

# A COMPARATIVE STUDY OF THE INTENTION TO BUY ORGANIC FOOD BETWEEN CONSUMERS IN NORTHERN AND SOUTHERN VIETNAM

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**Abstract:** *The purpose of this research is to examine the relationships between some selected factors (environmental attitude, perceived value, health consciousness, organic knowledge, subjective norms and attitudes toward organic food) and the purchase intention of Vietnamese customers with respect to organic food. Furthermore, a comparison of the significant differences among all the selected factors between Northern and Southern Vietnam is made. The data was collected from 201 people in the North (Ha Noi) and 201 people in the South (Ho Chi Minh City). The findings in this research are consistent with the results of a number of previous studies in terms of the positive correlation between the factors considered and purchase intention. In addition, the comparative study reveals significant differences in the health consciousness, subjective norms and purchase intention between Northern and Southern Vietnam.*

**Key Words:** *Organic food, attitudes toward organic food, purchase intention.*

## Introduction

Purchase intention is a prediction about consumers' attitudes. It can affect the buying decision of customers in the future (Elbeck, 2008; Warshaw, 1980; Bagozzi, 1983; Fishbein and Ajzen, 1975). Thus, intention purchase could help food manufacturers and marketers predict the purchase behavior of customers and understand the market. Furthermore, purchase intention is considered to be a forecasting instrument market research (Lipman, 1988).

Purchase intention is something most organic food manufacturers focus on since it helps them identify the behavior of customers and their perceptions of the products (Magistris and Gracia, 2008). Once suppliers have a better understanding of customers, they can provide a wide range of products and that address customer satisfaction.

In business, two of the goals most sellers want to achieve are profit and customer loyalty. Since attitudes toward the products play an important role in the buying decision of customers, sellers need to be flexible and respond to customers' needs with the right products.

The links between attitudes, intentions and behavior has been explained primarily by Ajzen (1985) who examined the positive relationship between customer attitude and intention to buy the organic food. The findings of this study, in keeping with those from several studies (e.g. Lea & Worsley, 2005; Magnusson et al., 2001; Tarkiainen and Sundqvist, 2005; Tregear et al., 1994) show that customers interested in organic food have positive attitudes toward organic food which can lead to actual purchase action (Wandel and Bugge, 1997).

Many factors can affect customer attitude and purchase intention but as Chen (2008) argued, using general motives (factors) is not helpful to show good predictions about the purchase intention of customers. Chen (2009) thus argued that two specific factors should be examined: (health consciousness and environmental attitudes) in order to make better predictions.

For this study, the researcher chose organic knowledge, health consciousness, environmental attitudes, perceived value and subjective norms as the selected factors to make better predictions about consumer attitudes toward organic food and what leads to the decision of buying organic food in the future.

The target market of this research is Vietnam, which is considered as the new market of organic food (<http://www.organicvietnam.org.vn>). For this reason, the researcher decided

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to select additional factors capable of affecting the purchase intention of Vietnamese customers so as to have a better evaluation about Vietnamese customer attitudes toward organic food.

Vietnam is a South East Asian country. (<http://www.saigon-gpdaily.com.vn/>). It opened its door to foreign investments around 20 years and is thus considered a new economy. At the early stage of its development, Vietnam faced many difficulties. Many bills issued by legislators to protect consumer against defective products were not approved and were watered down once they passed. As a result, consumers had to deal with many problems of product quality, especially food quality. In recent years, consumer protection laws have been approved and applied more strictly and with the emerging legislation, consumers have become more aware of health issues.

Customers' health protection is also changing positively. Some consumers have defended their legitimate rights when they bought low-quality products. If food manufacturers provide insufficient information about their products, customers may have a wrong perception of these products, which can affect their purchase intention (<http://www.anninhthudo.vn/>). From these reasons, the clarity of the product information provided is especially important. In the case of organic food, it gives customers a better perception and understanding of the food and may be an incentive for their purchase intention because of the safe consumption issues involved. All the more as food-borne illness is considered a burning issue in Vietnam and many other countries (<http://www.vietnamnet.vn>). In this context organic food acts for the good of society. It provides good quality food and health benefits to consumers such as no pesticide, fungicide residues or chemical substances and is known for its high vitamins and minerals content. (<http://www.sustainableenterprises.com/>).

In the USA, organic food standards are set strictly by the government agency in charge, the Food Safety and Inspection Service. In Vietnam, the Ministry of Health has vowed to take up the issues of health care, food safety and food

quality control and be accountable to the Vietnamese community. The rules set strict standards that include not only the product itself but also the process of production. The organic manufacturing process is controlled by the Vietnam Farmers' Union.

In recent years, organic farming projects have been developed thanks to the cooperation between Vietnam Farmers' Union and the Agricultural Development of Denmark Asia (ADDA - Denmark). The purpose of these projects is: to increase the volume and quality of organic food; increase the demand for organic agricultural products through marketing activities in local and international markets; and develop the national certification system for organic food in Vietnam (<http://www.organicvietnam.org.vn/>).

The topic tackled in this study raises some important issues: Which selected factors could affect the purchase intention of Vietnamese customers? Are there significant differences in the selected factors between Northern and Southern Vietnam? What are the proper ways to maintain and increase the value of the purchase intention of Vietnamese customers about organic food? This study will examine these issues in light of the relevant literature. The conceptual framework and research methodology will be considered next. The results will then be analyzed and some recommendations made.

## **1. Literature Review**

### *- Purchase Intention*

Elbeck (2008) described the readiness of potential customers in terms of purchase intention about a product. The sales of a company could be based on the market survey about the purchase intention of customers. Predicting purchases is the pre-step that guides customer to actual purchase actions, and is understood as purchase intention (Howard and Sheth, 1967). Furthermore, based on various previous theories, purchase intention can be considered as the predictor of future purchase decisions (Warshaw, 1980; Bagozzi, 1983; Fishbein and Ajzen, 1975).

Two scales are used to analyze purchase intention: the purchase intent scale (McDaniel

and Gates, 1991) and 11-point purchase probability scale (Wright et al, 2002; Juster, 1966) which is designed to test the response of a customer about the liking of an item that will be purchased in the future. Both the purchase intent and probability scales show reliability in the results with greater accurateness (Wright and MacRae, 2007).

Some previous studies reveal significant differences between buying intention and buying behavior (Warshaw, 1980; Mullett and Karson, 1985; Kalwani and Silk, 1982; Pickering and Isherwood, 1974). There is a difference between purchase intention and purchase behavior from a customers' perception. However, this does not mean that researchers can ignore this factor because some previous studies investigated the significant and positive relationships between intention to purchase and the purchase behavior of customers through many strong linkages (Newberry, Kleinz and Boshoff, 2003; Morowitz and Schmittlein, 1992; Bennaor, 1995; Taylor, Houlahan and Gabriel, 1975; Granbois and Summers, 1975; Sheppard, Hartwick and Warshaw, 1988; Morowitz et al., 1996).

The reliability of a purchase intention survey is based on the faithfulness, or honesty of each response. Truthfulness of the intention can fail in two cases. First, a positive response of purchase intention is not followed by purchase action. This kind of respondent is referred to as "*intender / non-buyer*" or ( $I+ \mid B-$ ). Second, a negative response in terms of purchase intention is followed by a purchase action. This is referred to as "*non-intender / buyer*" ( $I- \mid B+$ ).

Truthfulness of customer involves two cases: ( $I- \mid B-$ ) and ( $I+ \mid B+$ ). Both point to "*non-intender / non-buyers*" and "*intender / buyers*," respectively. In other words, the truthfulness of the response could improve the reliability of the research (Tirtiroglu and Elbeck, 2008).

#### - Attitudes toward Organic Products

Attitudes toward a product mean the directions that customers focus on and the thing in which they are interested. Consumers with a positive attitude toward a product will be more inclined to select the store and buy the product. However, in the case of customers with unfavorable attitudes, they will not choose the

product or will not buy the product (Moye and Kincade, 1999). Findings from previous studies show that consumers have different perceptions of organic food which bear on their attitudes toward it (safety, health) and toward the environment. These are determinative in understanding the buying decision process of customers with regard to organic food product. Many studies show that health factors are the most common issue. They act as a motivation to choose organic food (Williams and Hammit, 2001; Schifferstein and Oude Ophuis, 1998; Tregear et al., 1994; Magnusson et al., 2003; Wandel and Bugge, 1997).

Furthermore, consumers' attitudes toward organic food are strongly related to consumers' readiness to take healthy actions. The more ready a customer is to take healthy actions, the more positive his/her attitude toward organic food. In other words, the consumer's health consciousness influences his/her attitude toward organic food. Thus, positive attitude towards the products not only affects the buying decision of customers and an individual's health, it also influences the success or failure of food products in the food marketplace (Landell, 1992; Vetter and Christensen, 1996; Lin et al., 1996; Thompson and Kidwell, 1998; Beharrel and MacFie, 1991; Tregear et al., 1994).

#### - Subjective Norms

Subjective norms are understood as the effects of external factors on customer intention. Beliefs play important roles in forming the intention of customers (Miller, 2005). In previous studies of buying intention and behavior toward organic food, the role of subjective norms was not clear, especially with regard to their effect in forming the behavior (Ajzen, 1991). Magnusson et al. (2001) did not use subjective norms in their research whereas Sparks and Shepherd (1992) did, but the significance of this factor is not strong. However, this does not mean subjective norms play a minor role, Shepherd and O'Keefe (1984); Vallerand et al. (1992); Shimp and Kavas (1984) and Chang (1998) found a significant causes and effect relation from subjective norms to attitudes (missed in previous studies). Furthermore, the relation between

subjective norms and attitudes usually relate to the ethics, morality and human's benefits. Chang (1998) concluded that if there is a relationship between the subjective norms and other root factors, it could not be ignored.

Subjective norms research shows that it is a good predictor of behavior, when another person's well-being is affected by an individual's actions (Sheeran & Taylor, 1999; Kok & Godin, 1996). However, if it affects one individual in making a choice, the effect of subjective norms is negligible (Rimal & Lapinski, 2005).

#### - Organic Knowledge

Consumer's knowledge is specific information that affects consumers buying decision (how and what). Understandings and the perceptions of consumers about the organic food is important because these factors because they help consumers recognize the characteristics and benefits of organic food when compared with conventional food and adopt a positive attitudes toward organic food (Von Alvesleben, 1997). Moreover, Yiridoe et al. (2005) discussed two reasons of knowledge that affect the buying intention of customers: first, insufficiency of knowledge, the main reason that explains why consumers do not want to buy or choose organic food; second, consumers' perception of the lack of information provided about the organic products. They cannot clearly realize the uniqueness and benefits of organic products when compared with conventional food. Thus, organic logos or labels are the only things that enable customers to recognize that it is organic food. Researchers concluded that sufficient information about organic food helps to build the belief of the customers, and can help consumers have a better evaluation of the quality before deciding to buy the product.

#### - Health Consciousness

Consciousness relates to the mental system of the human (Rosenthal, 1986; Carruthers, 2000; Gennaro, 1995). Health has been defined as "*a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity*" (WHO, 1948). There are many factors that can affect human's health such as

disease, environmental external and internal factors, medication, food consumption, etc. For these reasons, consumers become cautious in their food selection and with regard to safety factors. Health is an important factor in the buying decision process (Wandel and Bugge, 1997; Magnusson et al., 2001). The linkage between health perception and conscious is built to become one potential factor in the research of health-consciousness. As previously mentioned, organic food contains no harmful additives, more nutrients than conventional food and is safer for human's health. Therefore, choosing organic food seems to be a proper decision. This is the reason why foods which are labeled as organic could make consumers think/perceive that organic foods are safe when compared with conventional ones (Grankvist and Biel, 2001; Torjusen et al., 1999).

#### Perceived Value

Many researchers and food manufacturers focus on perceived value because it is the main determinant in forecasting purchase behavior and competitive advantages (Zeithaml 1988; Holbrook, 1999; Dodds et al., 1991; Cronin, Brady and Hult, 2000). It has been defined as "*the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given*" Zeithaml (1988). This definition is understood at the benefits of the products. Perceived product benefits are based on different characteristics of the products and availability of the products for buying and using purposes. Customer's payments such as nominal price, costs or the service charges are defined as the perceived sacrifices (Ulaga and Chacour, 2001; Zeithaml, 1988; Slater and Narver, 2000; Monroe, 1990).

Perceived value relates to the value for money consumers receive and pay for, "*what you get for what you pay*" (Sirohi et al., 1998). Furthermore, the reliability of the perceived value could be high when customers have the shopping experiences because they could measure the product value and could optimize the full process of decision-making and positive response actions (Simon, 1976). Thus, perceived value is a good instrument for forecasting

consumer-buying behavior (Schechter 1984; Dodds, Monroe and Grewal, 1991; Bishop, 1984). Many studies in marketing aim to examine and understand the concept of perceived value. Value perception includes price, quality, experience and other factors (Schechter, 1984). Consumers can come up with a variety of definitions of value, for example: "Value is low price; Value is whatever I want in a product; Value is the quality I get for the price I pay; and Value is what I get for what I give."

Marketers consider it important to understanding the role of perceived value. They are finding the proper understandings about this because of by understanding value. They have designed a value scale for measuring product values. The scale has to be based on value factors such as price, quality or consumer's perception. Zeithaml (1988) stated that researchers could ask the customers about "what value is; what value is made of; and when perceived value is more or less, etc." Thereby, the researchers can identify the various ranges of value.

#### - Environmental Attitudes

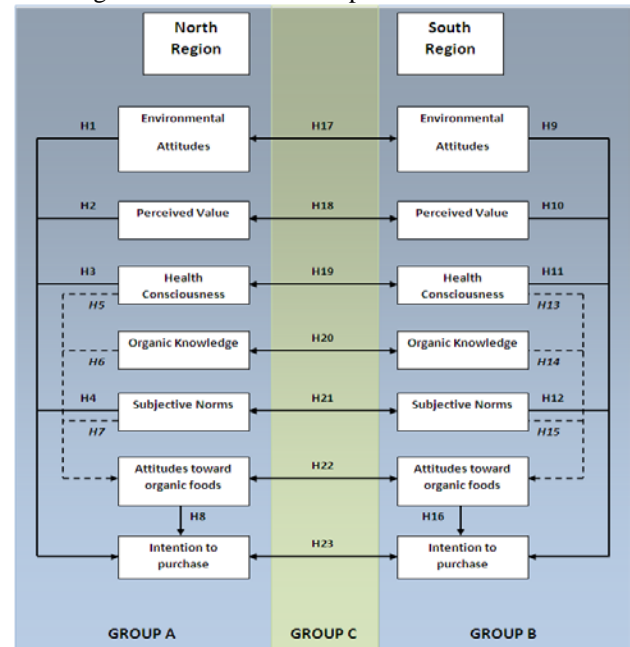
Grunert and Juhl (1995) found that there is a relationship between the environmental attitudes and buying decision with regard to organic food. Thus, positive attitudes toward environmental factors could lead to positive attitudes with respect to purchasing decision and buying frequency. For example, Loureiro et al. (2001) found that consumers who buy organic fruits (apples) have positive attitudes toward the environment and food safety. Durham and Andrade (2005) stated that consumer's attitudes towards health and environmental factors are the main reasons to explain organic food purchases intention. Environmental attitudes can also be linked to beliefs and response toward an object (Heberlein, 1981).

## 2. Conceptual Framework and Research Methodology

The objective of this study is to examine potential factors that could affect the purchase intention of Vietnamese customers. Furthermore, this paper also seeks to compare significant differences with regard to the

selected factors between Northern and Southern Vietnam.

Figure 1: Modified Conceptual Framework



Source: created by the author for this study

23 hypotheses have been developed based on the research objective of this study and conceptual framework. They are divided into 3 main groups:

Group A consists of eight hypotheses (H1 – H8) which test the relationships between the selected factors (environmental attitudes, perceived value, health consciousness, subjective norms, attitudes toward organic food) and purchase intention in Northern Vietnam. Furthermore, they test the relationships between health consciousness, organic knowledge, subjective norms and attitudes toward organic food in Northern Vietnam that can lead to purchase intention.

Group B consists of eight hypotheses (H9 – H16) which tests the relationships between these selected factors and purchase intention in Southern Vietnam. In addition, they test the relationships between health consciousness, organic knowledge, subjective norms and attitudes toward organic food in Southern Vietnam that can lead to purchase intention.

Group C determines the significant differences of all these selected factors as well between Northern and Southern Vietnam. It also includes eight hypotheses (H17 to H23).

Data for this research were collected by distributing questionnaires to 201 respondents in Northern Vietnam and 201 in Southern Vietnam. The sampling method applied to in this research used the following:

(i) Judgment sampling, which is a sampling procedure that selects the sample based upon some specific characteristic of the sample members (Zikmund, 2003). The selection focused on Vietnamese customers living in Northern and Southern Vietnam. The samples for the study were collected from Ha Noi (North), in three districts (Ba Dinh, Hoan Kiem, Hai Ba Trung) and from Ho Chi Minh City (South) where the researcher also collected the data in 3 districts (District 1, District 2 and Tan Binh District). These are the places where the companies and administrative zones are mostly located.

(ii) Quota sampling - Zikmund (2003) indicated that quota sampling is a non-probability sampling which represents the smaller groups of the population. The total sample size of the research is 400. Since the researcher selected two places, the sample size for each place is 200 respectively as shown in Table 1 (see Appendix One). Furthermore, each region was sub-divided into 3 districts selected because this is where most of the companies and the administrative zones are located, which makes it possible to focus on the people working there who have at least a Bachelor Degree.

(iii) Convenience sampling – As Zikmund (2003) stated, it is a non-probability sampling technique used and based on the convenience and readiness to answers the questions of respondents. The purpose of convenience sampling is to save time and cost during the survey.

The primary data was collected in September 2010. The questionnaire includes 9 parts. The first part consists of a screening question used to screen out customers who have never bought organic food since this research focuses on the purchase intention of non-experienced customers with regard to organic food.

Parts 2, 3, 4, 6, and 8 use a 5-point Likert scale to evaluate the level of agreement of respondents with the 5 factors considered: environmental attitudes, perceived value, health consciousness, subjective norms, and purchase intention, respectively. Part 5 consists of 10 questions to test one's level of organic food knowledge. The true-false format is set for the questions and the scores allocated as 0.5 for the right answer and 0 for the wrong one. With 10 questions, the maximum score that respondent can get is 5 and the lowest score is 0.

Part 7 consists of 5 questions. Zikmund (2003) determined that numerical scales have a number of response options used to identify the categories (response positions). The researcher set the lowest number (1) as a negative attitude and the highest one (5) as a positive one. Since the scaled items have five response positions, this is a 5-point numerical scale. Furthermore, the meaning of the scores in the 5-point numerical scale is the same as with the 5-point Likert scale.

Part 8 consists of 4 questions about the respondents' demographic characteristics and personal information.

## 5. Results and Conclusion

In both regions, the majority of the respondents were males, 51.2 percent in the North and 50.2 percent in the South, most were between 24 and 29 years old, 49.3 percent in the North and 51.7 percent in the South and also a majority of them both have a monthly income between 6 and 10 million Vietnam Dong (VND). With respect to their education level, most of them have a bachelor degree. The highest percentages with regard to each demographic factor are summarized in Table 2 (see Appendix 2).

The data was analyzed by using statistical package of social science (SPSS). The results of groups A and B show that group A null hypotheses (1-8) and group B (9-16) were rejected, which means that environmental attitude, perceived value, health consciousness, organic knowledge and subjective norms have a significant effect on the attitudes toward organic food and purchase intention with regard to it. The results also indicate that there is a high

positive correlation between the attitudes toward organic food and purchase intention of customers in Northern and Southern Vietnam. This is consistent with the findings of Magnusson et al., 2001; Roddy et al., 1996; Grunert and Juhl, 1995; O'Donovan and McCarthy, 2002; Lea and Worsley, 2005, Shahrudin et al., 2010; Choo et al., 2004; Lada et al., 2009, Magistris and Gracia, 2008.

In group C, the null hypotheses 17, 18, 20, and 22 were rejected, indicating that there is no statistically significant difference in the environmental attitudes, perceived value, organic knowledge, and attitudes toward organic food between Northern and Southern Vietnam. The reason these factors do not show any regional difference is that they are not affected by the geography (one Vietnam country), nationality (a Vietnamese identify with minor cultural differences), and educational system (the same in the North and South). Furthermore, the general uniform policy of the Vietnamese government has contributed to the erosion of any salient regional traits with regard to these factors.

Regional lifestyles and cultures, however, have affect on some other factors as there are statistically significant differences in terms of health consciousness, subjective norms and purchase intention between Northern and Southern Vietnam. These differences can be accounted for by the particulars of the culture and lifestyle of each region in Vietnam. Health consciousness and subjective norms relates to food consumption, habit and culture, with differences between Northern and Southern people coming in part from the climate and culture. In the North, there are four seasons and only two in the South. The cold winters in the North affect food consumption habits as Northern Vietnamese will eat more than Southerners to protect themselves from cold temperatures. Furthermore, the immune system of the people who are living in the cold area is usually stronger. Those are the reasons why Europeans who come from the North areas such as Sweden, Finland or Norway are usually taller, stronger and have longer life than the Europeans in the other areas (<https://www.cia.gov/>).

## **Recommendations**

Base on the findings of this research, the following recommendations can be made to increase the purchase intention of Vietnamese customers

### *- Marketing the Organic Concept*

Organic food producers should launch a campaign to raise awareness about organic agriculture products among all their stakeholders, especially consumers. This campaign should be a type of social marketing. The aims should be to improve the understanding of organic agriculture in order to build momentum to support organic development. This could create a suitable environment for the development of medium and long-term plans.

Note that these marketing activities should not include the profit purpose or selling purpose of some organic projects. Thus, the marketing activities in organic concept should be used to support the environmental attitudes, perceived value and organic knowledge of customers. This could improve the understandings and consumers' perception about organic products through the knowledge and the sufficient information that Vietnamese customers would get from these activities. This stage could make customers have a positive attitudes toward the organic food.

### *- Supply Chain Management*

Producing plans is a criterion for successful market penetration and development, especially for new products (organic food) and a new target market. Typically, in the early stages of development, the organic market will have many problems and difficulties in terms of production meeting consumer's demand for organic food, especially in respect of fresh products. A good supply chain will help to synchronize the organic production and sales more effectively. Logistics, that is, management of transportation, distribution, packaging or even the manufacturer, also needs to be adjusted to respond to demand. Thanks to heightened control and planning, a better supply chain will help to ensure the quality of the products.

In addition, efficient supply chain management will help to prevent the product

mix between organic and conventional products. Contact information in the supply chain management can help to generate consumers' trust and make organic market development successful. This stage also increases the perceived value of customers as they realize the difference in using organic food as compared with conventional ones. Furthermore, health consciousness can benefit from this stage but this is not a strong influence since health consciousness comes from the inner perception of each person and is derived from education, personal habit, etc.

#### - Start with Niche Markets

Market development cannot be built overnight; it takes time. The important point here is that any organic food project should proceed systematically to approach the target market. The process should not be speeded up. It is necessary to build a strong foundation for medium and long term market development. After the first stage – the supply and management stage – has progressed and production becomes more stable, the next step should be to articulate a marketing strategy and start selling products at a profit. Customers would thus have some specific knowledge and perceived value of the organic food since they would have a chance to experience the products and evaluate the product, using their own perception.

The researcher's recommendation, however, is that organic food producers should start with a niche market because at first the amount of organic food produced will be low. Given the limited supply, niche markets would be appropriate and more suitable than market integration. Furthermore, market segmentation is important because, as this study shows, there are some significant differences in the subjective norms and health perception which in turn lead to significant differences in purchase intention in Northern as compared to Southern Vietnam. In light of these remarks, the research recommends that deeper market research of these factors be conducted in each region in order to have a better understanding of the consumer's needs and wants in each region.

Niche market could satisfy the small needs of

consumers who already have higher awareness of organic agriculture, a better understanding of the benefits of organic products (especially healthy factors), and are willing to pay for organic products. Based on the classification of market, niche market is relevant for organic production in the early stages of development. Even at this stage, it is important to keep raising awareness for consumers in niche markets. The contents of the information imparted can be changed and be flexible. For instance, the added benefits to the environment and society that organic agriculture brings should be emphasized. Thus, intensified information would help to build trust in some groups of customers as to the genuineness of organic agriculture. Word-of-mouth is one way for these groups to advertise organic food and all the aforementioned benefits to the other group interested in organic foods (<http://www.organicvietnam.org.vn>).

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## Appendix One:

**Table 1:** Number of respondents for each district and each region in Vietnam

Districts of Ha Noi (North)	Amount (person)
Hoan Kiem	67
Ba Dinh	67
Hai Ba Trung	67
<b>Total of North</b>	201
Districts of Ho Chi Minh City (South)	Amount (person)
District 1	67
District 3	67
Tan Binh	67
<b>Total of South</b>	201
<b>Total</b>	402

Source: created by the author for this study

**Table 2:** Summary of demographic highest percentages

	Respondent profile	Highest percentage	
		Variable	Percentage (%)
North	Gender	Male	51.2%
	Age	24-29 years old	49.3%
	Monthly income	6 – 10 million VND	46.3%
	Educational level	Bachelor degree	47.8%
South	Respondent profile	Highest percentage	
		Variable	Percentage (%)
	Gender	Male	50.2
	Age	24-29 years old	51.7%
	Monthly income	6 – 10 million VND	47.8%
	Educational level	Bachelor degree	43.3%

Source: created by the author for this study