#### **Recycling venture in Thailand**

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#### **Opportunities for a New Venture in**

#### **Environmentally Friendly Business in Thailand.**

Waste is a big problem for many countries, as well as Thailand. This study explores opportunities to create successful environmentally friendly (EF) businesses, under the rule of circular economy model, - specifically beverages takeaway drinks cups. The main stakeholders of the two selected ideas (reusable cups (RUC) and biodegradable cups (BOC)) are customers and shop owners. The data were conducted using interviews to gain more insights into shop owners' opinions. Questionnaires used in this project aim to comprehend consumers' behaviours and attitudes towards takeaway bevarages regarding to EF. It has been shown following the interviews with the shop owners that, BI1 has fastinated shop owners, while it does not gain the same level interest with other respondents. However, since the requirement (e.g., government, financial support) of BOC are difficult to access, RUC seem to be more realistic idea for further consideration.

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## **Chapter 1**

#### Introduction

#### 1.1) Background

Nowadays, more people tend to concern about environmental issues as almost all products and services, which we have normal used, are likely to cause the negative impact on environment. Due to increase of new businesses and advance in technologies, a great deal of environment and resources have been damaged rapidly. "Growth has been so intense and enormous, but people forgot about the environment" (Seznec cited in Alderman, 2010).

New York Times reported that Dubai is now facing environmental problems as the region is about to run out of resources (Alderman, 2010). Similar to China, the environmental crisis has also reported as there are few cities that meet 'World Health Organization clean air criteria' (Mckinsey. 2013). From the case studies of Dubai and China, this leads to a considerable increase of environmental consciousness among many countries in order to utilise their natural resources and encourage their people to use those resources efficiently. Nevertheless, in Thailand, only the minority of people concern about this issue. About 15.1 million tonnes of waste was reported in 2009 and less than 30% of those wastes had been sent to recycling centre (Gheewala, 2014).

Human should address this environmental problem seriously before it is too late to solve it. "You waste it when you throw it in the landfill" (Krebs cited in Sealey, 2013). It was suggested that, recycling business could be one of effective solution for saving and sustaining resources despite of the fact that it could be really complicated and expensive; however, it would be definitely worth for world in the future (Sealey, 2013). Therefore, this study aims to explore on recycling business. Then for further consideration, it will emphasis on the area of takeaway drink cups packaging.

#### 1.2) Research objectives of this study

This paper is trying to identify, how can a new environmentally friendly (EF) business in Thailand be created. By exploring an EF business related to takeaway drink cups in the country and identify, which of those ideas (see section, 1.3) might possible launch

successfully. In order to achieve the objective, Thai consumer behaviour as well as their attitude and knowledge towards green issue will be investigated.

# 1.3) New businesses idea explanation: Environmentally friendly (EF) takeaway drinks cups.

This study will present two business ideas which are reusable and biodegradable takeaway drinks cups, these methods aim to save and utilise environment wisely. Both of them have been implemented under the rule of circular economy model, as was suggested that packaging manufacturers should concern about their systems and wastes (Ellenmacarthurfoundation, 2013).

#### - 1.3.1) The brief explanation of business idea 1: Reusable Cups (RUC)



Figure 1.1 : The RUC, customers process

This successful business needs to require the cooperation between customers and beverages shops as customers need to buy RUC from distributors. By implementing this conceptual business idea into practice, beverages shops, that are participated in the project, was suggested to offer some promotions for those customers who bring the signed cups to the shop. To

illustrate, if the customer buy the first beverage with the RUC, they will receive another drink for free. At the same time, beverage shops could also reduce their packaging expenditure. Consequently, in this case, win-win situations could be proven. From the figure 1.1, it demonstrated that both customers and beverage shops can save the environment together in several ways.

Moreover, from the figure 1.2 below, owing to fewer cups being made and sent to landfill, less resources and energy will be exploited. With this fewer throw away cups, it can help not only to reduce the incremental waste but also to decrease the significant amount of Co2 emission.



Fewer cups being made and fewer cups being sent to landfill.

Figure 1.2: By using RUC will help to reduce waste.

#### - 1.3.2) The brief explanation of business idea 2: Biodegradable cups (BOC)

BOC is made from renewable or sustainable resources which can be converted into fertiliser at the end of its life-cycle. This can be explained in figure 1.3 and figure 1.4. On an account of biodegradability, customers and beverages shops could also help to reduce waste, which are expected to send to landfill as well as the Co2 emission. Nevertheless, due to its higher production cost, this BOC will be more expensive.

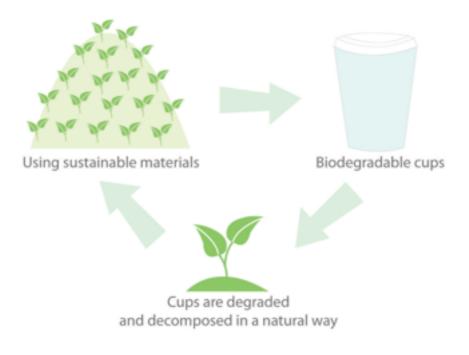


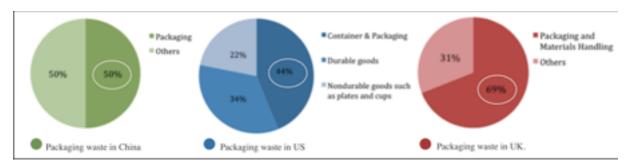
Figure 1.3: The process of BOC.



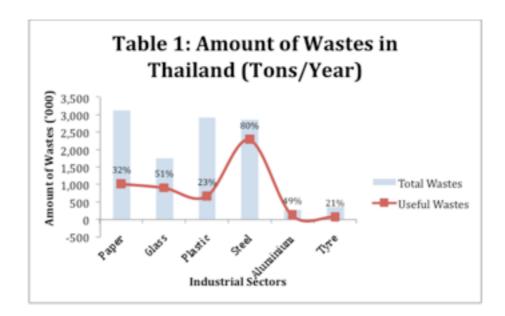
**Figure 1.4:** BOC will be composted into fertilizer at the end of its life.

#### 1.4) Waste and beverages packaging reports

There are evidences which show that large amount of wastes are generated from packaging, thus it has become the focus area of this study. From figure 1.5 below, packaging is accounted for a half China's waste volume, and only 30% is recycled (Zhongguo Huanjing Fazhan Baogao, 2013). Similar to US and UK, more than 40% and 70% of total wastes came from packaging respectively, while less than 10% of those packaging waste in US has been recycled (Epa.gov., 2014 and Waste Connect, 2012).



**Figure 1.5:** Total plastic wastes in China (Zhongguo Huanjing Fazhan Baogao, 2013), US (Epa.gov., 2014) and UK (Waste Connect, 2012).



**Figure 1.6:** Total of waste in Thailand (Mungcharoen, 2008).

Moving on to those packaging waste in Thailand, according to Euromonitor report (2014), there was an increase in number of volume in producing packaging in Asia pacific and Thailand every year (Appendix 1.1). Figure 1.6, has shown that paper and plastic, which seems to be the most common material for making packaging, are accounts for the biggest amount of wastes in Thailand (Mungcharoen, 2008). Furthermore, Unilever reported that about 30% of total waste in Thailand came from packaging industry (Unilever, 2014), besides the top three largest amount of wastes, which was collected from the oceans in 2011 was come from packaging as well (Appendix 1.2).

#### 1.5) Structure of the research

The study has been divided into 6 chapters, as shown in figure 1.7 below.

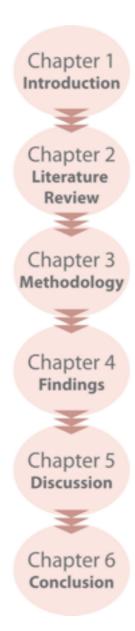


Figure 1.7: Structure of the research

## **Chapter 2**

#### Literature Review

Major academic databases were search using keywords such as 'green', 'environmentally friendly', 'Thailand'. Only a few relevant articles were found (full datas of the searches are in appendix 2.1. In the first section, the research indicates how the CEM could create the new business successfully. Since the packaging is the vital key of this study, a better understanding of green product and EF packaging would be explained. Then, in the last two sections, the researcher has specifically focused on the finding of new opportunities in Thailand, where the business is expected to operate and how to create a new venture by using "opportunity business model".

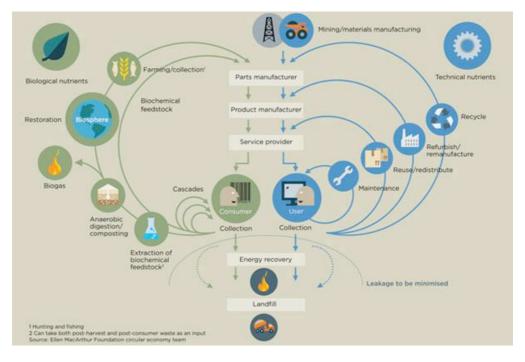


**Figure 2.1:** The structure of Literature Review

#### **2.1)** Circular Economy Model (CEM)

#### - 2.1.1) Linear model or one-way production

In a globalised world, linear model or one-way production has been applied in industrial sectors for more than a century. Linear model enables people to exploit natural resources without an effective management. As a result, it could be considered as a threat for the future. The more the rate of population has increased rapidly, the greater the erosion of national resources will be. This resulted in the higher cost of material. Moreover, some natural limitation resources expected to reach its under the linear (Ellenmacarthurfoundation, 2013). Due to the risks of doing businesses, "the world need a new way of doing businesses" (Polman cited in Ellenmacarthurfoundation, 2013), which is CEM as presented in figure 2.2.



**Figure 2.2:** Interactive system diagram

(Ellenmacarthurfoundation, 2013).

According to the environmental risk such as flooding, the companies should aware on those negative impacts toward their operational businesses. For instance, in 2011, there was a flooding crisis in Thailand, this disaster caused the severe impact not only on its nearby regions, but also far-away districts. Consequently, this incidence damaged the whole

computer industry. In order to mitigate those risks, the proactive planning is necessary (Ellenmacarthurfoundation, 2013).

#### - 2.1.2) The reasons that CEM is important.

According to CEM, while most people perceived waste as a waste, Ellen Macarthur Foundation (2013) see "waste is food" (P.26). Some managers have focused on the reduction of waste at the end of lifecycle productivity; whereas, this model indicated that there are several valuable resources and energy that have been wasted during each activities.

The waste of energy and resources could also be useful. In other words, there are various invisible advantages which could be presented and created while the production are still operating. Instead of wasting the energy and resources as what the linear model explained, the organizations could gain profits from their wastes before sending to landfill. (Ellenmacarthurfoundation, 2013)

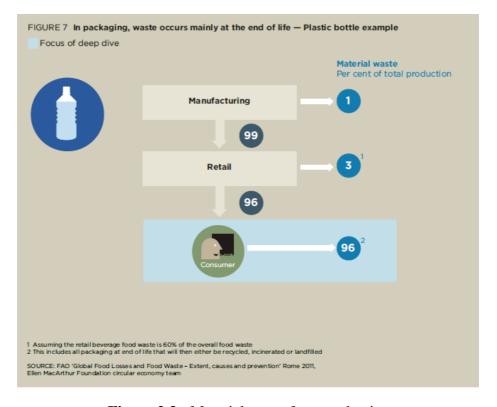
**Table 2.1:** The benefits of using CEM

Unit	Benefits				
Business owner	Business owner could gain a lot of profits through circular model. For instance,				
	although there are a dramatic increase in price of natural resources, the				
	shareholders do not affect from the sensitivity of those prices as they have				
	sufficient owned the national resources (Ellenmacarthurfoundation, 2013) Besides, the CEM has also brought a great benefits to the firms whether it is in the				
	same or across industrial sectors. For example, carbon dioxide (Co2), which was				
	generated from planting sugar crane, has advantages not only in agricultural sector				
	but also in refrigerator industry (Agas, 2014). Moreover, the company tends to				
	have strong relationship with its stakeholders, both customers and its suppliers. To				
	demonstrate, due to better services, which allow the products to be returned or				
	repaired. It could enhance a good relationship with customers				
	(Ellenmacarthurfoundation, 2013).				
Customer	The price of products would be lower as there is a wide selection of products in the				
	market. Furthermore, if farmers use wastes generated from food instead of using				
	chemical fertiliser, consumer would less affect from toxin. It is possible that crops				
	would also contain more nutrient, which are better for consumers' health.				
	Consequently, it would create a better living as few wastes would be left in				
	landfills. (Ellenmacarthurfoundation, 2013).				

Unit	Benefits
Country	There would be an increase of employment for those people who have a unique
	skill. An effective waste management leads to an improvement of landscape,
	which would attract more tourists, resulting in both increase of tax income and
	gross domestic product (GDP) in the countries (Ellenmacarthurfoundation, 2013).

#### - 2.1.3) Applying packaging industry with CEM.

"The large amount of waste are being produce from packaging, especially at the consumption stage" (figure 2.3) (Ellenmacarthurfoundation, P.40, 2013).



**Figure 2.3 :** Material waste from packaging (Ellenmacarthurfoundation, 2013).

Packaging plays a significant role in not only protecting goods or food inside but also presenting brand image. Thus, approximately 10% to 25% of the total expenditure of production came from packaging (See 1.4) Wastes and Beverages Packaging Reports).

In consequence, recycling has become more important. However, there are the minority of manufactures who concern about this issue. In US, about 50% of the total waste is remained in landfill (Ellenmacarthurfoundation, 2013).

Based on the CEM, reusable method can be viewed as an effective way to preserve resources. In UK, there is a successful beer manufacturer who has applied the reusable glasses instead of the disposable packaging. As a result, this helps the company to reduce the cost of packaging as the glasses can be reused up to 18 times. By applying the CEM to production of reusable packaging, it can be defined that the usage of material will be unlimited during the period of the time or will be longer in the circulation. Nevertheless, the disposable material should be concerned when packages are not suitable for reusability since some products like tissue paper are not appropriate for recycling (Ellenmacarthurfoundation, 2013).

In conclusion, CEM requires a proper management when materials are employed. It is also needs the collaboration from both government and consumers who are able to understand the situations globally. Also, suitable for any businesses that aims to find more profitable and ready to adapt at all time for surviving in this fast moving world, where everything is not stable (Ellenmacarthurfoundation, 2013).

#### 2.2.) Green product

Businesses which are operated under the rule of CEM tend to be more sustainable. Since, the model has suggested that business owners should environmentally concern when operating businesses. Thus, it is necessary to understand the consumers, whom are likely to consume these green products as well.

#### - 2.2.1) Green consumer behavior

There are an increase in number of people who have changed their attitude to be more positive on green products. As previously mentioned, it can be seen that there is an opportunity for business owners to promote themselves as green or EF business (Min and Galle, 1997). Although food package can be viewed as a low-involvement product, customers would be more likely to perceive it as a high-involvement when the goods are EF (Chan 2000, 2001 cited in Thogersen et al, 2012).

There are various factors which impact on consumer behaviour toward green products such as price, convenience and brand (Min and Galle, 1997). However, Rokka et al. (2008) stated that "one-third of consumers, favoured environmentally labelled packaging as the most important criteria in their choice" (P.516).

#### The factors which have impacted on purchasing behavior towards green product.

There were evidence which reported that people have positive attitude towards green product (figure 2.4 below). For example, 312 out of 400 Midwestern respondents have said that they like green product (Min and Galle, 1997). However, it is difficult to find an alternative energy or experts who are able to deal with waste management or recycling system. Thus, EF products seem to be more expensive than non-green products. In consequence, despite having positive attitude towards green products, buying behavior are still lower than expectation (Wicker et al. cited in Rokka et al., 2008).

*Price* is one of the major problems which could discontinue consumers decision making on buying green products (Rokka and Uusitalo, 2008: Min and Galle, 1997: Thogersen and Jorgensen and Sandager, 2012). However, not only have customers been affected by this factor, price, but also its business owner since being green business is "expensive to innitiate" (Min and Galle, 1997, P.15). However, few people would not buy green product even they are interested in them. For instance, younger people, who likely to have less experience, limited budget, and too young to realize about this issue, barely buy green products (Thogersen et al., 2012). In contrast, there are a number of researches which reported that professionals especially women who have high education and income are likely to concern more on environmental issues than other segments (Florenthal and Arling, 2011: Rokka and Uusitalo, 2008: Euromonitor, 2011).

Knowledge could also viewed as one of the factor which have a great influence on purchasing of green products. Since each products do not show if they are less or more environmental friendly (Rokka and Uusitalo, 2008), it is difficult for customer to classify the differences between general and environmental friendly products as it is not prominent. (Min and Galle, 1997) There are surveys which reported that approximately 65 percent of the respondent does not know which is green packaging (Min and Galle, 1997). In this case, M&S has shown its responsibility by coordinating with the UK government in order to

demonstrate clear labels, such as recycling information and sustainable raw materials, on its food packaging (M&S report, 2008).

Social norm is another factor which has an influence on individual purchasing decision. It was said that consumers are likely to adapt their behaviours to be like others or people whom they are surrounded by (Rokka et al., 2008). On the other hand, "the environmental issues to the consumer are not likely to 'spill over' into other environmental relevant behaviour domains". For example, people who care about energy saving might be not concerned about recycling (Thogercen and Olander cited in Rokka et al., 2008). If the knowledge about environmental issues are not spill over, then, business should be advertised as an EF in order to attract more potential customer. For instance, since the characteristic of organic consumer can be viewed as the part of EF behavior. Therefore, in order to increase the sale volume and raise the environmental awareness, organic food shops should promote themselves more as an EF concerned business (Bartels, 2011).

The perceived consumer effectiveness (PCE) is another factor which has an impact on consumer behaviour. Since there are a lot of different environmentally issues, hence different people would care about the contexts which they are related to or it has linked to their lives. Thus, the responsibility towards environment in each persons are different. Few people would tend to buy green product, even they have a positive attitude towards those product as they might think that they could not effect on environmentally changes (Rokka et al., 2008).

#### - 2.2.2) Market Opportunities for green product

Packaging is a low-involvement product which can be made up-to high involvement if it advertise as a EF product (Thogersen et al., 2012). In addition, there are increasing in a number of people whom concern about environmental issues, thus by being a sustainable business could be another opportunity for the firm to build their brand image and gain more potential customers, as well as creating competitive advantages for the firm (Florenthal and Arling, 2011; Rokka and Uusitalo, 2008; Min and Galle, 1997).

#### 2.3) Environmentally friendly packaging

2.3.1) Why do we need EF food packaging.

For food packaging industry, there are some arguments which stated that recycle might not be the best way to reduce waste and save the environment. "If it takes more of the earth's resources to recycle old materials or re-use an item than to make, use and dispose of it from new materials, then it is environmentally better to use new materials" (Jones, 1996, P.3). It caused time consuming, due to complicated process and a lot of energy which will be use for reproducing new materials. Moreover, more resources will be exploited during the recycling productivity, maybe more than making a new product (Jones, 1996).

Nevertheless, even though materials have been recycled, the waste still exists since people will generate more waste as they thought it can be recycled (Kingfisher, No date). Furthermore, THB 650 million (GBP 12.3 million) per year, are estimated to save from transportion cost, by reducing the number of plastic using in Thailand (Bangkok.go, 2009). Based on CEM, it also stated that recycle is expensive. However, as it was mentioned earlier, the price of raw materials will be higher and harder to access when there are few of them. If business owners only think about producing a new product, then the high cost of resources problem would present. Therefore it is still worth in exploring on these 3 factors. Those are reduction, reuse and recycle before it is too late (Ellenmacarthurfoundation, 2013).

#### - 2.3.2) Energy, which will be exploited by producing RUC and Disposable Cups

	Cup Mass	Material Specific Energy	Embodied Energy
Cup type	g/cup	MJ/kg	MJ/cup
Ceramic	292	48	14
Plastic	59	107	6.3
Glass	199	28	5.5
Paper	8.3	66	0.55
Foam	1.9	104	0.20

**Table 2.2:** "Compared three types of reusable drinking cups (ceramic, glass and reusable plastic) to two types of disposable cups (paper and polystyrene foam)" (Hocking, No date).

The explanation of table 2.2: Looking across each row indicates the mass (g), material specific energy (MJ/kg) and the embodied energy (MJ/cup) (energy stored in one cup of that material) of a cup made using the material indicated on far left column respectively. Specific energy is the energy stored in one kg of the material in question (Hocking, No date).

	Disposable Cup			
Reusable Cup	Paper	Foam		
Ceramic	39	1006		
Plastic	17	450		
Glass	15	393		

**Table 2.3:** "Break-even matrix: each number shows the uses necessary before the reusable cup listed on the left, becomes equally energy efficient to the disposable cup listed on the top" (Hocking, No date).

It can be seen that the embodied energy will be more exploited for making those RUC than disposable (table 2.2). In consequence, table 2.3 shows the number of cups used so that the indicated reusable cup would be worth its value for paper and foam cups respectively. For example: Using 39 paper cups is equivalent in energy level to using a ceramic cups 39 times. In this case, it means that the latter should be used more than 39 times to be worth its value (Hocking, 1994).

#### - 2.3.3) Food packaging innovation is needed

The environment is affected not only by packaging productivities but also the primary system such as the cost of transportation and food waste (Jones, 1996). Therefore, packaging can play a major part for saving an environment. Size and packaging material quality—also matter (Euromonitor, 2012: Min and Galle, 1997: Euromonitor, 2013, Thangsupanich, 1995).

*Material quality:* The main purpose of food packaging is to protect the food inside. Moreover, the transportation expenditure will cost less if food does not damage during transportation (Marsh and Bugusu, 2007; Williams et al., 2012). Besides, when the design of packaging is good enough to serve customer's requirement, the advantages of well design are not only seen for both customer and environment, but also seen for manufacturer. Due to the

fact that, convenience of using package can enhance more customers to buy those products (Euromonitor, 2012: Thangsupanich, 1995).

#### 2.4) Finding opportunities for new business in Thailand, regarding to EF.

- 2.4.1) The demand of the world's packaging.

There are an increase of many emerging new enterprises. Consequently, it is necessary for many products to be branded and packed. In 2012, the demand in the world's food packaging increased by 4% (Euromonitor, 2013). Asia is one of the most important regions for food packaging, which accounted for 60% of total food packaging. Food packaging is mainly manufactured in India and China (Euromonitor, 2013 and 2010).

- 2.4.2) Marketing information in general regarding to packaging industry, which could have an impact on food packaging industry in the region.

This research aims to find opportunities, regarding to new eco-business, which will be located in Thailand. Therefore by understanding Thai life-style and board factors, which could effect on packaging sector, should be taken into account.

#### Attitude and act towards EF:

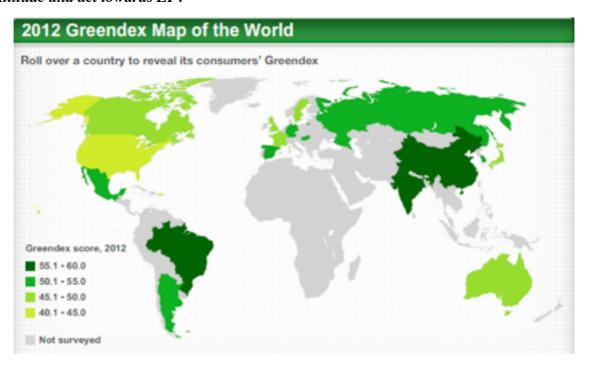


Figure 2.4: BRIC countries top survey of green consumers (Jason, 2012)

Figure 2.4 above show that people in BRIC countries, India China and Brazil, seem to have the highest level of environmental concern (Euromonitor, 2010: Jason, 2012). Surprisingly, developed countries, Sweden, Germany, Australia, Britain and American, are less concern on environmental problems. The reason of why those European countries are less concern about this issue is because, they "do a better job of protecting their environments and have fewer environmental problems" (Jason, 2012).

#### Thai attitude and act towards EF

There is a report, which showed that the most people, who are willing to pay for green product, mostly came from India and China (Euromonitor, 2010: Jason, 2012). In Thailand, the trend of green marketing are growing fast as well. In 2010, 74% Thai customers reported to be environmentally concern (Euromonitor, 2014).

Furthermore, there is a movement on environmental packaging in Thailand as Thai government also concern about the environment, such evidence was shown in the campaign, "No Bag, No Baht". It aims to encourage Thai people to use their own bag and get 1 baht discount in every 100 baht from their purchasing cost. In the other words, 1 baht per bag have been paid from customers who want a bag (Lee, 2010).

#### 2.5) Entrepreneurial learning and opportunity business models

"Most of what you hear about entrepreneurship is all wrong. It is not magic; it is not mysterious; and it has nothing to do with genes. It is a discipline and, like any discipline, it can be learned" (Drucker cited in Blundel and Lockett, 2011, p.10). In other words, entrepreneurial can be learned through experience. Therefore, entrepreneurial skill could be more creative and developed over time (Blundel and Lockett, 2011).

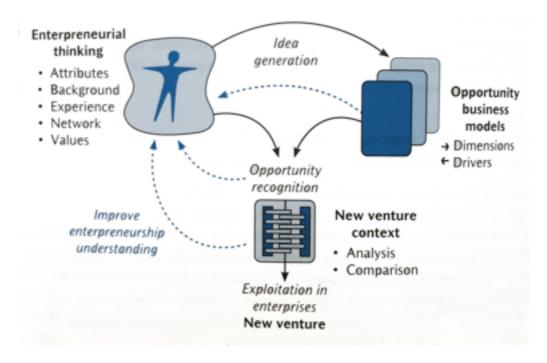


Figure 2.5: Entrepreneurial learning (Blundel and Lockett, 2011, p.33)

Figure 2.5 has illustrated that, entrepreneurs could have more than one vision and their learning are unlimited. Since each entrepreneur's journey will continuously opened their entrepreneurial mind and help them to understand themselves and to discover new venture. According to Blundel and Lockett (2011), entrepreneurial thinking are generated from individual "background, personal attributes, experiences, networks and personal values" (p. 33). Thus, this can be concluded as one of the reason why an entrepreneur could create many different enterprises (Blundel and Lockett, 2011).

One of the hardest part of being an entrepreneur is to choose from various visions, whether the idea is too fantasy or can be converted into real opportunities. However market or customer seem to be the only one who decide which alternatives can be worked in reality. Therefore, it was suggested that, clear idea is necessary to be understandable and comprehensible not only for entrepreneur themselves but also for stakeholders (e.g. investors, suppliers and customers) (Blundel and Lockett, 2011).

#### - 2.5.1) Opportunity Business Models (OBM)

Since, some ideas which generated from entrepreneur are distinct, opportunity business models are suggested to be one of the tool for making entrepreneurial vision clearer. It can be use to exploit an enterprise, including enhance the studying of venture creation. Nevertheless,

this section will give a brief definition of all dimensions and drivers, as the model will be used in exploring new enterprise in chapter 5, discussion (Blundel and Lockett, 2011).

There are 5 important dimensions. Those are included in OBM, which are "Proposition, People, Place, Process, Profit". In terms of Proposition, it is the clear value of an enterprise, which is perceived by the client. According to Blundel and Lockett (2011), People are the stakeholders who are participated in business activities. While, Place mean the area where enterprise is located, including the identification of customer segments and competitors. And Process is the structure, and technology that will be used. Lastly, the returns in any perspectives, such as social and financial, could be all called Profit (Blundel and Lockett, 2011).

Moving on to the important 4 drivers, 'Societal' and 'Commercial' and 'Legal' and 'Technological' drivers, which are the uncontrollable factors that could have an impact on an enterprise. Societal factor is associated with political, environmental and social context. Meanwhile, economic and financial are implying in commercial factor. Legal factor has involved with regulations and rules which legislated by government. Finally, the last factor is technology, such as social network (Blundel and Lockett, 2011).

To sum up, while most people perceived waste as a waste, CEM see "waste is food" (P.26). Since, the majority of waste generated from packaging, thus reusable and biodegradable has been suggested to be the ways to help reduce those waste (Ellenmacarthurfoundation, 2013). Moreover, there are an increase in number of green consumers, thus by being an EF business can also interested more customers who like green products as well (Min and Galle, 1997). However, there were number of factors (e.g. price, brand) which could discontinued people from purchasing on EF goods (Thogersen et al., 2012).

## **Chapter 3**

## Research Methodology

The methodologies, which have been used to uncover the research question, how can a new EF business in Thailand be created, have been provided in this chapter. The chapter presents the way this research has been done, which is followed by the research 'Onion' in figure 3.1 below (Saunders et al., 2009). Then, it will be divided into five sections. Those are research philosophies, research approaches, research strategies, research methods, and data collection and data analysis.

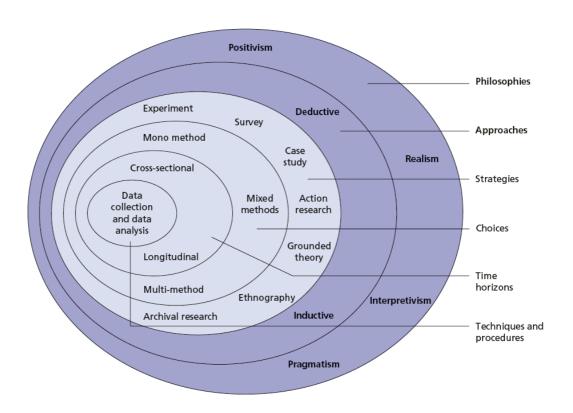


Figure 3.1: Research Onion (Saunders et al., 2012, p.02)

#### 3.1) Research philosophy: Pragmatic

It was said that, researchers who use this method tend to believe that none of viewpoints could project the whole picture (Saunders et al., 2012). In other words, there are more than one answers in reality, which are waiting to be found. Since, EF seems to be new issue for Thai people (Euromornitor, 2012), both qualitative and quantitative data could be useful for understanding a broader picture of this industry. Pragmatism is a mix method between, qualitative and quantitative (Saunders et al., 2007).

This research philosophy has suggested researchers to find the fact and reality, rather than to believe in what was been told (Tashakkori and Teddilie, 1998). For example, there were number of reports which stated that, professional women, who have high education and income, seems to be EF target group (Rokka and Uusitalo, 2008: Euromornitor, 2011: Florenthal and Arling, 2011). Nevertheless, none of those papers were included Asia people in their research. Since this study aims to find an opportunities in Thailand, the truth about this area should be reconsidered.

#### **3.2**) Research approach: Inductive

The theories which are created from inductive research are likely to be more practical and useful than those theories which interpreted by doing deductive research (Tenbrunsel et al. cited in Gill et al., 2010). Before setting a direction of the new enterprise, observing from existing businesses would allow researchers to understand a whole picture of the industry, including competitors or industrial environment. Induction research suggested researchers to start from observation, and try to explain of what they have found. Then constructed those information into theories (Gill and Johnson, 2010). In contrast, deductive research involves in the development of the existing theory (Collis and Hussey, 2003). EF business is in an early stage in Thailand. Therefore, it was chosen to find the business model from other countries, where these types of business have already been successful. By approaching this research, it would allow researchers to create the phenomena in the way they valued (Gill and Johnson, 2010).

#### 3.3) Research strategy: Exploratory and descriptive

#### - 3.3.1) Exploratory research

Exploratory research can be seen as travelers' or explorers' activities (Adams and Schvaneveldt, 1991). At the first stage, recycle business has become one of the key words for

this research. However, due to high cost and high technology for recycling, the focusing area of this study has been changed. This strategy will allow researchers to be more flexible, thus the direction of the study could be changed at all time (Saunders et al., 2009). To illustrate, CEM suggested that reusable packaging can help to reduce waste better than recycle (Ellenmacarthurfoundation, 2013). Hence, while recycling business seems to be difficult, the opportunities for EF packaging has been found. For example, since there are lots of new enterprises emerged within Thailand, thus more packaging is in needed (Euromonitor, 2012).

"If you travel on a theme, the theme has to develop with the travel. At the beginning your interests can be broad and scattered. But then they must be more focus as the different stages of a journey" (Naipal cited in Saunders et al., 2007, P.134). Even though reusable and biodegradable packaging have appeared to be a focused area of this study instead of using recycling method, the core objective of the research regarding EF business is still unchanged. It does not mean that this kind of research will not be focused on its main question, but it suggested the researcher to go broader at the beginning, then further process will be narrowed down (Saunders et al., 2009).

#### - 3.3.2) Descriptive research

However, after the hypothesis has been found by the exploratory research, then the descriptive will be more effective. When using descriptive research for exploratory study, it should be use at the beginning of the study (Stebbins, 2001). Firstly, the respondents would be general asked about their attitudes and behaviour. Then the questions will be more specific. As ideas of two EF takeaway drinks cups businesses have provided at the end of the questionnaire and asked whether the respondents are interested in them or not. Descriptive should be used when researchers know the whole picture of the occurrence (Saunders et al., 2009).

Survey: There are several factors that lead each researchers to use different strategy for conducting the research. Firstly, it will depends on what is the question and objective of the study (Suander et al., 2009). And in term of this study, the main research question is how can a new EF business in Thailand be created. Besides, time limit and the availability for accessing resources and knowledges will be taken into account. Survey can be considered as one of the most efficient way to collect large size of population (Suander et al., 2009). Since, this research is being searched and conducted all its information out of the region where the enterprise are expected to locate. It has also been gathered some of the marketing report by

researching from secondary data, which can be found in the website and newspaper. Moreover, since the time for gathering all the information are limited, this strategy seems to be one of the most suitable way for this study.

It was said that this is one of the productive strategies which could help researcher to point out the way in which direction of studies could be. It is frequently ask "used to answer who, what, where, how much and how many questions" (Saunders et al., 2009, p.138). Hence it is likely to use for exploratory and descriptive research (Saunders et al., 2009).

#### 3.4) Research methods: Mixed method

In this study, there are two example groups of people whom are involved with the selected businesses ideas, reusable and biodegradable takeaway drinks cups. Therefore, the questionnaires has decided to understand consumers attitudes and behaviors of buying takeaway beverages, regarding green issue. On the other hand, the interview aims to find a deep inside information from beverages shop owners. The purpose of each study are differences, thus different method will indicated in different key result (Saunders et al., 2012). Due to the fact that, qualitative method can be flexible. It will allow the researchers who use them creatively. However, some people said that interviewees could say something which is not related to the study topic because of its flexibility (Silverman, 2000). Nevertheless, this study will use both qualitative and quantitative research.

Quantitative data is the information which generating in form of number, which is suitable for gaining large amount of whole population within limited time (Saunders et al., 2009). The questions from quantitative researchers will be fixed and matured. Thus it would be quicker than using qualitative method (Halfpenny, 1979). The questionnaires has given the idea of new businesses then it was expected to count the number of respondents whom are interested or not interested in those ideas. According to Saunder et al. (2009), the numerical data will be provided by researchers who use quantitative research.

Qualitative research is associated with inductive approch, and it help the researcher to create a new insights information which might be uncovered by quantitative research (Saunders et al., 2009). This method has used in this study in order to support the quantitative data. Since the real meaning of social life may be ignored by quantitative research (Filmer et al. cited in Silverman, 2000). Thus, qualitative research has been used in the last question of

the questionnaire so as to give an opportunity for those respondents to give some recommendations from their perspectives. Moreover, the study has been decided to conduct the data from interviewees, who are beverage shop owner, as it expected to obtain a deeper information from beverages industry insiders (Saunders et al., 2009).

#### 3.5) Data collection: Questionnaire and interview

#### - 3.5.1) The sample

The questionnaire had been created by Google form and the data was collected from the UK via the Web but all the respondents were based in Thailand, which are expected to be customers and café owners were accessed via interviews. In order to break the language barrier, all 25 questions were written in both English and Thai languages. There were several colleagues, who helping to check all of those questions whether they were understandable or not. Then, the final version was edited by Dr Stephen King, who is the supervisor of this project. The questionnaire was sent out through social media, such as Facebook and Line chat, to people who are related to the researcher. Thus the questionnaire was answered by 234 Thai people which is 100% response. Information was collected from 25th of July to 6th of August 2014.

#### Designing the questionnaire (Appendix 3.1)

The brief purpose of this study has provided in the cover letter, first page. There are 25 questions in the questionnaire, which has been divided into 4 pages. The questions about consumer behavior in buying takeaway drinks was asking in the second page. While third and forth pages aims to conduct the mature of primary knowledge and attitudes of Thai people towards EF issues. Lastly, the demographic information was asked, in order to find people, who has a potential to be a target group of these businesses ideas.

 Table 3.1: Details of questionnaire questions

Variables	Sample Items	Types of Scales	Relevant References
Buying Drinks Behavior	Please choose the group of people who most influence your choice of take-away drinks.	- Dichotomous questions	Social norm could be one     of the factors which     influences on green     choices (Rokka and     Uusitalo, 2008).
Knowledge about EF issue	It takes a lot of energy to produce a take-away drinks cups.	- Likert scale	Green packaging are not differences from non-EF packaging (Min and Galle, 1997).
Attitude on EF	Lots of little changes in behavior towards EF over time would become a big change.	- Likert scale	Attitudes and behavior are too low than it was expected (Rokka and Uusitalo, 2008).
RUC	- Do you interested in buying a RUC from Give me?	- Dichotomous questions	Reusable packaging can be one of the best way to reduce waste and Co2 (EllenMacarthurFoundati on, 2013).
вос	The prices of BOC are higher due to their biodegradability, would you still be interested in buying the drinks?	- Dichotomous questions	By converting     biodegradable packaging     into fertilize, the profit     will be found for     manufacturers     themselves     (Euromonitor, 2014).
Demographic	- Age	- Multiple Choices	- Professional women seems to be EF concerned (Florenthal and Arling, 2011: Rokka and Uusitalo, 2008: Thogersen et al., 2012).

#### 3.5.2) Interview

**Table 3.2:** Details of interviewees

Participa nts	Name	Date and Time of Interview	Store Name	Year since opening	No. of branches	No. of Staffs	No. of cup sold per day	Averages Prices per cup	Method
SOI	W. Chalanuchpong	28.7.2014 14.00-14.20 PM.	Nana Coffee	6	3	3-10	80-150	THB 80-150 (GBP 1.5-2.8)	Facebook Chat
SO2	C. Treelertkul	29.7.2014 15.25-16.00 PM.	Pacamara and Zanabean	10	9	4-6	200	THB 45-95 (GBP 0.8-1.8)	Line call
SO3	C. Chuechoochat	31.7.2014	Inthanin	7	320	7	300-400	THB 30-75 (GBP 0.6-1.4)	Line call
		14.30-15.05 PM.	Coffee Boy	15	60	1-2	100	THB 30-75 (GBP 0.6-1.4)	Line call
SO4	P. Suebwonglee	3.8.2014 10.40-11.10 PM.	Body Shape Cafe	4	5	3-4	200-600	THB 60-120 (GBP 1.1-2.3)	Telephone call
SO5	C. Janpipakchai	4.8.2014 12.00-12.40 AM.	A cup a cake	5	1	5	100-200	THB 50-80 (GBP 1-1.5)	Telephone call
SO6	K. Kumpeerayos	8.8.2014 11.00-11.30 AM.	Milo	5	3	2-3	100-150	THB 60-100 (GBP 1.1-1.9)	Telephone call

By using interview method, interviewee and interviewer are interacted together through the conversation (Glassner and Miller cited in Silverman, 2004). Six drinks shop owners participated in this study, all of them have been contacted through the researcher's connections. Five are franchising and one of them is local cafe. All of them are selling takeaway beverages. Due to the distance and financial resource, the one-to-one interview has been done by Skype, Line calls (free telephone) and internet chatting. The average length of conversation in each interview is 45 to 50 minutes.

#### Designing the interviews: Semi-structured

Both semi-structured and in-depth interview are non standardize which is relevant to qualitative research (King cited in Saunders et al., 2007). Semi-structured can be associated in an exploratory research, as it would help researcher to find out new insights informations and the questions in this method which have been listed before (Saunders et al., 2009). Each interviews has been categorized into 3 sectors. Firstly, the general information will be asked about the cafe such as how many waiters and waitresses they have, how many takeaways drinks cup selling was per day. Secondly, the questions will be about packaging which they, currently, have been using. Thirdly, it will be about their attitudes and willingness in using EF takeaway drinks cups. However, due to the different interviewees (in this case, size of the cafe) some of the questions, will not be asked or the order of the questions could be change during the conversation (Suander et al., 2007).

## **Chapter 4**

## **Findings**

Both café owner and customer views on EF issue, which conducted from the interviews and questionnaires will be discussed in this chapter. Also their attitudes towards RUC and BOC, as well as consumers drinking habits.

#### 4.1) Cafe owner views

4.1.1) Interviews: Findings (Appendix 4.1)

EF packaging has been interested by the majority of participants. All of the shop owners said that, by advertising their shops as EF concerned could help to build their brand image. 5 of 6 participants agree that they can help to save the environment by using eco-packaging and half of them are researching on to this issue (SO1, SO3, SO5, SO6).

Even though EF is favored, only two of them were experienced on using eco-cups in their shop. However, due to its high cost, both of them have already changed back to non-EF takeaway cups instead. One of the experienced participants, SO5, said that she used to use BOC, but when the cup are using, water seems to leak out. Including the fact that, it is hard to find where to buy those EF cups in Thailand, said by SO4. From all these reasons, even the attitudes of the participants towards green are high but their behavior are low (Wicker et al., cited in Rokka et al., 2008).

*Price and perceive availability,* seem to be the obstacle factors which could discontinue shop owners on purchasing green products (Rokka et al., 2008). To demonstrate, SO2 said it is not clear whether those cups are environmentally or non-EF, "at first sight, I can recognize the different of Namthip (The name of a water brand in Thailand, see Appendix 4.2) from others". Because, the bottles are softer, then he can feel that less plastic are being used to produce them. Moreover, by squeezing those bottle after using the size of the bottle will be smaller. Hence, this strategy can make him believe that, there are less waste sending to landfill.

*Market trend* is another factor that influence shop owners to buy their packaging, which mean that business owner tend to follow social norm (Rokka et al., 2008). SO5 mentioned that she will choose to buy the normal cup from the same manufacturer as the majority or big brands are using. Because, it is mean that those manufactures are reliable.

**Packaging material** is also matter (Min and Galle, 1997), as said by SO3 that "my consumers complaint that they feel better when ice coffee are being served in plastic or transparent cups, and paper cups seems to make hot drinks looks more delicious". Thus, nowadays, both plastic and paper cups are being used in his shop.

#### - 4.1.2) RUC versus BOC from shop owners' aspects

When the questions was asked about their opinion on two businesses. From the table 4.1, it can be seen that RUC is more popular among those café owners than BOC.

**Table 4.1:** Comparing the level of favor from the interviewees

Participants	RUC	вос
SO1	+2	-2
SO2	+1	+2
SO3	+2	+1
SO4	+1	+1
SO5	+1	+1
SO6	+2	+1
Total	9	4

<sup>+2</sup> referring to "definitely interested"

<sup>+1</sup> referring to "interested"

<sup>0</sup> referring to "neither interested or not interested"

<sup>-1</sup> referring to "not interested"

<sup>-2</sup> referring to "definitely not interested"

#### Reusable cups (RUC)

From the transcript of SO2 is more likely to participate if the target customers of those members in the campaign are middle to high class, since these segments of customers are able to raise brand image of the coffee shop. On the other words, the campaign should help to attract new customers rather than the old one. Another point to consider is that, the clear benefits of what was the shop would gain should be seen at the first stage right after the shops or customers are agree to participate with the project, said by SO5. For instance, the campaign will be more attractive if the money from selling each cup will also be generated for the shop.

The participants would like to know the kinds of promotion that they have to offer, in order to attract customers (SO2 and SO5). To demonstrate, the averages price of cups packaging are 2 to 5 THB (GBP 0.09), hence the shops are willing to offer promotion which have the equal price as their packaging cost. In this case, comparing with the difficulty in maintaining their own cup. Thus, SO2 mentioned if only less than 5% discount from THB 95 (GBP 1.8), it might not be appealed enough for those customers to buy drink.

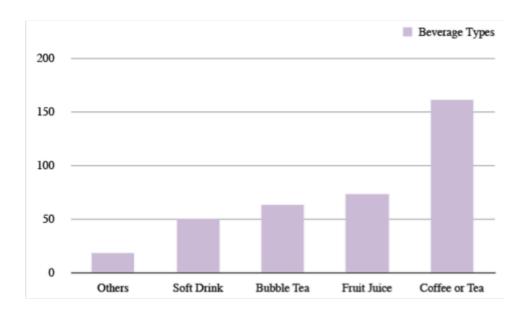
Moreover, SO2 has stated that, the logo on takeaway cups can help to raise the brand awareness. Therefore, "by using the RUC, how can others know that the coffee inside came from my shop". Taking Starbuck as an example, it is expensive to buy Starbuck's coffee compare to local's shop in Thailand. Thus, customers tended to buy Starbuck's cups because of its brand, as they believe that it could show their ability of consuming costly beverages.

## Biodegradable Cups (BOC)

Due to the fact that, BOC are more expensive than non-environmentally cups, thus those expensive cups will cause the price of the beverages to be more expensive as well. Most of the participants, still interesting to buy even the cost of those green cups packaging are expensive, but not higher than 10 to 20 percent compare to the normal price, which is THB 2-5, (GBP 0.047-0.094) of the cups which majority shops have been using nowadays. SO3, one of the participants who likes this idea said, if the price of the coffee are higher by using green packaging, he might separate those expensive drinks into new categories and call them "Premium" beverages. And the most important factor is that, customers will not have to change their behavior unlike the first idea. However, SO1 believes that, it is not worth using those BOC. Because, by using them the resources and energy still be exploited.

# 4.2) Customer views - Drinking habits and green attitudes

# - 4.2.1) Quantitative data



**Figure 4.1:** Coffee and tea are the most popular beverages

Over 150 respondents selected "coffee and tea" (Figure 4.1) to be the types of drinks that they are frequently buy, while less than half chose fruit juice and others types. A total of 133 respondents have bought their drinks from franchise shops (Appendix 4.3).

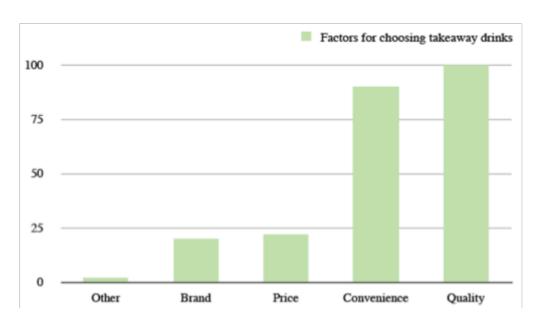
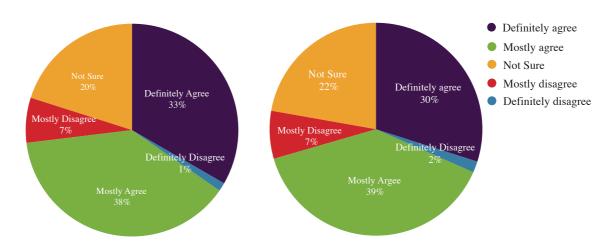


Figure 4.2: Quality and convenience are the factors, which influence people on buying drinks

Quality and convenience (figure 4.2) are two factors that can influence most people decision of buying beverages, which are 99 and 89 respectively. More than a half of the respondents chose that no one (Appendix 4.4) can influence their choice of beverages, and one in forth are influences by their friends.



**Figure 4.3:** It takes a lot of resources (right) and a lot of energy (left) to produce a take-away drinks cups

When the question was asking about recycled symbol (Appendix 4.5), 146 respondents have given the right answer. Approximately 70% of the respondents are agree with the statement that it takes a lot of resources and energy to produce a takeaway drinks cups (figure 4.3). In addition, there are 43% respondents claimed that they sometimes separate rubbish for recycling and more than 150 people think that the recycling facility in Thailand is bad. More than 80% are definitely agree that recycling system need to be improved and rubbish are taken too much space in the region. Additionally, more than a half of population mostly agree that they are EF and almost 5 times as many people, who are likely to go to shop that advertised themselves as environmentally, compared to those non-environmentally shop. Moreover, people tend to believe that by using green packaging can help to save the environment (Appendix 4.6-4.12).

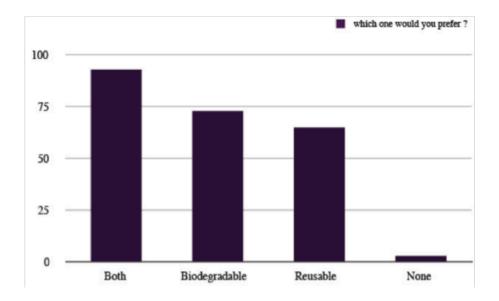
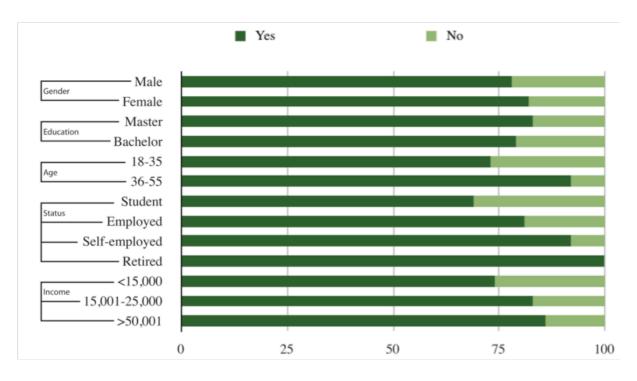


Figure 4.4: RUC versus BOC, which one do you prefer?

From figure 4.4, it can be seen that roughly the majority of the respondents like both idea. And more people seems to like the biodegradable cup than the reusable ones however it could be due to chance since the percentages are not that far apart. Roughly a third of the respondents prefer biodegradable cups, while slightly less number of the them prefer the other. To make most of the population happy, assuming that this targeted group of sample represents the general target group of Thai people, both ideas could be employed (Appendix 4.14-4.17).

#### Demographic Result

The figure below, has been trying to identify whether the differences in demographic could have an impact on people attitudes towards environmentally issues. By choosing the group, which have similar amount of respondents. To demonstrate, the reason for choosing Bachelor and Master degree because, there are 135 and 78 respondents whom are graduated from Bachelor and Master respectively, while only 1 respondent studied secondary school.



**Figure 4.5:** Result from C.6.,

would you be more likely to go into a cafe if it is advertised as EF?

Overall, it can be clearly seen that the majority of people were "pro-EF" and that there appears to be little difference in attitudes across most demographic dimensions apart from age and status; with older people more interested in EF and also the self-employed and retired. Moreover, women and people who are more educated have more positive attitudes towards EF. By analyzing these, it is expected that highly educated middle aged/old women of higher income seem to be the target customers for shops that advertised as EF.

#### 4.3) Customer views on RUC and BOC

#### - 4.3.1) Qualitative data

There are lots of different opinions from each respondents, thus this sections will stated some of the most frequently shown up reasons of why those customers like or dislike RUC and BOC.

Convenience: The majority of people whom are not confident with using RUC is because they are displeasure about taking the cup everywhere with them. Moreover, due to the fact that not every shops will be involved in the project, thus it might be inconvenient for customers to find shops with the reusable sign. Some people have their own favorite brands,

thus they will buy the cup if those shop are in the project. In contrast, second idea will allowed them to go to any shops they passed by.

*Maintenance:* This factor seem to be one of the reasons which make those respondents overlook first idea. The strength of the cup is also important, since customers will need to take care of their own cups. Including, washing the cups after it have been used and holding the cup along with them during the day. Some respondents stated that, "what if I can not find where to wash my cup during the day, what if I want to buy second cup". On the other hands, BOC can easily throw away after it was used.

**Design:** Some respondents said that, it is important to look professional when they go to works. It could interested them if the cup will not effect their outlook image or improve the way they look. For instance, "by holding Starbuck cups, make me feel proud" said by one of the respondents. Another interesting point is, by using their own cups could have an impact on their attitudes towards drinks taste. Some of them complained that, their feeling have changed when using new cup, hence may be it is too boring to use the same one everyday.

**Benefit:** Promotions from the shops seems to be one of the reasons that most respondents have given when it was asked why they like this idea. Takeaway cups can be used one times only and more expensive, in contrast RUC are unlimited times use. Thus, it can be seen as long-term investment, since customers will get the cups and the profit will generated back to them by those promotions.

*EF Issue:* Since BOC required energy and resources to produce new cup over and over again. Moreover, these cups will be left in the landfill and take times to de-compost, thus the waste problem is still exist. Therefore, it is clearer in customers' point of view that RUC benefits the environment than using BOC.

# Chapter 5

# Discussion

The study aims to find an opportunity in doing environmentally business in Thailand, which are RUC and BOC. It can be seen from the last chapter that both businesses could be beneficial in Thailand. The information in this chapter is conducted from primary data (questionnaires and interviews) and secondary data (literature review). The chapter can be divided into two sectors. First of all, it will compare pros and cons of both businesses for identifying different ideas between customers and shop owners toward environmental perspectives. Lastly, two ideas will be explained by using the information from previous chapters.

### **5.1.**) Projecting the ideas into differences point of views.

Some people may wonder about the attitude and behavior of Thai people towards green issue. This can be found from the past research in chapter 2 that had been revealed by the questionnaires. To illustrate, as mentioned earlier in the literature review section, people might believe that they could not affect on environmentally changes (Rokka et al., 2008). Based on the questionnaire, the question tends to ask whether minor changes could affect the environment. Most people tend to agree with this statement (Appendix 4.13). However, this might not be a serious problem as it will take time for both business ideas to develop.

Moreover, as it was stated previously, consumers will adopt their behave like people whom they are surrounded by (Rokka et al., 2008). From the interview, the shop owners seem to care about what kind of cups that majority of shops have used in order to follow market trend. Thus, social norm can be seen as another factors, which had a great influence on purchasing decision. In consequence to raise the brand awareness, Thai celebrities whose projected as EF in the society. For example, Tik Jesdaporn, the executive producer of EF T.V. programme, Navigator (Navigatortiktun. 2014) (Appendix 5.1). Or maybe women whose personality are related to the demographic in figure 4.5, could help to promote RUC as well (figure 5.1).

**Figure 5.1:** Professional women, Ann Thongprasom (Asianfuse.net, 2014)



From the above statement, there is a high possibility for both businesses to become successful in Thailand as it can be clearly concluded from the questionnaire that most respondents would like to go to shops that have advertised as EF. They are willing to buy those beverages with reusable or served by BOC. Nevertheless, the table below has shown some problems which have been found from the questionnaires and interviews. In order to enhance these two businesses, those -1 and +-1 in figure 30 need to be improved.

**Table 5.1:** The pros and cons of these two businesses regarding with customers and shop owners

	RUC (A, B, in figure 5.5 below)	BOC (1, 2, in figure 5.5 below)			
	C.R.1) The behavior need to be changed and maybe complicated	-1	C.B.1) The behavior do not have to change .	+1	
Customers'	C.R.2) The cup can be kept and use again	+-1	C.B.2) The cup can be thrown away after used	+1	
Perspective	C.R.3) The drinks would come with promotions.	+1	C.B.3) The drinks might be more expensive.	-1	

	RUC (A, B, in figure 5.5 below)		BOC (1, 2, in figure 5.5 below	w)
	S.R.1) Packaging cost will be reduced.	+1	S.B.1) Packaging cost will be higher.	-1
Snop Owners	S.R.2) Advertised as a group, along with other participants in the project.	+-1	S.B.2) Advertised as an individual shop.	+-1
	S.R.3) Customer's cup need to be take care during the making drinks process.	-1	S.B.3) Do not have to take responsibility for customer's cup.	+1

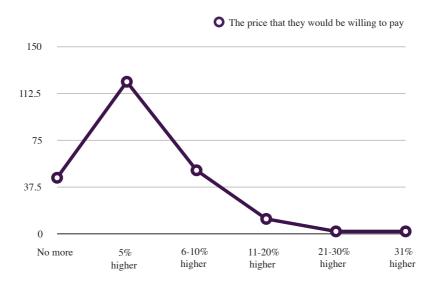
<sup>+1</sup> Referring to positive - 1 Referring to negative +- 1 Referring to neither positive nor negative

# **5.2**) The implication of business ideas

#### - 5.2.1) Biodegradable cup (BOC)

It was suggested that, packaging could be made up to high involvement if it is advertised as EF product (Thogersen et al., 2012). Most of the customers and shop owners claimed that they are interested in EF product. However, due to the fact that the cup can be used for only one time, in consequence, the quality and convenience are likely to be the first and second factors for respondents to choose their drinks. The majority of respondents have said that, they could pay more for takeaway drink, which served with EF cups if the quality or tastes of those beverages are good as well as the normal cup. Therefore, there are some factors which should be considered before launching this business.

Price seem not to be the important factors (figure 4.2) which could discontinue consumers' decision on buying takeaway drinks. Nevertheless, the price of the drinks that served in ecocups should not be higher than 5% (figure 5.2).



**Figure 5.2:** How much more would you be willing to pay for EF takeaway drink?

Moreover, the differences between using or not using biodegradable takeaway cups are not clear. Green product does not show if they are less or more environmental friendly (Rokka et al., 2008). Since, new cups are being produced and the used cups still being sent to landfill. In this case, it might be better to improve material of the cup or show a clear sign to indicate the EF packaging in order to attract the buyers. For instance, the bottle of Namthip, which is one of the most popular water brand in Thailand, could be a good example of green product. Unlike other water brands, Namthip has reduced the density of the plastic which allow them to become softer and able to squeeze. Then, customers believe that they can help reduce waste by using Namthip brands (Appendix 4.2). Nevertheless, many criticism on social network was complaining that those bottles are too fragile. Even the density of material has reduced but the strengthen of BOC must stay the same. It must be suitable for using with variety of drinks, easy to transport and comfortable for keeping in stocks (Topicstock.pantip, 2013).

#### The struggle in operating BOC

The previous chapter has shown that the majority of respondents agreed that waste problems in Thailand should be addressed as those amenities in the country are not advanced enough to encourage them to separate wastes. Proper management and huge fund is needed in order to make the waste management system in Thailand work successfully (Hengrasmee, 2005). Since, it requires the cooperation and financial support from the government otherwise, it may be too difficult to initiative. Furthermore, Barnes (2014), claimed that compost able and biodegradable are different. Biodegradable products are made from natural resources, while compost able are not. However, both of them are able to compost by itself. Since, he had tried to explore on this area, biodegradable. He has found that none of investors seem too interested in the project. Due to most of the biodegradable products are made from food, such as potatoes and sugar crane. In consequence, by employing on those natural resources could leads the price tax of those products to be higher (Barnes, 2014).

Even though BOC will not need recycling system, waste problems seem to affect those users' faith as a whole, such as C.B.2) and E.B.3) in the table 5.1 above. Due to the fact that the same amount or more wastes will still be sent to landfill under BOC. Therefore, how the cups could be decomposed before the land would be filled with new wastes. Biodegradable products will need at least 3 to 6 months to compost (Barnes, 2014). In this case, before

launching biodegradable business in Thailand, technicians, money and government support are necessary for solving those wasted which have already existed in the region.

In consequence, RUC has become the first idea to be focused in this study. Since, it will not required the need in changing the norm from big organizations or institutions, but only need adaptation from customers and shop owners (C.R.1), S.R.3)).

#### **5.2.2) Reusable Cup (RUC)**

#### **OBM Dimensions**

**Proposition:** This business aims to be a part of helping Thailand moving forward EF issue. Nevertheless, the businesses which has been enhanced in this study is different from others (eg. Starbuck). As, it will cooperate different beverages brand altogether. For this reason, customers could get promotions from variety of shops, in the same way the shops can advertise themselves along with other brand in the project, regarding EF. Consequently, the brand image of RUC should be strong enough to express itself as an EF (Treelertkul and Janpitakchai, 2014). Besides, there is an example of reusable bottle project, which has already been exist and successful in UK (Givemetap, 2014). Thus, this proposition might have a potential to be successful in Thailand as well.



**Figure 5.3:** The example of glass washer (Barsupplies, 2014)

Since, the RUC is the key product for this business, the design of the cup should be good enough to satisfy both customers and shop owners, however it does not have to be expensive or less than THB 80 to 100 (GBP 1.5 to 1.7). It should also be suitable to use with hot and cold beverages and easily to wash after the cup has been used. The specific cup washer may

be included with the cup packaged when it was the first cup (figure 5.3 above). Due to the fact that different people have different tastes, customers should be able to personalised their own cup for different materials, texture and colour. However, each cup should have a reusable symbol to help people easily to recognized that these cups are EF. Another point to be concerned is, the cup should be light, easy to hold and to be kept during the day (figure 5.4 below).



Figure 5.4: Foldable cup (Tapplastics, 2014)

However, not only does the cup design that is important, but also the after sale customer service. According to CEM, it was suggested that, when the customers buy products, they could be returned and repaired. This could help to preserve the environment as well as to satisfy more customers (Ellenmacarthurfoundation, 2013). In consequence, the cup can be fixed and returned, perhaps unwanted cups could be given to charity or people who want them. In this case, there will be zero waste which was sent to landfill (figure 5.5).



Figure 5.5: After sale service

**People:** "New ventures are often based around people working together as members of an entrepreneurial team" (Blundel and Lockett, 2011, P.83). Initially, entrepreneur will be like a coordinator, who would bring beverages shops and all stakeholders together and guide them into the same direction. Most of the teams are likely to created from entrepreneur's own personal contact network (Blundel and Lockett, 2011).

Firstly, it is essential to have product designers who have an ability to create an innovative cup, which is beautiful and practical. Then, cup manufacturer is needed for producing those cups and fix them. Besides, also, this business could not be success without beverages shops that are participated with the project and those customers who bought those RUC. Lastly, the secondhand cup will be delivered to charity or people who would need them. Nevertheless, the target customers of those members in the campaign should be similar, because each segments of customers could affect brand image of beverages shops. Since, most respondents are likely to buy drinks at franchise shop and coffee seems to be the most popular types of beverages. Plus, office workers seem to be those people who most frequently buy takeaway drinks. In consequence, in order to satisfy more customers to buy the RUC, franchise shops that are located near office where sell coffee, are suggested to be the main target clients for this business.

**Place:** This business would be located in Thailand. The RUC will be sold in those shops that are involved with the campaign. The cup should be able to order on its official website, since Thai people like to shop online (Euromonitor, 2014). As it was stated in 'people' above, there are no direct competitors for this business, since this idea is new and different from others.

**Process:** Beverages shops, that are taken part in the campaign, have to indicate the reusable sign in the stores, and it was also recommended to offer some promotions for those customers who came with the cups.

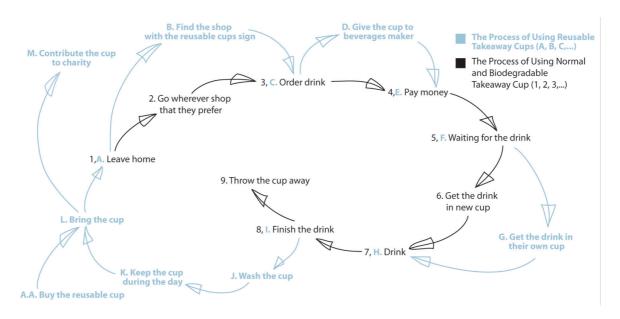


Figure 5.6: The process of buying drinks by using RUC, and BOC and normal takeaway cup

Moving on to customers' process (figure 5.6), it has shown that after the cup was bought (A.A.), customers would need to adapt their behavior for using RUC. Firstly, they have to bring the cups with them in order to get promotions from the shops (L,B). Later on, after the cups are used, it need to be washed (J) and kept (K) with them until the cup will be used again for next time. Moreover, sale service is also included in this study, this helps customers to decide whether they want to returned their unwanted cups for contributing to charity or not (M).

*Profit:* The profit from this business model can be provided along the supply chain. First and foremost, by selling the RUC, the profit will be generated for cup manufactures. After that, if beverages shop or distributors allows the RUC to sell in their stores, the commission from each cups would also be provided when a cup was sold within their shops. Then, the customers who bought those cups would get a promotion, when they buy a drink from the shop that are participated in the project, with the RUC. In this case, those beverages shops can also reduce the cost of their packaging, and are able to promote themselves along with other clients. Moreover, broken cups will be distributed to charity. By doing all of this,

environmental profit can also be acquired. Due to less cup was being made, no waste sending to landfill. Moreover, less energy and natural resources will be less exploited. As a result, Thailand would be a better place to stay. Since, Thailand is one of the world's best place to visit but only 7% of the GDP came from tourism (Tourismthailand, 2014), hence maybe better place could attract more international tourists to visit the country.

**Table 5.2 :** OBM Drivers of RUC

OBM Drivers					
	Thai people attitude towards green issue are positive.				
	To illustrate, the majority of them are more likely to go				
	to EF cafe. However, maybe the education scheme in				
Society:	the country should express more about EF issue, since				
	more than two third of the respondents have given the				
	wrong answer when it was asked about recycling				
	symbol (Appendix 4.4).				
	The price of potatoes would be higher, when it was				
Commercial:	used to produce BOC (Barnes, 2014). Therefore, this				
	idea seem to be too difficult too initiate.				
	Wastes problem are being a big issue in many				
Local	countries, as well as Thailand. Consequently, the				
Legal:	government are taking concentration on this issue				
	(Worldbank, 2013).				
	With advanced technology, the example of cup washer				
Technological:	and foldable cup are being available in the market. As				
	a result, RUC has a potential to create successfully.				

# Chapter 6

# Conclusion

This study has tried to find an opportunity for a new EF business in Thailand. It has found that massive of wastes came from packaging industry. And the volume of these wastes are expected to increase in the future. Thus, EF beverages packaging has become an area of focus in creating new business ideas, which are RUC and BOC. The research has discovered that Thai people seem to interest and willing to pay more for EF products. And the market segment of these products are likely to be female who are older than 35 with high income. However, the differences between gender and income are not significant different. Furthermore, quality and convenience are likely to be the first two factors which those consumers concern when buying beverages. BOC is difficult to initiate, since it require financial and government support. Thus, RUC has more potential to be successful. Nevertheless, innovative cup is needed, for example if the reusable cup which made from plastic should be strength enough for using 17 times, in order to be "equally energy efficient" to the non-EF cup.

#### **6.1**) Limitations

There are varieties of platform which have been used to conduct the interview. The differences between each method could reflect the way in which respondents answering the questions. Beth (2004, P.107) stated in Silverman, that "things seem to be communicated better through my fingers than my voice". Furthermore, in term of the data that which was conducted from respondents whom are known by the connection of researcher. The demographic of those people are not varies enough. For example, only 8 retired people answered the questionnaire (Appendix 6.1).

# **6.2)** Recommendations for further research

BOC can be seen as one of another way to raise the environmental issue. However, it seems to have lots of struggle, such as financial funds and government support. Barnes (2014) stated that "sailors are using biodegradable products, so they can throw those product away in the sea after it has been used". Thus, it might be useful to find out, what is the market segmentation of these particular products.

According to the research, RUC has the potential to launch successfully in Thailand. With this initiative idea, might revolutionize Thai habit on segregate the recyclable waste and conscious more on EF product. Nevertheless, in order to bring this idea forward. The question about how to produce RUC with EF production or what kind of innovation cups, that could satisfy customers, still need to be uncovered.

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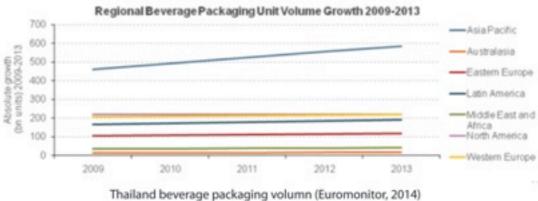
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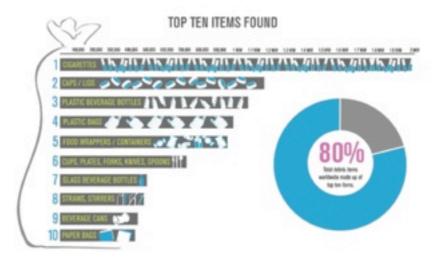
# **Appendices**

Appendix 1.1: Total Packaging Volume in Asia Pacific and Thailand (Euromonitor, 2010)



20000-15000-5000-0-2008 2009 2010 2011 2012 2013

Appendix 1.2: Top ten wastes which was collected from the oceans in Thailand (Green World Foundation, 2011).



# **Appendix 2.1:** Full datas of the searches

Source No.	Keywords	Торіс	Researcher and Year	# rates	Source	Date Accessed
1	green lifestyle and green products	Do Green Lifestyle Consumers Appreciate Low Involvement Green Products?	Florenthai and Arling, 2011	14 results	BSP	8. June. 2014
2	green packaging and consumer	Preference for Green Packaging in Consumer Product Choices - Do Consumers Care ?	Rokka and Uusitalo, 2008	79 results	BSP	8. June. 2014
3	green purchasing	Green Purchasing Strategies: Trends and Implications	Min and Galle, 1997	15 results	BSP	9. June. 2014
4	brand knowledge and brand attitude	The Role of Social Identity and Attitudes Toward Sustainability Brands in Buying Behaviors for Organic Products	Bartels et al., 2011	28 results	BSP	10. June. 2014
5	green and consumer products and organic	Consumer Decision Making Regarding a "Green" Everyday Product	Thogersen et al., 2012	834 results	BSP	10. June. 2014
6	opportunities and packagers	Food Branding: New Opportunities for Packagers	Euromornitor, 2012	56 results	Euromornitor	11. June. 2014
7	Packaging and green	Packaging - January 2011 Green Packaging Round- up	Euromornitor International, 2011	2,700 results	Euromornitor	11. June. 2014
8	Circular economy model	Towards The Circular Economy Opportunities for the consumer goods sector	Elle Macarthur Foundation, 2013	2,050,000 results	Google	13. June. 2014
9	environmental and packaging and UK and food	Environmental Impact Of Packaging in the UK Food Supply System	Jones, 1996	24,700,00 0 results	Google	13. June. 2014

Source No.	Keywords	Торіс	Researcher and Year	# rates	Source	Date Accessed
10	Bangkok and plan and Thailand and recycle	Objective Plan	Bangkok.go., 2009	1,190,000 results	Google	13. June. 2014
11	closed loop and business and Kisgfisher	The business opportunity of closed loop innovation	Kingfisher, No date	16,300 results	Google	16. June. 2014
12	Reusable and Disposable Cups energy	"Reusable and Disposable Cups: An Energy-Based Evaluation."	Hocking, 1994	110,000 results	Google	16. June. 2014
13	Reusable and Disposable Cups energy	Reusable vs. Disposable Cups	Hocking, No date	110,000 results	Google	17. June. 2014
14	food packaging and environmental and food	Food Packaging — Roles, Materials, and Environmental Issues	Marsh et al., 2007	324,684 results	Leeds University search @Library	18. June. 2014
15	household and Food Waste	Household Food Waste With Special Attention to Packaging	Williams et al., 2012	109,440 results	Leeds University search @Library	18. June. 2014
16	Thailand and environment and recycling	Thailand fights addiction to plastic bags	Lee, 2010	961,000 results	Google	20. June. 2014
17	Exploring and entrepreneurshi	Exploring entrepreneurship	Blundel and Lockett, 2011	41,377 results	Leeds University search @Library	20. June. 2014
18	M&S and waste and report	Waste from M&S stores	M&S, 2008	279,000 results	Google	21. June. 2014
19	19 Row Foods Packaging Research 2013: Key Hightlights		Euromonitor, 2013	9,400 results	Euromornitor	22. June. 2014
20	home and packaging	Make yourself feel at homethrough packaging	Euromonitor, 2010	6,200 results	Euromornitor	22. June. 2014

Source No.	Keywords	Торіс	Researcher and Year	# rates	Source	Date Accessed
21	consumer and green	Green Features: What is the Consumer's Perception?	Euromonitor, 2012	4,050 results	Euromornitor	23. June. 2014
22	food and packaging and Asia	Food Packaging in Emerging Markets - Asia Pacific	Euromonitor, 2011	2,000 results	Euromornitor	24. June. 2014
23	consumer and Thailand	Consumer Lifestyles in Thailand	Euromonitor, 2014	2,600 results	Euromornitor	24. June. 2014
24	Thailand and country	Thailand: Country Pulse	Euromonitor, 2014	3,000 results	Euromornitor	25. June. 2014
25	packaging from the Drinks Packaging Industry  packaging and Total Packaging	Packaging: Regional Insights from the Drinks	Euromonitor, 2010	3,450 results	Euromornitor	26. June. 2014
26			Euromonitor, 2014	900 results	Euromornitor	27. June. 2014
27	Thailand and packaging	Snack Bars in Thailand	Euromonitor, 2014	1,400 results	Euromornitor	28 June. 2014
28	Food and packaging and Thailand	Food research and product development and packaging practices, issues and strategies in Thailand	Thangsupanich, 1995	1,560,000 results	Leeds University search @Library	28. June. 2014

# New business ideas regarding environmentally friendly take-away drinks cup in Thailand.

By: Ratawan Tanadumrongsak



#### Dear Participant:

This questionnaire is a part of dissertation of MSc Enterprise, University of Leeds, which aim to identify the attitude of Thai people regarding environmentally friendly issues and new business ideas. It might take around 10 minutes to complete. Lastly, thank you in advance for your participation.

Kind Regards, Ratawan Tanadumrongsak

#### ถึง ผู้ทำแบบสอบถามทุกท่าน

แบบสอบถามชุดนี้เป็นส่วนหนึ่งของวิทยานิพนธ์ ซึ่งมีจุดประสงค์เพื่อใช้ในการศึกษาทัศนคติของคนไทยที่มีต่อสิ่ง แวดล้อม และเพื่อการนำเอาความรู้ที่ได้ไปต่อขอดในการเริ่มต้นธุรกิจบรรจุภัณฑ์เครื่องดื่มที่เป็นมิตรต่อสิ่ง แวดล้อมในประเทศไทย โดยระยะเวลาในการทำแบบสอบถามประมาณ 10 นาที สุดท้ายนี้ต้องขอขอบคุณทุก ท่านที่ไห้ความร่วมมือสละเวลาทำแบบสอบถามนี้ค่ะ

จัดทำโดย รตวรรณ ธนาดำรงศักดิ์

Continue »

# Appendix 3.1 : Questionnaire (Page 2 of 6)



# Section A: Buying Drinks Behavior

พฤติกรรมในการเดือกชื้อเครื่องดื่ม

Figure: Take-aw รูปภาพ: เครื่องคืม	ray drinks cops เส้าหรับทานนอกร้าน
	ypes of take-away drinks do you buy frequently? (can choose
more than o	
	ทานนอกร้าน)ประเภทใดที่ชื่อบ่อยที่สุด (เลือกได้มากกว่า 1 ข้อ)
Coffee or tea (	
Fruit juice (w)	
Bubble tea (#	
□ Soft drink (พา	ERRM)
Other:	
	do you normally buy take-away drinks? *
	(สำหรับทานนอกร้าน)ที่ใหน
O Local shops (	านชายเครื่องดื่มในพื้นที่)
<ul> <li>Franchise sho</li> <li>Amazon)</li> </ul>	ps (eg. Starbucks, Cafe Amazon) (ร้านชายเครื่องดื่มเพ่วนใชน์ เช่น Starbucks, Cafe
0 Other:	
	choose the factor that most influence your choice of take-awa
drinks.	*** * * * * * * * * * * * * * * * * * *
	ตัดสินใจเลียกชื่อเครื่องดื่ม(สำหรับทานนอกร้าน)มากที่สุด
	eg. near to where you go) (สะควก เช่น ใกล้ที่ทำงาน)
O Quality (quan	
O Brand (uuvu)	
© Price (ราคา)	
U Other:	
	choose the group of people who most influence your choice of
take-away o	
	สินใจในการเดือกซื้อเครื่องดื่ม(สำหรับทานนอกร้าน)มากที่สุด
Friends (www	
O Families (#10	
	ารา หรือคนมีชื่อเสียงในสังคม)
U No one (laisi)	
U Other:	

# Appendix 3.1: Questionnaire

(Page 3 of 6)

#### Section B: Knowledge about "Environmentally friendly" issue"

\*Environmentally-friendly or eco-friendly mean designed not to harm the environment.

ความรู้ที่เกี่ยวข้องกับการเป็นมีครค่อสิ่งแวดต้อน



B.1.)	Wha	t does	this	sym	bol	mean?	•
δηδον	ด์ต้าน	กล้าน	ายถึงอ	els			



# B.2.) Do you separate your rubbish for recycling?

คุณแยกของบ้างหรือไม่

- Every time (พุกครั้ง)
- O Almost every time (เกียนทุกครั้ง)
- O Sometime (unimita)
- © Rarely (พาพาศรัย)
- O Never (lainn)

If the answer in B.2.) was "every time", you can skip the question number B.3.).

ถ้าค่าตอบในข้อ B.2.) คือ "ทุกครั้ง" ไม่จำเป็นต้องกำข้อ B.3.)

#### B.3.) If "not every time", why? (can choose more than one)

ถ้าไม่ "ทุกครั้ง" เพราะอะไร (สามารถเลือกได้เกิน 1 ข้อ)

- There are not enough facility or place for recycling. (สถานที่สำหรับอำนาดในการที่ไซเด็ดในประเทศไทย มีน้อย)
- □ Too-complicated, time consuming (spenn was decree)
- 🗆 I do not know how (ไม่รู้ว่าต้องทำอย่างไร)
- □ I do not care (laimals)

u Other:

#### Please choose to what extent do you agree with the following statements. \* โปรตระบุว่าคุณที่หลัวเหรือให้กับข้อความนี้

	Definitely agree (เห็นตัวย ยย่างซึ่ง)	Mostly agree (ค่อนข้างเห็น ตัวถ)	Neither agree nor disagree (laiss/le)	Mostly disagree (ค่อน ข้างไม่เห็นตัวย)	Definitely disagree (lai เพิ่มตัวธอต่าง ซึ่ง)
B.4.) It takes a lot of energy to produce a take- away drinks cups. (มีการสูดูเสีย พลังสามอย่างมาก เพียใช้ในการเลีย แก้วใช่เครื่องคืม สำหรับทานนอกล้าม สำหรับทานนอกล้าม	o	0	0	0	O
B.s.) Producing take away drimks cusp consumes a lot of raw materials. (lunnsudendrials unfoculational units and uni	0	0	0	0	0

# Appendix 3.1: Questionnaire

(Page 4 of 6)

#### Section C: Attitude on "Environmentally friendly"

Environmentally-friendly or eco-friendly mean designed not to harm the environment.

ทัศนคลิที่มีค่อความเป็นมีครต่อสิ้นเวคล้อม



Please choose to what extent do you agree with the following statements.

	Definitely agree (Awara seines)	Mostly agree (rieseln softs sins)	Neither agree nor disagree (laiunly)	Mostly disagree (ค่อน ข่างไม่เห็นต่าย)	Definitely disagree (lai charactro fe)
C1.) I am environmentally- friendly. (quadlu environnibus environ)	0	0	0	0	0
C.2.) Lots of little changes in behavior towards environmentally friendly over time would become a big change. (การทรม ทำเห็ดที่สหาสิ่น และ ล่อนที่สหาสิ่น แล้ จะเป็นเห็ดจะเล่าน้อยใส เรามาจะเก็ดเป็น เป็นโดยเลี้ย์ไหญ่ได้ ในขอดสราว)		0	0	0	0
C3.) Thailand should improve facilities (eg. bin, curbside, green label) to support recycling.  (shunelmental envisions excuses a consumeration of the consu	0	0	0	0	0
C.4.) One of the big problems that should be tackled in Thailand is rubbish landfill taking up too much space. (Supervises textilutions) the work of t	v	U	v	v	v
C.5.) If I use environmentally friendly take away drinks cup, I help the world to be a better place. (จัน สามารถชาดโลกให้ดู ดีขึ้นได้ สำนันใช้ แก้ว(สำหรับพานนอก จ้าน)ที่เป็นมีตาต่อสื่อ มาตล้อม)	0	0	0	0	0

# C.6.) Would you be more likely to go into a cafe if it is advertised as environmentally friendly. \*

ข้าร้างขายน้ำใช่ทั้งเพลงและว่าเป็นมีครค่อสั้นเวลล์อม จะทำให้คุณสนใจเข้าร้างเน้นมากขึ้นหรือไม่

- O Yes (lei)
- o No (lai)

C.7.) How much more would you be willing to pay for your take away drink, if the cafes advertise themselves as environmental friendly? \*
nonunsoinalabilitusiseduroinalabilitusia

- No more (ถ้าราคาแพงกว่าเพียงเพราะเป็นมีครต่อสิ่งมาตล้อมจะไม่ชื่อ)
- 0 I am willing to pay up to 5% higher (newfeedersen/forfusneeinfi 5%)
- ⊕ I am willing to pay up to 6-20% higher (ของข้อเมืองาคาเค็อเข็มจากปกติ 6-20%)
- ⊕ I am willing to pay up to 11-20% higher (ตอนชื่อเมื่อราคาเพิ่มขึ้นควายนำดี 11-20%)
- I am willing to pay up to 23-90% higher (ขณะขึ้นเพื่อราคาเพิ่มขึ้นจากปกติ 23-90%)
- More than 30% (พอเพียงมีอาเคาะพิ่มขึ้นจากปกติมากกว่า 30%)

« Back Continue »

# Appendix 3.1: Questionnaire

(Page 5, Page 6)

# New business ideas regarding environmentally friendly takeaway drinks cup in Thailand.

Page 5 of 6

\*Please, tryto understand business 1, Give Me, before answering the D.1) to D.2)
\*Liberthennus/fillsus/sensis/legylle 1 (fell) flowfilatous/unusurons/fill D.2) lis D.2)

#### Section D: Business Ideas 1

Remeable take away drinks cup which will be called "Give me". เต็รที่ไม่ต่อสสทธ และสามารถจำกลับมาใช้โทมใต้ ระถูกเรือกว่า "ให้มี" ในแบบสอบอามณ์

The brief explanation of the process of business ideas :: First buy a cap from us, Give me. Then bring it to the variety of shops that participate in the project. Then get the drinks and promotions from them.

#### ค่าเรียวของวศัตรุทันที่ ::

ช็อมกัรน้ำจากกิดนี้ และนำติดตัวไปทุกครั้ง อำนำแก้วไปใช้ในการชื่อน้ำจากอ้านต่างๆ(ที่ร่วมกายการ) อูกด้างเได้ รับใหญ่ขึ้นสมรากทางก้านคำเนื้นๆ



The cup will be reusable, and can use unlimited times. Therefore, by using reusable take away cup, you could help to...

- Reduce the waste going to landfill, due to fewer throw away caps.
   Reduce the Coa emission, due to fewer caps being made and fewer caps being sent to landfill.
   Save the world's energy and resources.

เพื่องจากแก้วสามารงนำกลับมาใช้ได้เกียงๆ เพราะจะนั้น คูเพรเม็ต้วนในการข่ายลงเขม ออการใช้วัดอุติบและลด ก็กรุงกวันเหมือนอกไขต์ รวมถึงหลังงานที่เกียงากการเลือนีกตัวย



D.s.) Knowing all this would you be interested in buying a reusable cup

from us, Give me?

- หลังจากต่างงานเข้าในแนวติดถูงกินที่ 1 ทำให้คุณเขากเข้าว่าแโดงการกับกิฟมีหรือไม่
- O Yes o No

If the answer in D.1.) was "No", you can skip the next question number D.2.).

อำคำตอบใหร่อ D.L.) คือ "ไม่" ไม่จำเป็นต้องทำร้อ D.L.)

D.2.) How much is the maximum that you would be willing to pay for the

คุณสามารถท่ายเงินให้กับแก้ว)ที่สามารถนำกับมาใช้)สำหรับเครื่องคืน ในราคา"อย่าอนากที่สุด"เป็นเท่าใหย่

- 0 50-80 THB (50-80 uve)
- O 81-100 THB (81-100 1/m)
- 0 101-159 THB (101-159 uve)
- U 151-000 THB (151-000 UV)
- U 200-450 THR (200-450 WW)

0 Other:

#### Section E: Business Ideas 2

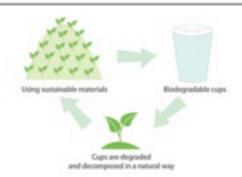
Biodegradable take away drinks cep แก้วให้เครื่องคืน(สำหรับสามพอกร้าน)ซึ่งสามารถต่อสมาชมองให้

\*Please, try to understand business 2, Biodegradable cup, before answering E.1) to E.3). \*โปรดทำความเข้าในเมาความคิดถูกใน 2 (เก็วที่สามารถต่อสมาดได้) ก่อนทำแบบสมบอกม ข้อ E.1) ซึก E.3)

The brief explanation of the process of business ideas 2: Biodegradable cup is made from renewable or sustainable resources which can be compost in a landfill.

#### ค่าอธิบายแนวคิดจูงใจที่ 2:

นทั่วซึ่งสามารถต่อยสมายเองได้ คือ แก้วที่มผิดจากวัดอุดิวที่สามารถเกิดขึ้นโทมได้ไม่มีวันพมดไปและเป็นมีครต่อ สิ่งมาตล้อม รวมถึงสามารถต่อยสภายเองใต้เมื่องเมตอาทุการใช้ภาพ



By using biodegradable cup, you could help to...

Reduce the waste going to landfill and reduce the Cog emission, due to their biodegradability. \*However, the cup will be more expensive due to its production.

แก้วสามารถต่อสสภายใต้ เพราะเจนนั้น คุณหนังส่วนในการช่วยลดุยแ และลดก็กรุดาร์บอนโดยอกใหล่ที่เกิดจาก

\*เข่างใช้เดาม ด้วยวัตถุดิบและความข่าขางในการเล็ด แก้วที่สามารเช่ะของกลได้แม้ราคาแพบว่าแก้วทั่วไป ซึ่งแต่เหมื่อราคาขอนครื่องในเค็มขึ้นต่าย



E.1.) As mentioned above, the prices of biodegradable cups are higher due to their biodegradability, would you still be interested in buying the drinks? \*

รางที่กล่าวร้างตัน ถ้าแก้วที่สามารถต่อยสหายเองได้ต่อเหมืาก็ราคาเครื่องตื่มแพงเร็น คูณระดังสนใจชื่อเครื่องตั้งเ พื้นๆอยู่หรือให่

- O Yes
- o No

E.2.) From above two business ideas, between "Reusable take away drinks cup" (business idea 1) and "Biodegradable take away drinks cup" (business idea 2), which one do you prefer?

จากแนวตัดรุชใจที่ 1 "เก็วที่ไม่ช่อยสหาย จึงสามารถนำกลับมาใช้ใหม่ได้" และ แนวติดรุชใจที่ 2 "เก็วใต่เครื่อง สัมชั่นสามารถต่อยสมายเองใต้" ความคิดไหนน่าสนใจกว่ากัน

- 🖰 "Reuseable take away drinks cup" (business idea 1) "มกักที่ไม่ย่อยสภาย จึงสามารถนำกลับมาใช้โทมได้" (a hofepalicus)
- o "Biodegradable take away drinks cop" "แก้วให้เครื่องคืนซึ่งสามารถต่อยสภายเองได้" (แนวคิดภูพิเพิ่ 2)
- O Both or equal (miles encuerada)
- O None of them (lains leaves)

.g.) From question number E.2.), why? minorise E.2.) writes inferentials	

« Back Continue »

## Appendix 4.1: Interview Transcripts (SO1, SO2, SO3, SO4, SO5, SO6)

#### **Interview with SO1**

Q: What kind of beverages selling in your shop?

SO1: everything, ranges from coffee and non-coffee

Q: Who is the target customer of your shop?

SO1: office workers and family

Q: What is the factors for choosing takeaway drinks cups to use in your shop?

SO1: reliable, good design, and not too expensive.

Q: What is the average cost of takeaway drinks cups?

SO1: The cost of the covers and cups altogether should be less than 4 Baht.

Q: What is the size of those takeaway drinks cups?

SO1: 16 OZ

Q: What is the material of those takeaway drinks cups?

SO1: I use plastic which called Gpps. And it can be used for both hot and cold beverages.

Q: Have you ever consider or experienced using environmentally friendly cups?

SO1: I used to try once.

Q: If there any reason for not using them anymore?

SO1: I think it is too expensive.

#### After the first idea was explained...

Q: Are you interested in joining a reusable cup project?

SO1: Yes, it is sound very interesting.

Q: Why?

SO1: Since the cup will be reusable. I can feel that it can help to save both energy and resources, and there will be less wasted generating.

## After the second idea was explained...

Q: Are you interested in using biodegradable cup, if the cost of those cups are higher than normal?

SO1: No, as I have told you before. Moreover, by using them the resources and energy still be exploited.

Q: Do you believe that being an environmentally concerned cafe would help raising the brand awareness?

SO1: I guess, yes. But I do not know how.

#### **Interview with SO2**

Q: What kind of beverages selling in your shop?

SO2: Umm... coffee and tea and also fruit juice.

Q: Who is the target customer of your shop?

SO2: Mostly officers and educated people and people who have high income.

Q: What is the factors for choosing takeaway drinks cups to use in your shop?

SO2: I care about the strength of the cup. Because, it need to be able to use with hot drinks.

Q: What is the average cost of takeaway drinks cups?

SO2: Around THB 3 to 5.

Q: What is the size of those takeaway drinks cups?

SO2: 16 OZ

Q: What is the material of those takeaway drinks cups?

SO2: paper and plastic

Q: Have you ever consider or experienced using environmentally friendly cups?

SO2: yes

Q: If there any reason for not using them anymore?

SO2: It is hard to find them in the market

#### After the first idea was explained...

Q: Are you interested in joining a reusable cup project?

SO2: Umm.. I'm not quite sure. Since, I have already got a lots of royalty customers, why do I have to give them more promotion to support your business. Moreover, I'm not quite sure if the customer would like to wash the cups by themselves.

However, if my shop could gain more other customers segment, such as those high-class people, by joining the reusable cup project. It will be more interesting.

#### After the second idea was explained...

Q: Are you interested in using biodegradable cup, if the cost of those cups are higher than normal?

SO2: By using the RUCs, how can others know that the coffee inside came from my shop. If it could raise the brand awareness, and the price is not higher than 15 to 20 percent. I will definitely use them.

In my opinion, maybe it is better if the cup which customers were using could show that they are being environmentally friendly. For example, at first sight, I can recognize the difference of Namthip from others. Because the plastic is lighter than other brand. Moreover, I can squeeze the bottles after using them, then it make me feel like I help to reduce waste.

Q: Do you believe that being an environmentally concerned cafe would help raising the brand awareness?

SO2: Definitely agree

#### **Interview with SO3**

- Q: How many years have you been working for the cafe?
  - SO3: Ummm.. It's been a long times... around 15 years for Coffee boy and more than 6 years for Inthanin.
- Q: What kind of beverages selling in your shop?

SO3: everything, but we focus more on selling coffee

- Q: Who is the target customer of your shop?
  - SO3: Since our drinks is not that expensive, everyone could be our target customers. However, most of branches are located near office. So, most of them are office workers.
- Q: What is the factors for choosing takeaway drinks cups to use in your shop?
  - SO3: Umm.. Just choose the cheapest cup, and use money more on good coffee. I also consider about the market trend and following others.
- Q: What is the average cost of takeaway drinks cups?

SO3: It should be less than THB 5.

- Q: What is the material of those takeaway drinks cups?
  - SO3: My consumers complaint that they feel better when ice coffee are being served in plastic or transparent cups, and paper cups seems to make hot drinks looks more delicious.
- Q: Have you ever consider or experienced using environmentally friendly cups?

SO3: I've heard about it but never used them before.

#### After the first idea was explained...

Q: Are you interested in joining a reusable cup project?

SO3: This is a very good idea, please tell me if you are really going to launch this business in the future.

#### After the second idea was explained...

- Q: Are you interested in using biodegradable cup, if the cost of those cups are higher than normal?
  - SO3: If the price of the coffee are higher by using green packaging, I might separate the expensive ones into new categories and call them "Premium" beverages.
- Q: Do you believe that being an environmentally concerned cafe would help raising the brand awareness? SO3: I think yes.

#### **Interview with SO4**

Q: What kind of beverages selling in your shop?

SO4: Only coffee

Q: Who is the target customer of your shop?

SO4: Officers who working around the area, and University student...

Q: What is the size of those takeaway drinks cups?

SO4: There are two size of cups, the paper one is 12 OZ and the plastic one is 22 OZ.

Q: Have you ever consider or experienced using environmentally friendly cups?

SO4: Umm.. Yes but it is hard to find where to buy those environmentally friendly cups in Thailand.

### After the first idea was explained...

Q: Are you interested in joining a reusable cup project?

SO4: It is sound interesting, but I'm not quite sure if it's going to work in a long term.

Maybe for someone whom are surrounded by that area will be suitable for this project, since they have to walk pass this area all the time.

Q: Are you interested in using biodegradable cup, if the cost of those cups are higher than normal?

SO4: Yes, I think it can help to reduce CO2 emission, but the price of the cup should not be higher than 10 to 20 percent.

#### After the second idea was explained...

Q: Do you believe that being an environmentally concerned cafe would help raising the brand awareness? SO4: It would help to build the brand image of that shop.

#### **Interview with SO5**

Q: What kind of beverages selling in your shop?

SO5: Hot, cold and shake drinks.

Q: Who is the target customer of your shop?

SO5: Because, my shop are located outside of the department store, so the target customers are those who live around that area.

Q: What is the size of those takeaway drinks cups?

SO5: I have got only one size which is 16 OZ

Q: What is the material of those takeaway drinks cups?

SO5: Plastic, which I normally buy from EPP, I think they are reliable.

Q: What is the factors for choosing takeaway drinks cups to use in your shop?

SO5: I don't really care about the cup. Because, I use sticker to show the brand on my cup.

Q: Have you ever consider or experienced using environmentally friendly cups?

SO5: Never, but I've heard about it.

#### After the first idea was explained...

Q: Are you interested in joining a reusable cup project?

SO5: I used to think about it, because I saw Starbuck doing that. However, I'm afraid to broken customers' cup. And the campaign will be more attractive if I can get some percent from selling each cup in my shop. And I also wanna know what kind of promotion do I have to offer them.

#### After the second idea was explained...

- Q: Are you interested in using biodegradable cup, if the cost of those cups are higher than normal?
  - I am interested in using them, so I've tried to use them once. But when the cup are using, water seems to leak out. However, if I have to pay more for that, I not quite sure if I still buying them or not.
- Q: Do you believe that being an environmentally concerned cafe would help raising the brand awareness? Yes, but the cup should company with the convenience of using them.

#### **Interview with SO6**

- Q: What kind of beverages selling in your shop?
  - Coffee, tea and ice chocolate SO6:
- Q: Who is the target customer of your shop?
  - Umm... I don't really have particular target, but the majority of them are office workers.
- Q: What is the size of those takeaway drinks cups?
  - SO6: There are 3 size using in my shop... 8, 12 and 16 OZ
- Q: What is the material of those takeaway drinks cups?
  - It is a plastic call PEC, and I buy them from KM packaging... It's cost me BHT 3 to 6
- Q: What is the factors for choosing takeaway drinks cups to use in your shop?
  - I use the double wall cup, because it can reduce my times. As I don't have to put sleeve cup in again. However, it is very hard to find those kind of cup in the market.
- Q: Have you ever consider or experienced using environmentally friendly cups?
  - Yes, but it is not beautiful enough, so I have changed to use the normal cup now.

#### After the first idea was explained...

Q: Are you interested in joining a reusable cup project?

> I normally give promotion for the customers who come to buy the drinks with their own cup. So I think it's a great idea.

#### After the second idea was explained...

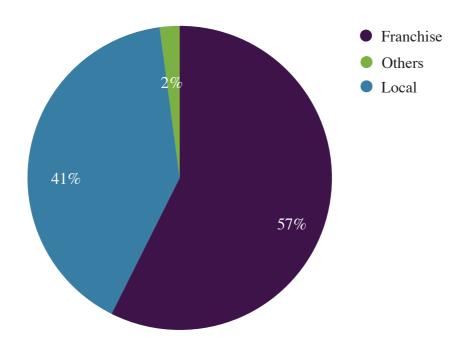
- Are you interested in using biodegradable cup, if the cost of those cups are higher than normal? Q:
  - Maybe.. Yes... but I'm not quite sure, just afraid that the smell of biodegradable cup would affect on my coffee.
- Q: Do you believe that being an environmentally concerned cafe would help raising the brand awareness?
  - I don't really care about this issue, but yes I agree. SO6:

**Appendix 4.2 : Namthip's bottle has reduce the density of the plastic** (Source from: Thaipr, 2013).



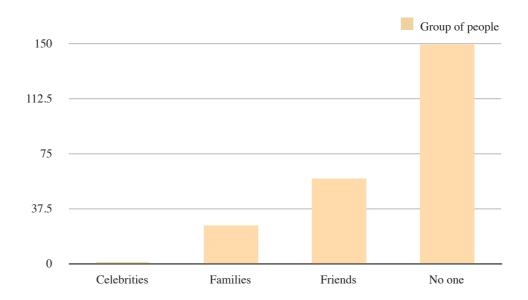
Appendix 4.3: The result from question A.2

A.2.) Where do you normally buy take-away drinks?



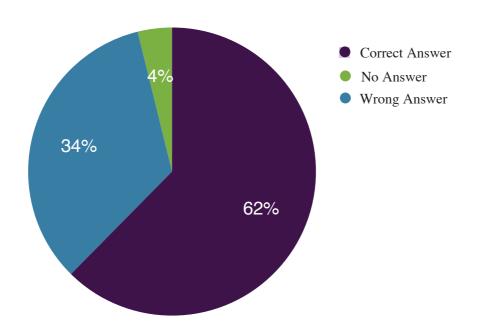
# Appendix 4.4: The result from question A.4

A.4.) Please choose the group of people who most influence your choice of take-away drinks.



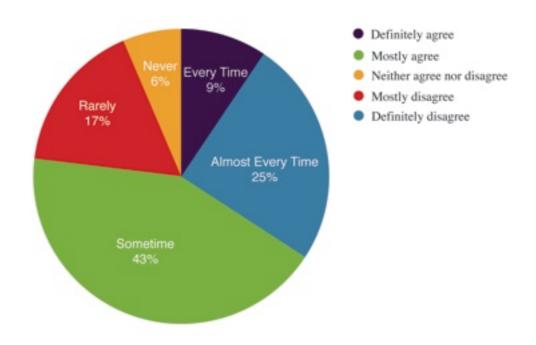
Appendix 4.5: The result from question B.1

B.1.) What does this symbol mean?



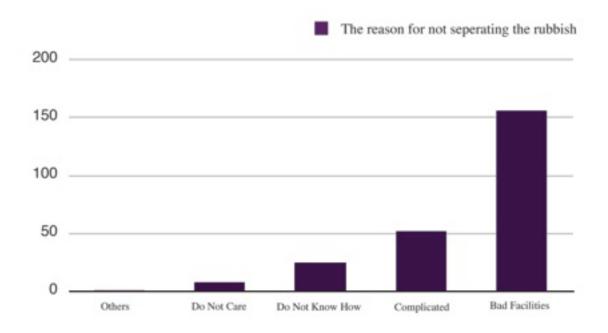
# Appendix 4.6: The result from question B.2

B.2.) Do you separate your rubbish for recycling?



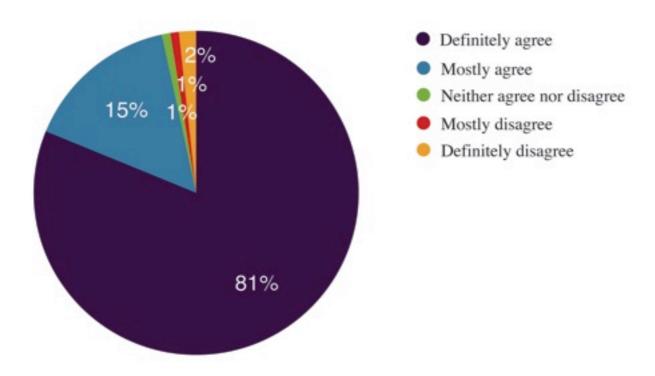
Appendix 4.7: The result from question B.3

B.3.) If "not every time", why? (can choose more than one)



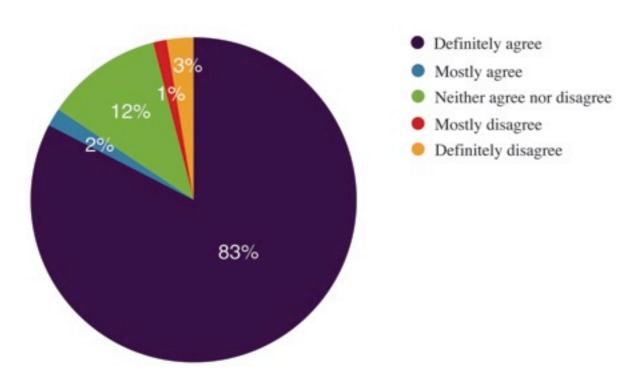
# Appendix 4.8: The result from question C.3

C.3.) Thailand should improve facilities (eg. bin, curbside, green label) to support recycling.



Appendix 4.9: The result from question C.4

C.4.) One of the big problems that should be tackled in Thailand is rubbish landfill taking up too much space.



# Appendix 4.10: The result from question C.1

C.1.) I am environmentally-friendly.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Definitely agree	57	24.4	24.4	24.4
	Mostly agree	140	59.8	59.8	84.2
	Neither agree nor disagree	33	14.1	14.1	98.3
	Mostly disagree	3	1.3	1.3	99.6
	Definitely disagree	1	0.4	0.4	100.0
	Total	234	100.0	100.0	

# Appendix 4.11: The result from question C.6

C.6.) Would you be more likely to go into a cafe if it is advertised as environmentally friendly?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	189	80.8	80.8	80.8
	No	45	19.2	19.2	100
	Total	234	100	100	

# Appendix 4.12: The result from question C.5

C.5.) If I use environmentally friendly take away drinks cup, I help the world to be a better place.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Definitely agree	148	63.2	63.2	63.2
	Mostly agree	64	27.4	27.4	90.6
	Neither agree nor disagree	13	5.6	5.6	96.2
	Mostly disagree	6	2.6	2.6	98.7
	Definitely disagree	3	1.3	1.3	100.0
	Total	234	100.0	100.0	

# Appendix 4.13: The result from question C.2

C.2.) Lots of little changes in behavior towards environmentally friendly over time would become a big change.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Definitely agree	163	69.7	69.7	69.7
	Mostly agree	60	25.6	25.6	95.3
	Neither agree nor disagree	6	2.6	2.6	97.9
	Mostly disagree	4	1.7	1.7	99.6
	Definitely disagree	1	0.4	0.4	100.0
	Total	234	100.0	100.0	

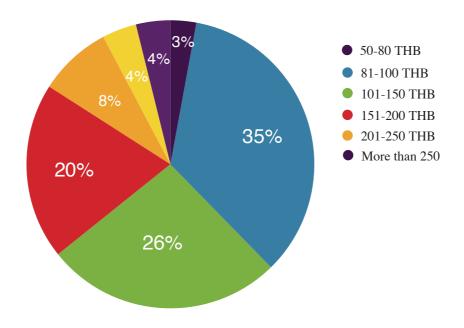
# Appendix 4.14: The result from question D.1

D.1.) Knowing all this would you be interested in buying a reusable cup from us?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	204	87.2	87.2	87.2
	No	30	12.8	12.8	100
	Total	234	100	100	

## Appendix 4.15: The result from question D.2

D.2.) How much is the maximum that you would be willing to pay for the reusable take away cup?



# Appendix 4.16: The result from question D.4

D4: As mentioned above, the prices of biodegradable cups are higher due to their biodegradability, would you still be interested in buying the drinks?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	176	75.2	75.2	75.2
	No	58	24.8	24.8	100
	Total	234	100	100	

# Appendix 4.17: The result from question C.7

C7: How much more would you be willing to pay for your take away drink, if the cafes advertise themselves as environmental friendly?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No more	45	19.2	19.2	19.2
	5% higher	122	52.1	52.1	71.4
	6-10% higher	51	21.8	21.8	93.2
	11-20% higher	12	5.1	5.1	98.3
	21-30% higher	2	0.9	0.9	99.1
	>30% higher	2	0.9	0.9	100
	Total	234	100	100	



Appendix 6.1: The demographic of the respondents might not be varies enough

	No. of respondents	
C. I.	Male	76
Gender	Female	158
	18-35 years old	136
Age	36-55 years old	86
	More than 55 years old	12
	Secondary	20
P	Bachelor	135
Education	Master	78
	Higher than Master	1
	Less than THB 15,000	50
	THB 15,001-25,000	46
_	THB 25,001-35,000	34
Income	THB 35,001-40,000	18
	THB 40,001-50,000	3
	More than THB 50,001	83