenya, Sri Lanka, India and Vietnam. Indonesia's tea export destination countries are Japan, South Korea, the United States and European countries. The condition and development of Indonesian tea agro industry itself in the period of 2007 - 2010, generally experienced an increase, both the number of companies, production and production value, permit capacity, utilization and investment value, as well as absorbed labor. Nevertheless, the increase is relatively small so it is not able to make a significant contribution in the national economy.

Cap Pohon Kurma Green Tea Products that produced by PT PLU comes from the tea plantations in the region Jamus Ngawi, East Java and subsequently transported to the production process in Pekalongan, Central Java. This resulted in the production process that needed fairly extra cost resulting in higher selling price, although still balanced with the product quality. In its business practices, some of its products were also purchased by the other producers of fragrant tea, so in this case PT PLU serves as a supplier of semi-finished products to be processed further by the other producers that is also act as competitors. In fact, PT PLU losses because revenue will be lower and it raise the competitors that can only act as a reseller.

In early 1997, the management of PT PLU has been able to conduct international trade contacts to sell Cap Pohon Kurma green tea to the Middle East. The Middle East market is not as heavy as the American market or the Japanese market, so this opportunity is a learning stage for continued attention to quality and world consumer tastes are different from each other.

2.1 Product Development

Product development is a cross-disciplinary activity that requires contributions from almost all functions in the company, but three functions that is always become the most important functions for product development projects are (Cross, 1994) :

Marketing. The marketing function is bridging the interaction between companies and customers. Other role is to facilitate the process of identifying product opportunities, defining

market segments, and the identification of customer needs. Marketing departments are also specially designing communication between the company and the customer, setting price targets and designing the launch and promotion of the product.

Design. Function design plays an important role in defining the physical form of the product to meet customer needs. In the context of designing task part includes design engineering (mechanical, electrical, software, etc.) and industrial design (aesthetics, ergonomics, user interface).

Manufacturing. Manufacturing functions are primarily responsible for designing and operating the products system in the production process. This function covers the purchase, installation, and distribution.

The product development process by Ulrich and Eppinger in his book entitled *Design and Product Development* (2001, p14) composed of six phases:

Phase 0: Planning Product

Planning activities are often referred as "*phase zero*" since this activities preceded the approval of the project and the process of launching the actual product development.

Phase 1: Concept Development

In the concept development phase, target market needs are identified, alternative product concepts generated and evaluated, and one or more concepts are selected for further development and trials.

Phase 2: System Level Design

This phase includes system-level design of the product architecture definition and description of the product into subsystems and components

Phase 3: Detail Design

This phase includes the detail design of complete specification of the shape, material, and tolerances of all unique products components and identification of all standard components purchased from suppliers.

Phase 4: Testing and Repairing

Testing and repairing phase involves the construction and evaluation of various initial production version of the product.

Phase 5: Early Production

At the beginning of the production phase, the products made using actual production system. The purpose of this initial production is to train manpower in solving the problems that arise in the actual production process. The transition from the initial production into actual production is usually one step. At some point in this transition period, the product was launched and began reserved for distribution.

2.2 Product Innovation

Hurley and Hult (1998) defines innovation as a mechanism of enterprises to adapt to a dynamic environment, therefore the company is required to be able to create ideas - new thinking, new ideas and offer innovative product and service improvement to satisfy customers.

Fontana (2011) stated that product innovations includes a changes in:

1. Wrapping, building, improve packaging of a product innovatively
2. Product size, the innovative diversity of size.
3. Innovation process, transform and build a more efficient production process.
4. Innovation distribution system, create a simpler distribution channel
5. Innovation management, aims to make the management of the organization to be more flexible and agile in the face of changing environmental conditions of the organization.

Slater and Narver (1994, p.25) argues that "innovation and success of product innovation are more likely to result from market-driven ones." Similarly, Deshpandé et al. (1993, p.24), after finding performance associated with market-based strategic orientation and innovation, then speculate on the causality relationship between market-based strategic orientation, innovation, and performance.

Product innovation deals with every new product introduced by the company. Product innovation is a cumulative process involving idea generation, idea evaluation, product development, and product recognition rates. Product innovation reflects the organization's response to the needs of outsiders. Galbraith (1973) and Schon, (1967, in Luke & Ferrell, 2000, p 240) define product innovation as a process in bringing new technologies to use. Product innovation refers to the development and introduction of successful product innovation or development on the market. Product innovation can be design changes, components, and product architecture.

By definition, product innovation is a completely new product for the company concerned. Hurley and Hult (1998 in Wahyono 2002, p.28) define innovation as a corporate mechanism to adapt in a dynamic environment. Therefore, company required to be able to create new thoughts and offer innovative products and improve customer satisfactory service. For most organizations, looking at product innovation is something that can be seen as a product functional advancement that can bring the product one step ahead. These conditions arise in response to changes in consumer desires, so that the company is able to achieve superior product innovation in the industry competition, especially if the product innovation has and produces an advantage that is seen as more value for consumers than what competitors offer.

Product innovation may be positively related to competitive advantage, which refers to the level of financial and competitive outcomes in the market, as evidenced in profit, return on investment, and market share. The buyers usually have pleasant perception of product innovation with superior features and they prefer that product in terms of buying preferences and actual behavior when the advantages of these features are more available (Li and Calantone, 1998, p.17). Furthermore, empirical research in the development of product innovation eg; Cooper (1983, 1992); Edgett, Shipley, and Forbes (1992, in Li & Calantone, 1998, p.17) provides some evidence that the superiority of product innovation leads to superior corporate performance. Product innovation means the company's effectiveness in fulfilling what the customer wants (Olson, et al, 1995, p.48). This is in line with the empirical evidence indicated by Hurley and Hult (1998, p.42-54), that companies seeking to continually process and develop innovative

In the context of Indonesia, there is a limited study on product innovation strategies. For example, a research by Ni Gusti Agung Ariastuti (2004) entitled "Factors Affecting Customer Loyalty to Sosro Bottle Tea Brand in Denpasar City" focused on consumer behavior. The results showed that there are seven factors that determine customer loyalty to Sosro Bottle Tea, namely performance factor, additional

feature factors, conformity factor with specification, endurance factor, quality perception factor, and beauty factor. Similarly, research by Rinna Rusbiyanto (2004) entitled "Consumer Loyalty Against Brand Teh Celup Sariwangi" highlighted consumer loyalty as influenced by product development and product innovation conducted by Teh Sariwangi management.

3.0 Research Methods

Descriptive method with qualitative approach is a type of research that is used by researchers. The purpose of this study so that researchers can describe the actual situation in accordance with reality, dig deeper and analyze the strategies related to product development and product innovation of Cap Pohon Kurma green tea produced by PT PLU. Interview, observation and documentation techniques are used to obtain the data. The research site selected was PT.PLU Pekalongan. Primary data were obtained from interviews with officials of Marketing Advisor and Officers of PT PLU.

Recorder, field notes, interview guides, and the researchers themselves are instruments used as means in collecting data. Miles and Huberman's interactive model used by researchers in data analysis. Data collection, data reduction, display the data and verifying is the data analysis stage that used by researchers.

Researchers use triangulation techniques such as the validity of data sources. Sugiyono (2005) explains that triangulation is used to test the credibility of the data, which is done by checking the data obtained from some sources.

4.0 Results And Discussion

The results and discussion would focus on two central questions which are the strategies for product development and product innovation.

4.1 Product Development Strategies

Product of CAP POHON KURMA Green Tea easily found on the shelves of products categorized spices in large and small supermarket. CAP POHON KURMA Green Tea competing in the premium on the shelves of some famous supermarkets.

In addition, PT. PLU need to make modifications to the market that have been served so that consumers feel more benefits when consuming CAP POHON KURMA Green Tea compared to others. The market modification that can be done include:

- a) Attracting non-users into users of green tea products by increasing advertising and promotion.
- b) Finding and entering new markets segments. PT PLU should try to enter the other segment, both domestic market and overseas market.
- c) Snatch customers from competitors. PT PLU can seek to influence more consumer of green tea products to try and switch their consumption to CAP POHON KURMA Green Tea. Every market segment is very sensitive to the quality, so technology of product development is absolutely needed.

As the results of in-depth interviews on how the marketing concept of Teh Hijau Cap Pohon Kurma, which was done with Mr. Hanafi (Director of PT PLU) as follows :

"We have a very strong brand with a very large captive market especially in Java, Bali, and Sumatera. So far our green tea has a very high image in the eyes of the distributor so our bargaining position is high enough for the buyer."

Then the Researcher further asked Mr. Hanafi how is the way to develop the brand of products to the consumers? He also replied as follows :

"The strength of our brand lies in the immediate efficacy of the health that consumers have felt after consuming Teh Hijau cap Pohon Kurma, this creates a high loyalty to our customers. So even though the design and packaging of our products are less attractive, but with the power of word of mouth (WOM) of our consumers strongly influence other consumers to try, accept, love and end up being loyal customers of our products. "

In an analysis based on the marketing mix theory, following results found:

- a) Products. CAP POHON KURMA Green Tea are less in design and packaging. However, consumers in its captive market recognize the benefits of CAP POHON KURMA Green Tea so that consumers are willing to continuously buy CAP POHON KURMA Green Tea although it has less attractive packaging.
- b) Price. The emergence of CAP POHON KURMA Green Tea started with the issue about the ability of CAP POHON KURMA Green Tea in healing – it contains herb leaves tea so that the premium price that is formed completely raised the image of the product. This can increase the revenue from the sale, especially at the retailer level and not at the producer level.
- c) Place. CAP POHON KURMA Green Tea were sold in exclusive outlets directly to the retailer, therefore CAP POHON KURMA Green Tea almost completely sold by direct selling. Some of retailer buy through Point of Sales that are selective, considering CAP POHON KURMA Green Tea have very limited supply.
- d) Promotion. CAP POHON KURMA Green Tea promotions are done without the use of audio-visual advertising. The promotions were only done by the method of WOM (Words of Mouth).

CAP POHON KURMA Green Tea packed in aluminum foil and wrapped in green thin cartons with "GREEN TEA" written. The making of more attractive packaging design should be based on well-established marketing concepts including :

1. A strong brand or logo that is interesting to attract customers, this can be done by offering a unique product that is not inferior to competitors. Besides, the manufacturers also must realize the products required by customers, but added with an advantage, so that it can be differentiate with competitors' products. One way to create a unique product is the attractive product packaging design. It is useless if you have a strong brand, but do not have the product packaging design that can attract customers. With their unique packaging design and attractive product, the product will enter the stage to be selected and purchased by the customer.

2. In addition to the customer, product packaging design is also one important aspect of marketing. Therefore, the manufacturer should design the product packaging as well, as interesting and unique as possible.
3. Start designing product packaging in product development process. Drawing up a few ideas to get a visual outcome of a product, in a sense that the word should imagine what the product looks like when it becomes so.
4. Keep It Simple is a motto that is always mentioned by the designers. By keeping the product packaging design simple, it will be profitable in the future. The thing to remember is that the product packaging design should present what should be presented. The product packaging design should contain details about the product being sold, then to provide a warning. It is also useful in order to reduce costs in making product packaging designs.
5. Market Positioning and Branding are two very important things in making product packaging design. Knowing the intended target market including identifying customer expectations for a product will support customer marketing effectiveness. Besides, it should also be done by observing the competitors, because the product will become bigger just by studying competitors opponents.
6. This product is sold also online, so it is slightly different from selling it physically or brick and mortar store. Customers can not touch and feel the product before buying, so the product packaging design should appeal to other senses. Whereas if the product is sold in a physical store, it should be made the product packaging design much more attractive, because the product will be in a supermarket shelf which is certainly adjacent to other products. If the product packaging design is not attractive, then the product will fail.

4.2 Product Innovation

Nowadays consumers are more comfortable with teabag tea products. So PT PLU soon launches green tea products in dye packaging so as to increase the sale of CAP POHON KURMA Green Tea products. Another thing that needs to be done by PT PLU is to modify the product by adding the scent so that the consumer and the market are modified towards the advanced phase of the green tea product cycle. In this way the CAP POHON KURMA Green Tea can change its image from health drink products into FRESH and HEALTHY beverage products. The way to modify the product can be done by:

- Quality Improvement
- Added new features (Feature Improvement)
- Improvement of style (Style Improvement)

Innovation actually refers to an item, service or idea that consumers perceive as something new. It could be that the idea has been available for a long time, but for the consumer, the innovation is considered as a novelty. Examples are 'herbal tea' products as they are currently being developed in the United States.

Innovation usually takes sufficient time to spread to all market segments and social systems. This is commonly referred to as the 'diffusion' process which Rogers defined as: the process of spreading new ideas from the creator of the new idea to the point of the consumer.

This is somewhat different from understanding the adoption process. The adoption process actually leads to 'a mental process by which a consumer hears about the innovation'. So adoption is a decision from consumers to establish themselves as consumers who will regularly consume the products offered.

It seems that the three processes above (process, innovation, diffusion and adoption) in green tea products run smoothly enough, so that in a short time green tea can be developed and accepted by consumers.

From the results of in-depth interviews on how the product innovation strategy of Teh Hijau Cap Pohon Kurma, which is done with Mr. Ir. Wisnu Gardjito, MBA (Advisor of PT PLU), are as follows:

"Currently we are exploring the possibility to go international by doing intelligent marketing to America as the largest green tea market in the world. The management hopes to do product development and product innovation to capture the opportunity. "

Then the Researcher further asked Mr. Ir. Wisnu Gardjito, MBA how the results of intelligent marketing efforts by PT PLU in several major cities in America? He also replied as follows :

"The results of our marketing intelligence showed that the development of green tea products has reached an advanced phase where tea products are no longer just green tea or fragrant tea only, but has shifted into a form of health drink or so-called herbal tea. This herbal tea product brings a new consumption culture to the American society. "

In the process of its adoption, the green tea product of date palm tree can be described through the following stages:

- a. Awareness of the CAP POHON KURMA Green Tea product
In this introduction phase, consumers become aware of and recognize the existence of product innovation, but still lack of information about the existence of innovation or about the innovation. In this phase, CAP POHON KURMA Green Tea is introduced by distributors, agents and retailers (salesmen) through simple leaflets.
- b. Interest (Interest) to CAP POHON KURMA Green Tea
In this phase consumers have been aroused to seek information about innovations made by the company. Therefore, the company's immediate action is to provide and provide information about the product innovation that has been done. At this time PT. PLU disseminates information through more detailed brochures on its green tea products.
- c. Evaluation (Evaluation) of green tea product date palm tree
In this phase, consumers have begun to consider whether they want to try a product that has been innovated or not.
- d. Trial (Trial) on green tea products stamp palm trees
In this phase the consumer tries a product that has been innovated in order to compare the estimation that he did with the value of the product.
- e. Adoption (Adoption) of green tea product date palm tree
If it turns out the consumer finds that the product innovation that exceeds his expectations, the consumer will decide to use in full and regularly to consume the product. This occurs during the third year, when the green tea product of date palm trees has been packaged in aluminum foil packaging.

Kotler argues that consumers will accept products that have been innovated and will want to buy when there is a significant difference between total consumer values to total consumer cost. In other words there is a positive value of total delivered value (total product value received by the consumer).

Among the business of PT. PLU for its green tea products can be accepted by new consumers is to post green tea products as a tea that can play a role as anti-oxidants so as to prevent cancer as promoted by the United Nations. At first consumers can accept it. This is shown from sales (sales) that continues to grow over time.

However, it seems that domestic consumers are starting to experience saturation due to the flavor and aroma of green tea date palm tree has not been developed further in accordance with the cycle of his cycle. The 'bored' taste of these consumers is still offset by the potential demand from customers who still do not often consume green tea due to limited supply. Consumers of this type that led to green tea sales stamp palm trees are maintained.

5.0 Conclusions and Recommendations

Some points of conclusion can be drawn from the results of the discussion that the author did above, including:

6.1.1 Green tea product development is growing with cyclical trend, so green tea product will have a short sinusoidal PLC (Product Life Cycle) pattern, with an estimated time of 1-10 years depending on consumer's preference level. However, if product development and product innovation processes can be carried out "pro-active" (preceding its competitors), it is not impossible that the PLC (Product Life Cycle) of the CAP POHON KURMA Green Tea will be "scalopped" (increasing periodically).

6.1.2 CAP POHON KURMA Green Tea have seen other market opportunities besides the domestic market, namely the United States international market because of the trend of lifestyle (Life-Style) most Americans want them to consume natural healthy ingredients. It is suggested that the management of PT. PLU starts to seriously develop and innovate products if it wants to serve the global marketplace where its consumers are very demanding.

6.0 Recommendation

For that writer feel also need to give input (suggestion) to management side of PT. PLU to do things below:

- a. Product development process should be done pro-active with still pay attention to financial performance of company, so that what is expected by consumer in market can also fulfill expectation from shareholders (stockholders).
- b. In order for the management of PT. PLU began to seriously develop product and product innovation by involving practitioners and academics in the field of green tea (especially) and the business world so as to enter and serve the global marketplace where its consumers are demanding.

References

- Kotler, Philip., Keller, Kevin Lane.2009.*Marketing Management*Ed. All 13 Volume 1. Jakarta: Erland.
- Tjiptono, Fandy. 1997 *Marketing Strategy*. Yogyakarta: Andi.
- Sugiyono. 2010. *Qualitative and Quantitative Research Methods R & D*. Alfabeta, Bandung
- Swastha, Basu. 2007. *Principles Marketing*. Sixth mold. Third Edition. Liberty Offset, Yogyakarta
- Hurley, Robert. F and Hult, G, Tomas. M, 1998, "Innovation, Market Orientation, and Organizational Learning: An Intergration and Empirical Examination", *Journal of Marketing*, July
- Zimmerer, TW (1996). *Entrepreneurship and New Venture*Formation.New Jersey: Prentice Hall.
- Parwanto, Arwa, 2011. *New Product Development and Product Lifecycle Strategies* (<http://arwaparwanto.blogspot.com>)
- Stamm, Bettina Von. (2003). *Managing innovation design and creativity*. Chichester: John Wiley & Sons, Ltd.
- Trott, Paul. (2008). *Innovation management and new product development (4th ed)*. England: Pearson Education.
- Omar, Hussein. (2001). *Strategic management in action*. Jakarta: Gramedia.
- White, Margaret A. & Bruton, Garry D. (2007). *The management of technology and innovation: A strategic approach*. Oklahoma and Texas: Thomson South Western.