

Frozen food packaging and repurchase decision

Abstract :

Once in life most of the people may disappoint from the product that they bought. Some people buy the product because of the package. So, this research will find out how packaging affects purchase and repurchase decision for frozen food. This paper also concerns about the consumer expectation. It will be both of firms and consumers side.

Packaging becomes important in nowadays. The first time customers purchase the frozen food is the time that packaging plays an important role. Packaging also helps in transferring the product from hands to hands. The competition among the firms is high. Then the company needs to stand out from competitors in order to capture consumers' attention which lead to purchase decision. Most of frozen food is sell in the supermarket and convenience store. So, packaging needs to be the representative of the product as a whole. Packaging is an instrument that customer use to distinguish the brands. Customers have high expectation of the product due to good packaging. There is a chance for clients to disappoint with the real product quality since it mismatch with the look of packaging. There are many factors that affect consumer's expectation such as size and picture on the front cover. Disappointment and dissatisfaction affected the rate of repurchase.

Most of the consumers buy frozen food because of time and convenience. However, some people still not believe in product quality of frozen food. For firms to use packaging as quality signaling. It depends on many factors that firms have to take in consideration. This research provides the suggestion for the firms to choose their own pathway. Each way has both of benefit and cost. The firms are faced with the tradeoff. So, each firm tries to find the optimal approach for their own company.

Introduction :

Product packaging plays as a major role to present the whole products and attract consumers at the point of sale. Packaging is the first thing that customers can perceive about the product. There are two main functions of the package. First is to preserve the product inside. Second is to be the communication tool and to be seen on the shelf. The packaging is not the thing that only protects the product from the outside environment, but it is also be the “silence salesperson”(Bardi ;

Kelly ,1974). It is part of the marketing tools in order to sell the products. Packaging becomes one of the most important parts in selling process. Since there is no salesperson in the supermarket or hypermarket, so the package need to be the one that can speak as a salesperson. It may require a nice shape to attract the customer's eyes and clear detail on it.

Most of the people who go shopping in the supermarket usually look for the category of the product that they need and make a decision at the point of purchase. It is widely accepted that over 50% of purchasing decision make at the shelf (Frontier,1996). Packaging is part of the most important factors in purchase decisions made at the point of sale. If it is unseen on the shelf which lead to unsold too. Even in today the packaging on the shelf is very crowded in the store, but there also be many ways that a package can be designed to get more visibility. Not only visibility can guarantee the purchase but packaging also need to capture customers attention as well. Once it could capture attention, then it can get customers to spend more time on product detail which leads to a higher chance for purchase decision. The most easiest way to get attention is to use the picture because it can act quickly, easy to understand, hold the attention and can represent as a thousand words.

The picture of the front cover is the first thing that customers see as the representative of product inside. So, the picture on the front cover is really important as the first thing the customer perceive about the products. Some of the customers use picture as one criteria to make purchase decision. Since customers cannot be able to see/touch the product inside beforehand. Therefore, customers use something else to make purchase decision. The firms should use picture as one of the tool to gain consumer attention such as use nice picture on the front covers. However, the better picture on the front cover, the higher consumer's expectation.

In nowadays, companies invest a lot on package design which costs a lot. Therefore, the package design of some product look really good and help company to increase a lot of unit sold. The strange package can get customer attention. However, the package design could lead to problems too. The good design always comes with high expectation from the customer as well. Therefore, the product may not meet with the consumer's expectation as they perceived from the product package. So the package design has both positive and negative impact on buying decision. For example, the buyer will not buy our product or any repurchase since it could not meet their expectation as it seem to be on the packaging. Customer will look forward for big amount of products quantity from the big package. The company needs to highly consider about it.

This research focuses on the role of packaging in consumer's perception of product quality.

Many people may wonder that how the consumer's buying decision and customer's perception of the product can be affected by the product's packaging or what the product tries to communicate to customers.

Objective:

Nowadays, package plays a big role in the market where similar items exist and to make products package differentiated against competitors. The aim of the study was to find out what package attributes influence consumers' quality assessment of frozen food products. This was answered through studying which package attributes imply a frozen food quality, which package attributes communicate, a product fulfills the consumer satisfaction of the product, and finally which package attributes signal good value for money. Lastly, to consider how packaging as one of the factors to repurchase.

Literature Review :

The main aim is to study the consumer perception toward frozen food packaging. As the packaging is one of the critical factors that help customers to make the purchase decision. Due to the decision that the consumer makes toward the package may make consumer disappointed with the product. Different consumers may perceive things from package design differently. The product inside the packaging may not meet with the consumer expectation but some products may satisfy beyond consumer expectation. The satisfaction may affect the repurchase decision in the future and customer loyalty. If the company could satisfy consumer expectation then the product could build a long term relationship customer. Loyalty could come from two sources, trust and satisfaction. There are a lot of benefits from having loyal customers. So, the question has arisen that how's frozen food packaging could affect repurchase decision.

Keyword : packaging, repurchase decision, frozen food

Packaging Definition:

Packaging can be defined as the containment, protection, handling, delivery and presentation of the product from the producer to the end-user or consumer. It could come in so many forms such as boxes, bags, pallets, tube and crates. One form of package may suit with specific product more than the other (BRODY, 2000).

Packaging Functions:

In nowadays, the role of packaging has been changed due to changes in consumer lifestyle and increasing is self service center. Packaging serves different functions for products. The main roles of food packaging are to protect the products from outside influences and damage, to contain the food, and to provide consumers with ingredient and nutritional information (Coles 2003). Packaging is part of the product which is necessary to preserve, contain or support the product during its lifespan. However, in marketing, packaging is part of the product and the brand. Marketer uses packaging to communicate with the customers. On the package may contain product information and detail. For example, tell good point of the product such as this product contain whitening to make your skin brighter. Moreover, packaging can also use to capture customer attention and can be attractive. As the food product market is growing, there are a plenty of products on the shelf. So, the firm may use the package design as one tool to stand out from other competitors. It could help to capture more attention which could make consumers spend more time concerning about the product. Finally, it could lead to purchasing decision. For example, snack companies which have kids as their target market. They might design their package to attract kids by using kid's cartoon character. Lastly, packaging can use to be the key tool for customers to distinguish between each brand or to be recognize between each brands. Therefore, companies should consider all of these factors to gain the advantage from the packaging.

Packaging

Carl McDaniel (1997) has descriptive research. According to Carl, packaging plays important role in consumer perception of product quality. Since, the company wants to change the packaging style, then the company may need to face with the trade off between various package features. A package is easy to open, but consumers may perceive the product differently. He did the research by using 1000 of potato chip packages. First 500 packages are wax- coated paper bags and another half are polyvinyl bags. The freshness inside the packages are exactly the same. Each respondent opens the bag and taste it. The process may repeat with the second type of the package. The result turns out to be wax- coated paper bags are easier to open and some respondent was frustrating to open polyvinyl bags. After they opened the package, they were asked about the taste. The result turns to be polyvinyl bags's chip is more crisp and tastier. On the other hand, Carl did the blind test. He put the chips in the bowl and let's people test it. No one can find any difference between the chips from a different package. Therefore, this research can tell that different type of package could lead to different consumer perception and fresh product is preferable. It is the reason why most of the chip are in polyvinyl bags, even it is hard to open, but it can sustain the product image which is better to trade off.

Affan Abdul Ghaffur Feizal; Leo Aldianto (2012) tried to analyze consumer's perception toward healthy drink packaging design. This change in person's life style was created opportunity for new business to entry healthy market. As the healthy trend is booming, consumers tend to consume more healthy foods and drinks. So it would be great if the producer could know consumer perception toward healthy food packaging to use it to take advantage among other competitors. In the supermarket, there are a lot of drinks that try to claim themselves as a healthy drink. Some might claim that it helps to improve your help by adding some more benefit such as Collagen, Guta and many vitamins. If the package communicates high quality, consumers assume that the product is high quality. If the package symbolizes as low quality, consumers perceive it as low quality product. The package communicates favorable or unfavorable implied meaning about the product. (Underwood, 2001). The company may need to find the way to tell the customer and make them believe that these products are healthy. The research found out that there are many factors that could affect consumer perception toward packaging such as color, size and shape. For example, use blue and white to imply healthy. The producer should make the package look healthy to differentiate from normal drink. Moreover, when the company wishes to launch a new product line, it should be in the same color and style in order for customers to recognize your brand.

Chandler Slavin did consumer research on “How Package Design Dictates Product Sales”. This research tries to find out that, first to discover how package design informs consumers’ perception of the product and brand, second discuss how perceptions dictate consumer purchasing behavior and the last one is to determine how to capitalize on these elements in order to increase product sales and product/brand loyalty. For the first question that Chandler aware of, he found out that consumers will not buy the product with damaged packaging. This experiment was done with the frozen food package. The research also finds out that there will be the decline in the number of sale for that brand and consumer change to buy another brand instead. Therefore, it can conclude that there is the correlation between the quality of the packaging and the quality of the product. For the second question, Chandler found that packaging has a lot of influence on purchase behavior. Product with good package that looks luxury may be the one that no one buy because it implies that this product is really expensive even it is not true. Package could be the symbol of the brand's image which could tell the quality of the product and it also be the signal of the price level of the product since it could change consumer perception toward that brand. However, packaging could be one of the tools to gain comparative advantage by using good package. Even the price is similar to your competitors, the consumer may should buy your product because of superior package design. So, firms could improve quality perceptions of their products by designing packages.

Rob Cunningham; Ken Kyle (1995) worked on the case for plain packaging. Since, the Canadian government regulated new law. Government requires to remove all the attractiveness from cigaret package. The package should be plain with standardized color, size, material, and opening method. The government also claims that it could help the packaging industry to meet with the economy of scale since every brand uses the same packages. The Canadian's government believes that the plain package could reduce amount of cigaret consumer consumption. The change of packaging has the influences on consumer perception toward to cigaret quality. Consumer may not feel the difference between hi-end brand and the low-end, consumer may perceive both types of cigaret as the inferior. Even the product inside the package has not been changed at all, the consumer may feel the difference between the existing one and in a new package. The consumer said that “ the plain package looks cheap”. Therefore, it could go to the conclusion that packaging has a lot of influence on consumer perception toward product quality.

Brian Wansin (1996) was conducted the research on, how can package size accelerate the volume usage. This research has done by finding the difference between the usage of the small and large packages even though each contained the same supply of oil and also do the same thing with the spaghetti usage. The package for these two products might larger as twice as the smaller one. The product inside for the smaller one is full but for the large has only a half of the package which means that the total amount is exactly the same. The result turns to be the larger one use less time to finish it. However the use of the larger size product might depend on many other factors too, such as promotion price and unit cost. Therefore we could imply that large package can stimulus consumer usage.

Nilufer Z. Aydinoglu (2011) has an analysis on the asymmetry of size labels on size perception and consumption. The question has risen, how do sizes label influence consumer understanding of the quantity of the product? . Most of consumers did not pay much attention from the size and quantity inside of the product. There is not an exact measurement for the quantity of the product. For example, a cup actually equal to 8 ounces, but in American a cup of coffee may contain only 6 ounces. It could imply that there is not a consistent size among producer. Sometime consumer uses visual cues and past experience to predict the total amount of the product inside. The most confusion that the consumer has been predicting the larger package as large quantity, but it turns out to be small but then to predict small as large is likely to happen. On the marketing perception, consumer prefers a small package with a large amount of product in order to feel that they did not eat that much.

Consumer satisfaction and repurchase decision

Kathleen Seider, Glenn B. Voss, Dhruv Grewal, Andrea L. Godfrey (2005). They raise the issue that “Do satisfied customer buy more?”. There are so many different reasons for each person to decide to make repurchase decision. According to the figure (A) (Appendix a.): interaction activity with the customer does not reflect much. Even the company tries to increase the involvement but the customers do not respond with high repurchase as it should be. The firm may try really hard to increase satisfaction, but it still does not affect repurchase decision. This type of customer still likes to shop around and make decisions to buy later on. For the D, when low involvement perceives superior satisfaction. It will increase a lot of repurchase in the future. This group of customers can turn to be a loyal customer in the future. For B, there is the relationship between income and repurchase decision. So, for companies to encourage a repurchase decision, may need to consider many other factors not only about the product or services.

There are many types of customers. Some may satisfied with the product, but some are not. The one who satisfied with the product may repurchase the product and become royalty customers. Even though some customers complain a lot about the product but they are also the chance for this group of customer to repurchase our products as well. To buy or not to buy are depending on the way that firms handle to solve the conflict.



This figure could explain people buying food process. Since, the customer recognizes their need. They will go into the supermarket in the category that they are interested. The first thing that could attract the customer is package design. After that, they will search for the information of the product that could meet to their need or not. For example, read through the label. All the information might be processed and make the decision to buy the product. If the product could meet with consumer expectation, then repurchase might occur easily.

Every company need to do everything to make consumers satisfied with the products in order to build good connection with the customer which leads to a repurchase decision in the future. Cost of retaining an existing customer is less than the cost of acquiring a new customer (Reichheld 1996). But in some cases, packaging may not meet with all customer expectation. It could make customer disappointed in our products. This unmet expectation will lead to no re-buy the products.

Therefore, we can conclude that package design does influence consumers' perception of both the product and brand, which ultimately, impact their purchasing behavior.

Julie Garden-Robinson(2014). Frozen food is the food that been preserved by freezing. It is the easiest way to preserve the food. The nutritional are maintain but it is impossible to have additional nutrition. Freezing can maintain color, flavor and texture of the original food. There are few factors that can destroy the quality of frozen food such as Ice Crystals, Freezer Temperature , Microorganisms and Air. Large ice crystals come from slow freezing cause the cells to tear which is the root of texture change. Moreover, the Oxygen in the air causes the color and flavor to change. Therefore, frozen food needs proper package to maintain food quality as the original one. It should be that one that suitable for freezing process.

The market growth of frozen food (Appendix b.) grows really well today since the frozen food could respond with the change of consumer behavior. Moreover, the expansion of economy which affected city people lifestyle. The way of living of people has been changed over time. People work with limited time during the day. These also affect the way people eat in nowadays. The demographic trend to be changed too, more single people and single mom/dad. There is also the increasing trend of divorcing couple. Women tend to work outside more then less time to cook for their family members. From the limitation of time constraint, the frozen food become more and more popular. (World Street, 2006). New generation of people usually store some frozen food in the fridge and use microwave or oven to heat it up. Frozen food take less time in cooking process and less time to clean up the kitchen. Lastly, it is very easy to buy frozen food. There are full of frozen food in the supermarket or even the seven-eleven on every corners of the street. There are variety of frozen food prepare for the consumer to choose such as heathy food, organic food and food from different part of the world.

Not only household that trend to consume more frozen food but also restaurant and bakery shop. The storage technology could make frozen food life longer than the normal one. Frozen food usually stay fresh for a year. Sometime frozen food has more nutrition than the fresh one. This could occur because frozen processed food usually cook at the time the raw material had reach the factory right away. On the other hand, people usually do grocery shopping once a week and cook meal by meal. At the time that started to cook might be the time that nutrition starts to decrease. So, frozen food contains more nutrition than the fresh one. In another word frozen food is the process that has nutrition lock in. On contrast, frozen food is processed in mass production which may use a longer period of time to do. So, it could lose nutrition during cooking process.

There are two types of frozen food. First is ready to cook product such as frozen seafood, frozen meat and frozen fruits. Another type is ready to eat product or frozen process food product. Frozen is one of the ways to do food processing in order to preserve the food. It could done my decrease the temperature to lower than -18c. (Eugene C. Vitkovsky,1987) The liquid in the food will turn to solid which are the way to maintain the freshness of the food. This way of preservation can be use with most of the food such as fruits, meat and ready to eat product. Frozen is not the way that aim to kill the microbe but it is aim to stop the microbe to increase. The frozen food should be kept at the temperature to lower than -18c all the time to protect the bacteria to increase and not to recrystallization. Recrystallization is the source of degenerate in the quality.

On the point of view of the producer, frozen food helps them to grow the market. When food became frozen then, it is a lot easier to transport the product. For example, fresh strawberry will be rodded easily but when it became frozen, it can ship all over the world. Moreover, frozen food is one of the way to do the value added. Ready to eat product is the one that has a lot of value added. The processed food also be able to respond to the different need of the customer. Different part of country like different type of the food. For example, in Asia people may like chicken teriyaki but in the western people may like stake.

From all the literature above, there are some gaps that no one has answered or consider about it which is how package design will affect consumer perception toward frozen food quality and satisfaction of the product that could lead to repurchase. This research may find out the what consumers may expect when they see the package. For example, when a customer see the food package that is in brown and green. Consumer may perceive it as an organic product. But the product inside is not what they expected it to be. From this what going to affect in the future. The frames are profitable or not to use packaging as the selling point not the product. So when once a customer buys it, they may complain about it which will occur no repurchase.

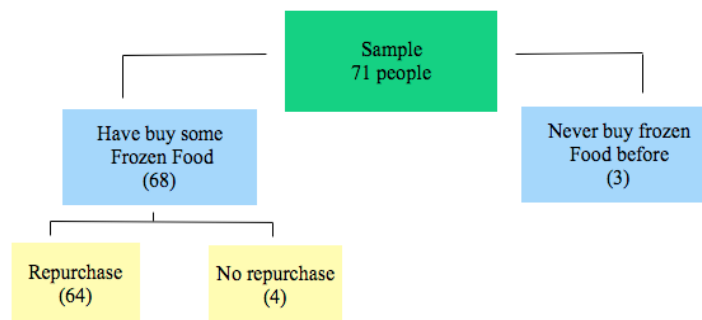
Methodology :

This research will use both primary and secondary data. For this section, primary data will be used. It will be the mixture of quantitative data and qualitative data. This research will use the method of interviews the focus group to interpret the qualitative and use survey to analyze as quantitative method. The interview may mainly ask for respondent's attitudes and perceptions towards frozen food packaging as well as their expectations of what it should be like. How the expectation of the package affects repurchase decision. The target group would be who mainly

consume frozen food in their daily life. For the qualitative data, the question may ask for the satisfaction and perception of the frozen food. On the other hand, the quantitative data may talk about the brand of frozen food they buy and the criteria that they use to choose the products.

For the demand side

First part of the paper is on the consumer's side. The sample that uses in the survey 56% are female and 44% are male. Most of them are single and their age can be ranged as young adult people (age between 21-30 years old). The education level mostly is in bachelor's degree and the income level usually at lower than 10,000 – 20,000 bath. We divided the sample into two groups, who never buy frozen food and who already purchase some frozen food. Moreover, we will subdivide who already purchase into two groups as well. First is the group that repurchase the frozen food but another group does not repurchase.



For the one who said that they never buy frozen food before (Appendix c.). The reason behind turn out to be people do not buy it because they think that frozen food might harm their health. Some people do not trust in the quality of the food and container whether it will harm their health or not since some kinds of plastic could be melted by the heat. Whether the frozen food is safe or not, it will depend on the brand that the consumer choose. If it is the band that well know in the market and pass the quality standard it is safe to consume. Since big companies are afraid to lose their reputation.

On the other hand, some people think that frozen food is better than the fresh food since frozen food is just one of the way to preserve the food. It could be cleaner than the street food. So some people prefer frozen food rather than street food and they also believe that in order for frozen food to sell in the market they need to pass some standard quality as well. Moreover, if the consumer not sure about the quality they can complain too. However, some people still think that frozen food is necessary only for astronaut, during war, natural disaster and starvation in order to survive. These are the reasons that frozen food publishes in the market in the first period. It is not necessary in the normal situation.

For the safety side, frozen food is one of the right way to sterilize and it is standardize way to preserve the food. However, the firm needs to be careful on the transport system and distribution channel. If on one of the processes dissolve, it could harm the quality of the product. Since when the temperature increase then, it will create some more bacterias to grow. Moreover, if the firms use the plastic that should not be used to contain the frozen food. The heat will make the plastic release some chemical that harm people health. For the ingredient, each company is carefully selected in order to pass the quality standard.

For the people that already buy some of frozen food before then this research try to find out the factors behind purchase decision. For example, how dose the packaging affect purchase decision. Therefore, some hypotheses have been established. It will go further to find the factors that affect repurchase decision as well. Some consumer buy it and never repurchase it again but some of the customer keep buying it for many times a week. So, we stated the hypothesis as following:

H1 : Packaging is the important part for buying decision

Most of the people from the survey trend to agree that packaging is the important part of buying decision. There are 52% of the survey said that they slightly agree and 34% of the survey said that they agree. However, there also 10% of the survey said that they do not agree. Therefore, we accept the hypothesis. (Appendix d.)

For this question, we were asked for the general products, not specific for some products. So, some people do not agree because they may think of the product differently such as if the product that they want to buy is complementary goods. They have to buy it anyway no matter what. As long as it is the product that the consumer need to buy, the packaging will not affect that much. In case the of the product is an experience good or the product that to buyer never buy it before. Packaging will play the important role in purchase decision. So, the company need to consider the type of product that they are selling and design the packaging according to it. For example, the product that the company sells has a lot of competitors in the market. Then the packaging needs to play the important role in order to be the one that can attract the customers eyes. But if the product is the thing that the customers need to buy it anyway and do not have that many competitors in the market. Then the company is able to invest less on the packaging.

H1 : People buy the frozen food because of attractive packaging.

From the survey, we got the result that (appendix d). There are two main reasons that people choose to buy frozen food instead of the fresh one. First it about the connivence. Second is about the time. Since there are variety of frozen processed food ready to serve in the market.

It takes less time to cook and consumer can buy it in big amount and store it in the freezer for quite some time. Consumer can heat it up and eat it whenever they want to. These are the main reasons that most of the people choose to buy the frozen food. Another reasons are attractive packaging and taste of the frozen food. There are only few people that concern about the price. Most people view it as the substitute with the fresh food. When consumers view it as frozen food, which mean that consumer will consume frozen food instead of fresh food when one condition or situation change. For example, when the price changes and the situation changes.

The taste of frozen food for each brand is standard. Every package contains the same quality and taste. Consumers can know what they going to got from the products. Frozen food can consider as experience good. It is the goods that product characteristic can be observe once the consumers consume it. At the first time customer want to buy the product, they may have hard time to make decision. However, customer can use the tools to guess to predict the quality of the products inside the container. As the customers already bought the frozen food, they will know the real value inside. For the frozen processed food the quality and quantity are same for every container. Consumer be able to know exactly what is inside since they already experienced it before. So, frozen processed food is one of the way to reduce transaction cost and search cost. Consumers do not need to search for the best one. They do not need to seek for the taste that they like. Therefore the transaction cost could be reduce.

For the first hypothesis might be reject since packaging is just a small part that consumers take in consideration. Mostly, consumers buy the frozen food because it is convenient and can save a lot of time as well. The process to make the frozen food ready to serve is easy. It may take just a few minutes to be ready. There are also varieties of distribution channels for the frozen food such as supermarket, hypermarket, and seven eleven. So, it is convenient for the consumer s to grab it for a meal. In some of the supermarkets also provide the consumers a microwave to heat it up and be ready to serve right away. For the producer side, since the customer buy frozen food because of the time and convenience. So, firms need to concern with the distribution channel to be reached very easy for every consumer in order for them to be convenience.

H1 : Package with great picture on the front cover could signal the better quality of the product.

The research found that people will have high expectation of product quality according to good packaging (Appendix f). Good packaging will also affect the taste of the product and how it looks.

This research found that buyers are uncertain about the quality of the product provided by the sellers since it is experienced food in the case that the consumers have not bought it before. The consumers may have less information than the producers. Since the customers may be

unable to know the product quality before they experience it or eat it. On the another hand, the firms know all the information about the products quality for the first time they produce it. So, customer use another tool to predict the quality of the frozen food such as picture on the front cover, price, brand and advertising. The prediction could be right or wrong depend on each person perception. Each person may perceive the product differently. Some people may perceive the same product better than another people. Frozen food could consider as the experience good. Moreover, packages with more number of product units displayed on the package will be perceived to contain more product quantity than packages with fewer product units displayed on the package. Therefore, the asymmetric information could occur between firm and consumer. Asymmetric information may exist between transacting parties in variety of situation. For example, labor market, insurance company and the second hand car market. Asymmetric information could occur when two parties have different amount of information. One party may lack of some information while another parties has a lot more information. There are many things that could signal the quality of the product such as price and advertising.

Therefore, we will accept the hypothesis which state that “Package with great picture on the front cover could signal the better quality of the product”. Since most of the customer use packaging as the signal.

H1 : Consumer will repurchase the frozen food because of attractive packaging

For the 90% who buy the frozen food again (Appendix g). Most of consumers repurchase it mainly because of taste. There are a lot of consumers said that the taste of the food is a lot better than the Thai a la carte or street food. Moreover, to try new place for Thai a la carte, the taste of it might not to be the taste that he/she like. For the frozen food, the consumers are be able to know exact taste and exact quality of the product that he going to get for sure since he/she already experience it. Another important factor to buy frozen again is connivence and satisfaction with the product. Some consumers may view the frozen food as it is the cheap product or inferior product. Inferior product is the product that consumers will consume less when they have higher income or become richer. One of the example for an inferior good is instant noodle. Since, some people said that it is cheap compare to the Thai a la carte.

From the survey, the result turn to be fail to accept the hypothesis which said that consumer will repurchase because of attractive packaging. Packaging is just a part of factor but not the important one. It is not true the consumer repurchase because of attractive packaging.

H1 : Expectation of the customer from the front cover could affect repurchase decision.

Front cover is the first thing that buyer will see when they want to buy frozen food. 13

Good packing is more attractive than the normal one. Every company tries to make their products stand out from another brands. Consumers use packaging as the signal of product quality and the firms can also use packaging to convey the information and quality of the product too. So, good packaging comes with a high expectation from the customers. Dissatisfaction might occur when the customers expect a lot from the package and product that they perceived. When consumers disappoint with the product they may not buy the product again. So, the companies need to measure the opportunity cost between attractive customer eyes and expectation of the customer which the company may need to trade off. To build the long term relationship is very important to the company. If the customer became loyal customer, they will think of our brand first when they want to buy frozen food.

From the survey, people slightly agree that packaging affects repurchase decision (Appendix h). However, most of the people agree that the picture on the front cover affects the expectation. Therefore, we will not reject this hypothesis which said that expectation of the customer from the front cover could affect repurchase decision.

H1 : consumer do not repurchase because disappoint from the picture of packaging

The main reason that make customers do not repurchase the frozen food is because of the mismatch between packaging and product quality (Appendix i). This situation occurs when consumers have higher expectation of the product inside. The expectation comes from the design of the package and picture on the front cover. Moreover, some consumers believe that it is too expensive. The price of the frozen food product also depends on the brand that the customers buy. For example, easy go is cheaper than CP frozen processed food. Therefore, we cannot really reject this hypothesis. It depends on each person perception toward frozen food.

For supply side

The methodology for supply side are from secondary data which include some literatures. The products may sell initially, but consumers can be fooled once, not twice. If brands use marketing tools like packaging to oversell their products and make promises they can't keep, it will ultimately destroy their credibility and take them down quickly. Especially now with world of social media. So how can package be optimized to bring the brand to consumers' attention, sell them, and deliver more than expected, earning their affirmation?

The products sell in the market have both high quality and low quality products. Even in same product category, there are varieties of product quality. Some of the firms use marketing tools to signal product quality such as packaging to oversell their products. However, customer

can be fool only once. Today, the news can spread really fast. So, the companies are faced with the trade off between the number of product sales and customer's expectation which affect companies credibility. So, how can firms optimized to bring consumer's expectation and number of products sales.

	Signal	Do not signal
High quality firms	A	B
Low quality firms	C	D

From the table assume that two types of firms (Kirmani; R.Rao, 2000). High quality firms and low quality firm. Both of the firms also use packaging as the product quality. The latter in the table (A,B,C,D) assume to be utility of the firms that get from the product sold. There are three possible cases. First, high quality firms use packaging as the signaling of products quality and low quality firms do not any tool to signal the quality ($A > B$ and $D > C$). So, it will be better off for both of the firms and customers. The low quality firms are able to lower production cost by lower the cost from investing in packaging. High quality firms gain trust from their customers since they do not use package to oversell the products. On the side of customers, it will be easier to observe real product quality. Since the packaging that have been used is not overstate and the real products quality are matched. In this case, repurchase happen easily since the customer satisfied and not disappointed with the products.

Second, both of the firms choose to use packaging as the signal of products quality ($A > B$ and $C > D$). In this case, it will be worse off for both of the firms and customer. Since the firms need to compete with each other to make the product to stand out in order to attract customer eyes. So, the firms need to invest a lot to get good packaging. Both of them use good packaging to signal the product quality. Then it is difficult for the consumer to distinguish between low and high product quality. Consumers are able to misunderstand and choose the product from low quality firms. Therefore, “pooling equilibrium” will occur. Since, it is hard to separate to type of firms then the customer measure the product quality as the average. In this case packaging is not the necessary tool to predict product quality. The high quality firm may worse off since the customer use average quality as the measurement which may be lower that their real quality. High quality will lose some opportunity of repurchase in the future because some customers thought that overall frozen food quality is not good. Since they misunderstood from buy the product from low quality firm. The group of customer who repurchase will come from the group that need to consume it and do not care much with the product quality.

Last cases, high quality firms do not use packaging as the signal as they think that they can sell it away way ($B > A$). Low quality firms use packaging as the signal of good quality

($C > D$). If the firm with low quality chooses to send the high quality signal, it will lose money from either from cost of investment or cost from forgone customer when they discover the real quality. The firms' sales will be decrease depend on the type of customer. If the customers are sensitive with the product quality then they will dissatisfy if and only if they bought the product from low quality firms. However, if the customers do not care much about the quality then they will keep buying it no matter what type of product quality. For the repurchase, sensitive customers will buy from high quality and insensitive customers will buy from low quality firms.

Another methodology that will be use is collecting the data from the amount of sales from each brand of the frozen food. It could use as a tool to predict the correlation between package design and amount of sales. There are many firms competing in the frozen food market. For example, CP, S&P, Sulaphon food and Plantalay. There are more and more new firms would like to enter this market. There are many factors that the firm would like to enter the market such as extend the product life on the shelf and the product could do value added. However, to enter the frozen food market, there is barrier to entry. This industry requires high cost of investment and good distribution channel. From the table below show the marketshare for the popular company in the market (appendix k).

From the secondary data that is found and the data that correct from the survey are related. Since consumers in the survey usually buy the Easy Go and CP frozen food which is the same brand and marketshare of CP Company is the highest amount the competitors. There are a lot of existing firms that have been in the market for so long but not really well know such as Jittamart brand. It is the first brand in Thailand that started frozen food business. So, it might be some factor be hide the success for each brands. For example, distribution channel and packaging. Therefore, it can conclude that not only the product quality but also many subsistence.

Conclusion :

The packaging is the container of the product that used to protect the food from the infect of the bacteria. It is also the tool to avoid transpiration and smell of the food. Moreover, it also defend from the absorbing smell from the outside which is the sources of deterioration of the quality. Marketer also use it as marketing tool to attract customer to buy the product and use it to be the signal of the product.

Some people buy frozen food and some not. Most of the consumers buy frozen food because it is convenience and save a lot of time. They did not buy it because of attractive packaging. However, packaging plays an important role when consumers decide which brand to choose. Since, frozen food is experience good then customers try to use something to predict the

quality of the product inside. Then consumers consider packaging as a tool to predict the quality inside the package.

Good packaging is the tool to signal product quality. Consumers will have higher expectation according to the package. Color, size of the package and the amount of quantity on the front cover also affect consumer expectation. So, some clients disappoint from the mismatch between packaging and real product quality. The firms need to trade off between good packaging to capture consumers eyes and consumer's expectation. Moreover, dissatisfaction is one of the factors that affect repurchase in the future. To repurchase or not depend on the satisfaction of the product and convenience.

There are two types of firms, high quality and low quality firm. Both types of the firms can choose to use packaging as the signal of product quality. For example, low quality firm uses packaging to signal as a high quality product. In another word, firms lie to the customers. But consumers will fool only once. Therefore, they will not buy the product from the same company once again. For the firm to choose the type of packaging depends on many factors. Firstly, type of their own firm. For example, high quality firms do not invest in good packaging since their products anyway. However, low quality firms may design packaging to be alike high quality firm. So, asymmetric information will occur. Secondly, the firms should concern with the type of competitors. If competitors are high quality firm. Then even we are low quality firms, we still desired to use superior packaging as a signaling. Thirdly, the firm should consider about the type of customers. If most of the customer that is in the market is sensitive type. Then, firms should tell real product quality in order to sustain customer to re buy the product again. Lastly, the firms should consider about the time that firm wants to be in the market. If the firm would like to be in the market just for short time. Then the firms may want to capture marketshare as much as possible. Therefore, the firm will use packaging as high quality products.

Contribution:

In order to prevent the companies to use overstate packaging, government should regulate to laws sticky and give some punishments. The consumer should collude not to buy the product from the companies which overstate their product quality. This paper helps the consumer to be more carefully selected the frozen food product. Consumer should not trust or expect a lot from packaging. Moreover, this paper also help the firm to choose their path way from choosing package as the product quality signaling. It could help the companies to sustain long term relationship with the customers.

Further study:

Since the frozen food growth rapidly then, a lot of new firms would like to enter

the market. The cost to enter the market is high but not as high as the car industry. However, to sustain in the market in the long term is harder. Packaging is an essential part in producing the products. It helps the company to transfer the product easily. So, further study should aim to how to develop better packaging/container in terms of technology. The research found that some people still do not believe in the plastic quality. They still believe that the container might harm their health. Moreover, there is an increasing trend of environmental concern. So, if the container is environmentally friendly, there will be a higher chance to capture more groups of consumers.

Islam is the popular religion in the world. Islamic people live all over the world. Further study should focus on “Halal Food” or the Muslim food. It is the food that Muslims can properly eat. Today, Halal Food is really popular in Thailand and the world market. It has high market growth. Halal Food became an interesting market sector for Thai frozen food companies.

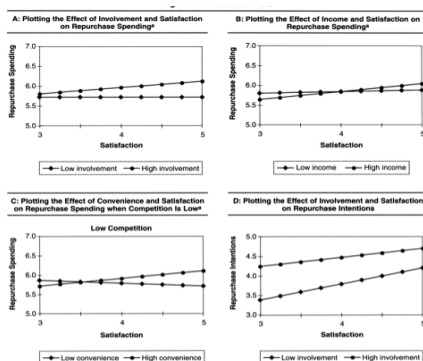
Reference :

- Doyle, M. (1996). *Packaging strategy: Winning the consumer*. Lancaster, Pa.: Technomic Pub.
- Klimchuk, M., & Krasovec, S. (2006). *Packaging design: Successful product branding from concept to shelf* (2nd ed.). Hoboken, N.J.: J. Wiley & Sons.
- Madzharov, A., & Block, L. (2010). Effects of product unit image on consumption of snack foods. *Journal of Consumer Psychology*, 398-409.
- MARSH, K., & BUGUSU, B. (2007). Food Packaging—Roles, Materials, and Environmental Issues. Institute of Food Technologists
- Peters, J. (2004). Packaging's Fifth Function—The Package Is the Product. J. Peters Associates Inc.
- Raynor, H., & Wing, R. (2007). Package Unit Size and Amount of Food: Do Both Influence Intake? *Vol. 15*, 2311-2319. (2007, September 9).
- Savoie, N., Barlow, K., Harvey, K., Binnie, M., & Pasut, L. (n.d.). Consumer Perceptions of Front-of-package Labeling Systems and Healthiness of Foods. *CANADIAN JOURNAL OF PUBLIC HEALTH*, E359-E363.
- Silayoi, P., & Speece, M. (2004). Packaging and purchase decisions. *British Food Journal*, 106, Pp. 607-628.
- Abdalkrim, G., & Suleman, R. (2013). The Role of Packaging in Customer's Perception of product Quality at the Point of Purchase. *Vol.5*(No.4).
- Aldianto, L., & Feizal, A. (2012). CONSUMER PERCEPTION TOWARD HEALTHY DRINKS PACKAGING DESIGN. *Vol.106*(No.4), Pp.221-228.
- Asher, J. (2010). Effective Packaging: An essential tool for success. Retrieved from WWW.PRIVATELABELBUYER.COM
- Aydinoglu, N., & Krishna, A. (2011). The asymmetric Effect of Size Label on Size Perception and Consumption. *Journal of Consumer Research*, Vol.37(No.6).
- BRODY, L. (2000). *Development of Packaging for Food Products*. CRC Press, Inc.
- Chevapanyarjao, R., & Sutamueng, K. (n.d.). THE TRUSTING INFLUENCE OF BANGKOK CITIZEN TO FROZEN FOOD. Pp.128-145.
- Cunningham, R., & Kyle, K. (1995). The case for plain packaging. *Tobacco Control*, Vol.4, Pp.80-86.
- Deliya, M., & Parmar, B. (2012). Role of Packaging on Consumer Buying Behavior—Patan District. *Global Journal of Management and Business Research*, Vol.12(No.10).
- Feizal, A., & Aldianto, L. (2012). CONSUMER PERCEPTION TOWARD HEALTHY DRINKS PACKAGING DESIGN. *Journal of Business and Management*, Vol.1(No.4), Pp.221-228.
- Fisher, F., & Monz, J. (1991). *Industrial organization, economics, and the law: Collected papers of Franklin M. Fisher*. Cambridge, Mass.: MIT Press.
- Kirmani, A., & Rao, A. (2000). No Pain, No Gain : A Critical Review of the Literature on Singling Unobservable Product Quality. *Journal of Marketing*, Vol.64(No.2), Pp.66-79.
- Lusk, J. (2011). *The Oxford handbook of the economics of food consumption and policy*. Oxford: Oxford University Press.
- Madzharov, A., & Block, L. (2010). Effects of product unit image on consumption of snack foods. *Journal of Consumer Psychology*, 398-409.
- Manalili, N., & Dorado, M. (2011). Appropriate food solution for developing country.
- Martin, S. (2010). *Industrial organization in context*. Oxford: Oxford University Press.

- McDaniel, C., & Baker, R. (1977). Convenience Food Packaging and the Perception of Product Quality. *Journal of Marketing*, Vol.41(No.4), Pp.57-58.
- Westhoff, P. (2010). *The economics of food: How feeding and fueling the planet affects food prices*. Upper Saddle River, N.J.: FT Press.
- Olshavsky, R., & Miller, J. (1972). Consumer Expectations, Product Performance, and Perceived Product Quality. *Journal of Marketing Research*, Vol.9(No.1), Pp.19-21.
- Potitunthimongkon, W. (2014). Thailand Food Market Report. *Market and Consumer Behavior*, Pp.1-15.
- Raynor, H., & Wing, R. (2007). Package Unit Size And Amount Of Food: Do Both Influence Intake?*. *Obesity*, Vol.15(No.9), 2311-2319.
- Rick, M. (2003). The economics of business enterprise and introduction to economic organization and the theory of the firm (International student ed.) Cheltenham: E. Elgar.
- Robinson, J. (2013). Food Freezing Guide. Pp.3-36.
- Savoie, N., Barlow, K., Harvey, K., Binnie, M., & Pasut, L. (2013). Consumer Perceptions of Front-of-package Labelling
- Underwood, R. (2003). The communicative power of product packaging. *Journal of Marketing Theory of Practice*, Vol.11(No.1), Pp.63-76.
- Seiders, K., Voss, G., Grewal, D., & Godfrey, A. (2005). Do Satisfied Customer Buy More? Examining Moderating Influences in Retailing context. *Journal of Marketing*, Vol.69(No.4), Pp.26-43.
- Silayoi, P., & Speece, M. (2004). Packaging And Purchase Decisions: An Exploratory Study On The Impact Of Involvement Level And Time Pressure. *British Food Journal*, Vol.106(8), 607-628.
- Slavin, C. (n.d.). Consumer Research Report How Package Design Dictates Product Sales: "Seeing it Sells it!"
- Underwood, R., & Klein, N. (2002). Packaging as brand communication: Effect of product pictures on consumer responses to the package and brand. *Journal of Marketing Theory of Practice*, Vol.106, Pp.58-68.
- Systems and Healthiness of Foods. *CANADIAN JOURNAL OF PUBLIC HEALTH*, Pp.359-363.

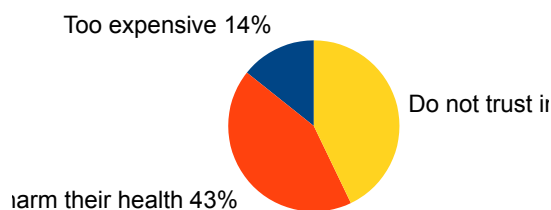
Appendix :

appendix a)

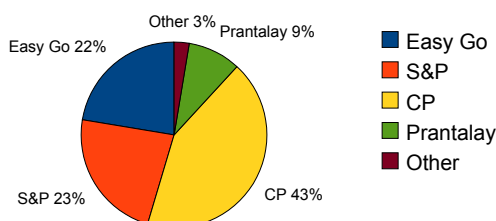


appendix c)

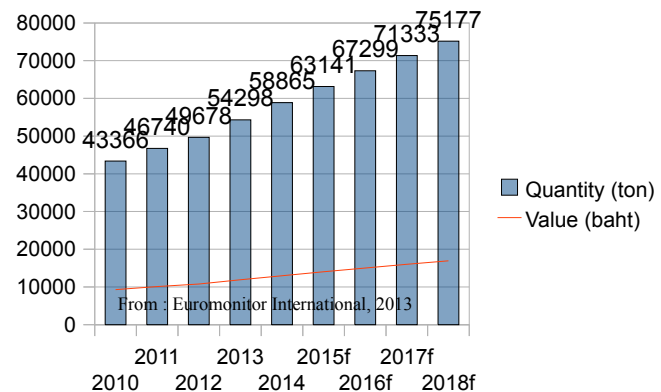
The reasons for people who



Frozen Food Brands

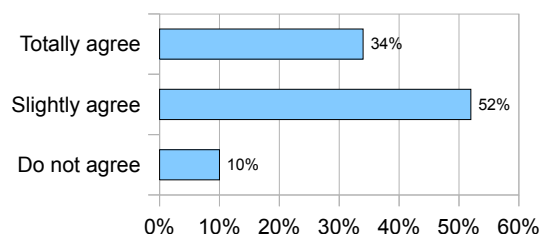


appendix b) : the market growth of frozen food product.



appendix d)

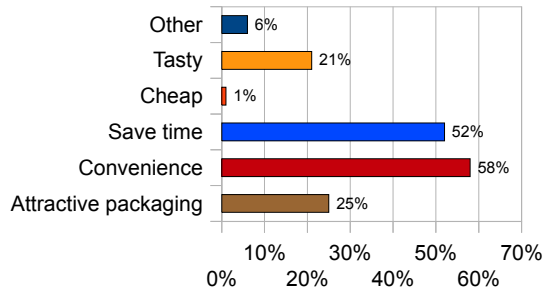
Packaging is the important for buying decision



appendix j)

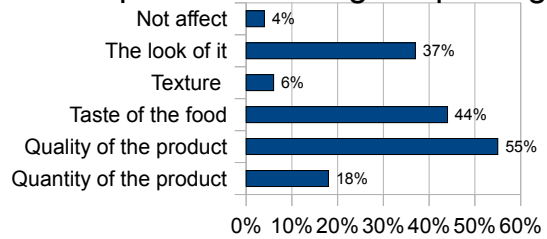
appendix e)

The reason for buying frozen food



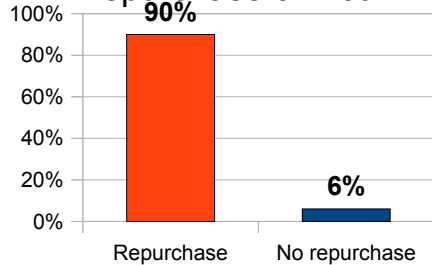
appendix f)

Expectation from good packaging

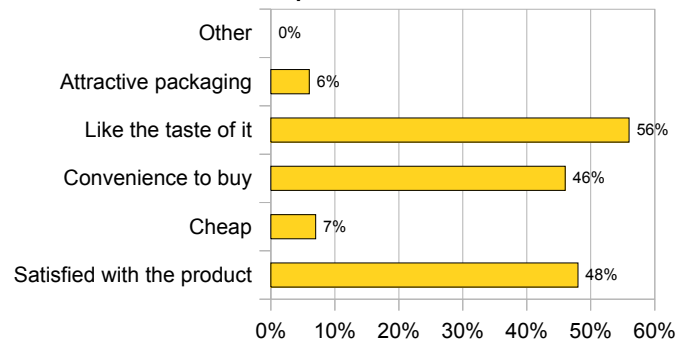


appendix g)

Repurchase or Not?

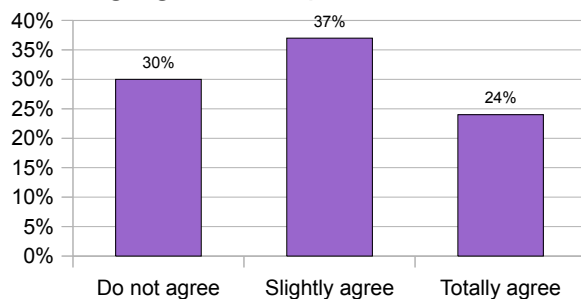


The reasons for repurchase the frozen food



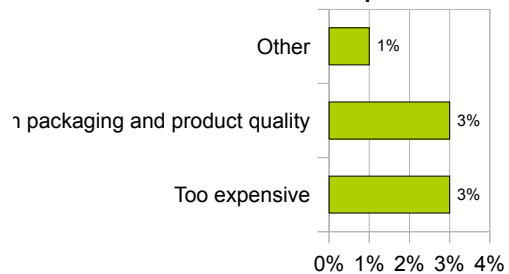
appendix h)

Packaging affect repurchase decision



appendix i)

The reasons for not repurchase



appendix k)

Company	Marketshare	Brand
Charoen Pokphand Food Public Co., Ltd.	19.10 %	Easy go
S&P Syndicate Public Co., Ltd.	16.20 %	S&P
Surapon Food Public Co., Ltd.	11.40 %	Surapon
Prantalay Marketing PCL.	13.90 %	Prantalay
CP retailing and marketing Co., Ltd.	8.10 %	Jade Dargon
CP interfood Co., Ltd.	6.10 %	CP
Another	25.20 %	

From : Euromonitor International, 2013

appendix l) : Questionnaire : **Frozen food packaging survey**

Sex : () male () female

Status : () single () married () divorced

Age

☐ 15- 20 yr ☐ 20-25 yr ☐ 26-30 yr ☐ 31 yr and more than

Education

☐ lower than high school ☐ high school ☐ bachelor degree ☐ master degree
☐ higher than master degree

Income level

☐ lower than 10,000 baht ☐ 10,001-20,000 baht ☐ 20,001-30,000 baht
☐ 30,001-40,000 baht ☐ higher than 40,000

Have you ever bought the Frozen food : ☐ Yes ☐ No

What is the reason that you have not buy the frozen food?

☐ the overstate of packaging ☐ harm your health ☐ the price is high
☐ not sure about the quality ☐ hard to find the place to buy ☐ other.....

What are the reasons that you choose to buy the frozen food?

☐ attractive packaging ☐ convenient ☐ save time to cook
☐ the price is lower compare to the fresh food ☐ tasty ☐ other.....

What is the brand of frozen food that you usually buy?

☐ Easy Go ☐ S&P ☐ CP ☐ Prantalay

What are the criteria that you use to choose to buy each brand for frozen food?

☐ save the time ☐ clean ☐ attractive packaging ☐ tasty ☐ convenient
☐ price ☐ the name of each brand

How good/beautiful packaging affect your expectation?

☐ quantity of the product ☐ quality of the product ☐ taste ☐ texture
☐ the look of it ☐ not affect ☐ other

Have you ever repurchase the frozen food ; ☐ Yes ☐ No

- The picture on the packaging affect how you make frozen food purchase decision
1. not agree 2. slightly agree 3. totally agree
- The picture on the packaging affect your expectation of the producer inside (e.g.,good packaging then good product quality)
1. not agree 2. slightly agree 3. totally agree
- Packing is the important part on your decision making process
1. not agree 2. slightly agree 3. totally agree
- the type of packaging affect you decision making
1. not agree 2. slightly agree 3. totally agree

The reason the you choose to repurchase the frozen food

☐ the satisfaction of the product ☐ cheap ☐ connivence
☐ like the taste of the food ☐ attractive package ☐ other.....

- Packaging has the influence on repurchase decision
1. not agree 2. slightly agree 3. totally agree
- The picture on the package meet with your expectation of the product inside
not agree 2. slightly agree 3. totally agree

The reason the you choose not to repurchase the frozen food

☐ not satisfied with the taste of the food ☐ expensive ☐ dissatisfied with the packaging
☐ hard to find the place to buy ☐ other.....

- The packaging of the frozen food affect the repurchase decision
1. not agree 2. slightly agree 3. totally agree