The influence of the country-of-origin image, product knowledge and product involvement on consumer purchase decisions: an empirical study of insurance and catering services in Taiwan

Long-Yi Lin and Chun-Shuo Chen
Graduate School of Management Sciences, Aletheia University, Taipei, Taiwan

Abstract

Purpose – The main purpose of this study is to explore the influence of the country-of-origin image, product knowledge and product involvement on consumer purchase decision.

Design/methodology/approach – Taiwan, China and the USA were the three countries selected for research into the country-of-origin, insurance and catering services. Structured questionnaires and convenience sampling were used. Samples were collected from consumers in the Taipei area. A total of 400 questionnaires were distributed with convenience sampling method, and 369 effective samples were collected, the effective rate being 92.25 percent. Stepwise regression analysis was adapted to test hypothesis.

Findings – The main findings were listed as follows: the country-of-origin image, product knowledge and product involvement all have a significantly positive effect on consumer purchase decision; the country-of-origin image has a significantly positive effect on consumer purchase decisions under different product involvement; and product knowledge has significantly positive effect on consumer purchase decisions under different product involvement.

Research limitations/implications – Limitations of the study are: it is unable to infer to national consumers and to other service areas and the explanatory power of some empirical models is relative low. Implications of the study are that: a more thorough structure about consumer purchase decisions should be provided and the relationship between product knowledge and information search quantity should be verified.

Practical implications – Practical implications of the study are that the company must face competitive strategies from many countries and also the effect of consumer product knowledge on business competitive strategy.

Originality/value – The added value of this paper is to link between theory and practice, and explore the different country-of-origin image, product knowledge and product involvement on consumer purchase decisions.

Keywords Country of origin, Consumer behaviour, Purchasing, Insurance, Catering industry, Taiwan

Paper type Research paper

An executive summary for managers and executive readers can be found at the end of this article.

I. Introduction

The year 1947, saw the establishment of General Agreement on Tariffs and Trade (GATT), which was dedicated to trade liberalization amongst membership nations. Because of many problems occurring in international economics and trade and non-tariff trade barriers issues, up to the 1970s and 1980s, the GATT functionality was replaced by the Word Trade Organization (WTO) in 1995. WTO with its four principles of equality, mutual benefits, transparency, and fair trade, requested global membership nations to open their market under a mutual beneficial foundation, allowing our national consumers to not only choose among products from our country, but also from all over the world.

According to information released by the Directorate-General of Budget, Accounting and Statistics (DGBAS), Executive Yuan, the overall product value in the service industry has an increasing percentage in the overall gross national product (GNP) of our country from the 1960s, and has exceeded 60 percent since 1995. Up to the 3rd quarter of 2004, the average weight of the overall product value was 68.77 percent, which exceeded the average percentage in the manufacturing industry. This also shows the significance of the service industry to our civil economy. In December 2000, since the inauguration of "the Financial Institution Merger Law" its performance in combining all financial products from banks, insurance, security, and trust has brought a new possibility to the insurance business. With the increased income of citizens and their higher standards in food preferences, the restaurant industry has grown considerably. Therefore, this study has chosen insurance and catering services as research objects.
Since Schooler (1965) first explored the national image in his research 1965, it has been verified that the national image has had an impact on consumer recognition, attitude, and buying intention. This shows that consumers seem to have a different product appraisal of products made by different countries. However, this type of research tends to focus more on the manufacturing industry or consumer products, and research concerning national image tends to focus more on certain types of service industries – see Lehmann’s (1986) research on skiing vacation; Harrison-Walker’s (1995) exploration of the medical services of the ophthalmology department; Yang’s (1994) investigation of banking and catering services; and Tseng’s (2001) study of Airline and Western Food Chain catering services. Bilkey and Nes (1982) reviewed papers concerning country-of-origin from 1965 to 1979, and discovered that the country-of-origin does have effects on product appraisal, the manufacturing industry and the consumers’ product purchase decision. However, it is not certain that the country-of-origin has an influence on the customers’ purchase decisions concerning insurance and catering services industries. This is the first motive of this study.

Chao and Rajendran (1993) point out that, when customers are making decisions, they search for more information before making their purchase. In relation to products, with the exception of considering national image of the country-of-origin, consumer product knowledge is an important element when purchasing. However, the effect of product knowledge on the consumer buying intention and information searching intention mostly relies on the manufacturer’s products, rather than its service. This is also the motive of this study.

The purpose of this study includes:
- exploring the influence of the country-of-origin image, product knowledge, and product involvement on the consumer purchase decision in insurance and dining services; and
- researching the impact of the country-of-origin image and also the product knowledge on consumer purchase decisions under different product involvement of the consumers in insurance and catering services.

II. Literature review

1. Country-of-origin and its image

(1) Definition and effect of country-of-origin

Saeed (1994) points out that country-of-origin means the country that a manufacturer’s product or brand is associated with; traditionally this country is called the home country. For some brands, country-of-origin belongs to a given and definite country, such as IBM belongs to the USA and SONY is a Japanese brand. However, Ahmed et al. (2004) defines country-of-origin as the country that conducts manufacturing or assembling, which follows the definition stated by Saeed (1994). Saeed (1994) indicates that country of manufacture (COM) represents the last location/country of manufacturing or assembling one product. Therefore, Saeed (1994) defines country-of-origin as the COM. In addition, Roger et al. (1994) report there is no distinct difference between location of manufacture and location of assembly, and this causes no significant difference to customers concerning product appraisal.

Roth and Romeo (1992) assert that country-of-origin effect means customers’ stereotypes of one specific country. According to the definition stated by Johansson and Thorelli (1985), a country’s stereotype means people in a country (or specific people) have stereotypes and preferences for products of another country. However, Saeed (1994) perceives that country-of-origin effect means any influences or preferences caused by country-of-origin and/or COM.

(2) Country image

Country image first appeared in a research paper written by Nagashima in 1970. He defines the term as:

Consumer holds particular picture, reputation, and stereotype towards products of a specific country. This image is formed by the country’s representative product, political and economic background, and historic tradition variables, which means overall country image (Nagashima, 1970).

In addition, Roth and Romeo (1992) assert that defining country image should clearly reflect its relation with product recognition. Therefore, they redefine country image as:

Consumer forms his/her understanding to specific country based on his/her recognition of advantages and disadvantages of manufactured and marketed products from a specific country in the past (Roth and Romeo, 1992).

In short, country image means the consumer’s general conscience for product quality manufactured from a specific country (Bilkey and Nes, 1982; Han, 1989).

(3) The role of country image in product evaluation

Hong and Wyer (1989) report that when customers hear any news or find any clues about country-of-origin, such as price or brand, the country-of-origin effect in the consumer recognition process should be observed from two sides. One is the halo effect, the other is the summary construct effect. When the consumer is not familiar with a specific country’s product, then the country image would cause a halo effect, this would not only directly affect the consumer’s trust in the product, but also it would indirectly affect the consumer’s overall evaluation of the product (Erickson et al., 1984; Johansson et al., 1985). However, when the consumer is very familiar with a specific country’s product, then he/she refers product associated information to the country and this causes a summary construct effect. This effect would indirectly affect his/her attitude towards this brand (Han, 1989).

(4) Measure of country image

Han and Terpstra (1988) referring to Nagashima’s (1970) research, refine four factors from 14 measured items through factor analysis. The four factors are advanced technology, prestige, workmanship and economy. Furthermore, they place subjective concern serviceability and overall evaluation as the measure dimension of country image. Agarwal and Sikri (1996) review much literature; they summarize 24 items then narrow to 14 items to measure the country image. They adapt the factor analysis to refine three factors at least, which are industry technology, prestige and price as the measure dimension of the country image. According to Martin and Eroglu (1993), general tools and methods used for the country image measurement, can only measure the product image of a specific country but not the country image. So Martin and Eroglu (1993) propose that in finding effective and reliable measure tools for country image, country image or
product characteristic will be measured, and the researcher should have a clear definition for every questionnaire.

2. Product knowledge
(1) Definition and classification of product knowledge
Product knowledge plays an important role in the research of consumer behavior, therefore, it is an essential research subject in related fields. Brucks (1985) states that product knowledge is based on memories or known knowledge from consumers. Lin and Zhen (2005) assert that product knowledge depends on consumer's awareness or understanding about the product, or consumer's confidence about it. Based on a definition of Brucks (1985) about product knowledge, it can be divided into three major categories:
1. subject knowledge or perceived knowledge;
2. objective knowledge; and
3. experience-based knowledge.

However, Alba and Hutchinson (1987) indicate that product knowledge should contain two parts, which are:
1. expertise; and
2. familiarity with products.

(2) Product knowledge measurement
Wang (2001) summarizes much literature and reports that the index used to measure product knowledge by scholars include:
- The consumer's perception of how much he or she knows (Park and Lessig, 1981).
- The amount, type and organization of what the consumer has stored in his/her memory (Johnson and Russo, 1984).
- The amount of purchasing and usage experience (Marks and Olson, 1981).

Rudell (1979) uses an examination score to measure objective knowledge and applies a self-evaluation inventory to measure subjective knowledge. Lin and Zhen (2005) adopt the product knowledge definition stated by Brucks (1985) to measure product knowledge. The aim of the measurement of product knowledge is to measure the understanding and confidence level of notebook attribute and information, and a Likert seven-point scale was used.

(3) The influence of product knowledge on information search behavior
To understand consumer behavior, consumer knowledge is an important construct. This is because, before the consumer performs actual purchasing behavior, he/she most likely experiences two procedures:
1. Information search: this means when the consumer faces many consuming relevant questions, he/she requires relevant information to assist with his/her consuming decision. This type of search of appropriate information procedure is called information search (Solomon, 1997).
2. Information processing: includes consumer self selects to expose, notice, recognize, agree, accept, or retain. No matter how much knowledge the consumer has, it all affects his/her procedures concerning information search and information processing (Brucks, 1985).

Much evidence shows that product knowledge does have an impact on information processing to the consumer (Larkin et al., 1980). For example, Zhu (2004) states that, in a RV leisure van research, when the consumer selects a product, he/she usually rely on his/her product knowledge to evaluate it, and his/her product knowledge would also affect his/her information search procedure, attitude, and information search quantity. In addition, his/her level in product knowledge would determine consumer purchase decision, and indirectly affect his/her buying intention.

The relationship between product knowledge and information search has not yet generated any definite conclusion. Some scholars state that consumers’ understanding in product knowledge has a positive correlation to information search quantity, such as Moore and Lehmann (1980), Punj and Staelin (1983), Selnes and Troye (1989), Alba and Hutchinson (1987). Some scholars assert that these two variables have a negative correlation, such as Brucks (1985), Newman and Staelin (1972). Therefore, when scholars face these two different conclusions, they submit another theory, i.e. that product knowledge and information search quantity has a U-shape correlation rather than simply a linear correlation, as Bettman and Park (1980) and Johnson and Russo (1984) assert.

3. Product involvement
(1) Definition and concept of involvement
The concept of involvement originated from social psychology. Krugman (1965) first brought and applied the involvement concept into marketing. He explains how low the involvement concept has a television commercial effect. With this low involvement concept, it not only brings a huge influence on advertisement, but also on marketing research concerning the consumer behavior theory. After this, involvement discussion gradually becomes part of the major stream in consumer behavior research.

Traylor (1981) defines involvement as a consumer's understanding or recognition of a specific product. The higher level the consumer consideration of the product is called high involvement and the lower level, low involvement. Zaichkowsky (1985) calls involvement personal demand, conception, and interest in the product. Engel et al. (1995) reports involvement as, under a specific environment, a consumer is stimulated by personal recognition and/or interest in the product. The higher the level, the higher of the involvement; the lower the level, the lower of the involvement.

(2) Classification of involvement
Depending on different involvement objects, involvement can be divided into advertising involvement, product involvement, and purchasing involvement. To understand the difference between these three involvements, they can further be divided into situational involvement, enduring involvement, and response involvement.

Krugman (1965) asserts that involvement with advertisement as understanding a consumer's involvement level or response after receiving advertising information based on a consumer's concern about advertising information. The involvement level ranges from absolute concentration to complete ignorance. Involvement with a product means consumer's concern and contribution to it (Cohen, 1983). Involvement with purchase refers to a consumer’s self concern over purchase decision and purchasing activity (Slama and Tashchian, 1985). Enduring involvement reflects that an individual has given a response to specific behavior
environment. Houston and Rothschild (1978) indicate that enduring involvement originated from two sources, which are a consumer’s personal subjective appreciation system in a product’s meaning to a consumer or consumer’s experience in using this product in the past. Bloch (1982) perceives that a situational involvement refers to when a consumer intends to reach outside goals about product purchasing or application, or has temporary concern about the product. After his/her goal is achieved, the situational involvement would immediately decrease. Arora (1982) demonstrates that, response involvement means combining situational involvement and enduring involvement, thus causing a mental condition about something.

(3) Product involvement measurement
Involvement is an abstract moderating variable, which cannot be measured directly. We should use involvement factor research and post-purchase conclusions to infer to it indirectly. Zaichkowsky (1985) adopts a semantic differential method and develops a set of inventory, which is known as personal involvement inventory. Chin (2002) refers to Zaichkowsky’s (1985) personal involvement inventory to measure product involvement. After a reliability and validity examination, he contracts ten measurement items, and Likert’s seven-point method was used.

4. Consumer purchase decision
(1) Consumer behavior model
There has been much research concerning consumer behavior; therefore, an explanation of many different consumer behavior models is extended. The EKB model was first presented by three scholars, Engel, Kollat and Blackwell, in 1968, and also a rather clear, complete, and systematic theory model concerning consumer behavior. The EKB model assumes that a consumer’s decision processing is a consecutive processing which leads to solving problems, and which features considering decision processing as the center of combining interaction of relevant outside and inside elements.

The EKB model has three advantages (Yang, 2001), which includes:
1. Thoroughness. The EKB model contains fairly complete variables, which are capable of explaining entire processing of consumer behavior.
2. It is process oriented. The EKB model has rather relevant variables, which are collected with signs, are easier for researchers to confirm the relationship of variables, and also benefit hypothesis development and research result interpretation.
3. The dynamic feature. The EKB model combines many scholars and experts’ opinions towards consumer behavior and performs many revisions; therefore, is considered as a fairly thorough consumer behavior model. The EKB model contains four major parts, which include: information involvement; information processing; decision processing; and variables of decision processing.

(2) Consumer purchase decision
Kotler et al. (1999) point out that, when a consumer makes a purchase decision behavior, there is a primary “stimulation-response” model and the black box concept in behavior science response. Through external stimulation sources, marketing and environment, it would further affect consumer purchase decisions through the black box (including consumer feature and decision processing).

Engel et al. (1993) report that, the center concept of the EKB model means consumer purchase decision processing, which is also problem-solving processing to consumer decision processing and includes five stages: demand confirmation, search for information, evaluation of alternatives, purchasing, and purchasing result.

(3) Information search intention and purchase intention measurement
McQuarrie and Muson (1992) use Likert’s seven-point method to measure information on search intention. Chin (2002) refers to McQuarrie and Muson’s(1992) research and uses a Likert’s seven-point method to measure information search intention. Dodds et al. (1991) use five questions, however, Klein et al. (1998) use six questions and both use Likert’s seven-point method to measure it.

(4) Major variables that influence consumer purchase decision
Based on the above literature on consumer behavior and consumer purchasing behavior, this paper assumes that a consumer’s purchasing behavior under his/her demand confirmation is ensured, rather than discussing how a consumer executes project evaluation and the after-purchasing result. Therefore, this paper selects and uses the following two elements:
1. Information search intention: summarizing consumer behavior and purchasing behavior from Nicosia (1968), Howard (1989), Engel et al. (1993), and naming relevant information/news parts as a search for information. When a consumer confirms his/her demand, he/she would start seeking relevant information. That means, a consumer reads about relevant product information through this news, compares differences among different products, and furthermore spends more time on product search (McQuarrie and Muson, 1992). In this processing when a consumer purchases a product, information search intention takes a large part. Therefore, this paper considers information search intention as the first element in affecting a consumer purchase decision.
2. Purchase decision: in evaluation of alternatives and purchase decision relation map, Kotler et al. (1999) indicate that between evaluation of alternatives and purchase decisions, they would first form buying intention. Fishbein and Ajzen (1975) verify that buying intention could be taken as an important index to predict consumer behavior. Therefore, this paper chooses buying intention as the second element that influences the consumer purchase decision.

5. The relationship between variables
(1) The influences of the country-of-origin image on a consumer purchase decision
Hsieh (1994) states that international co-operation has gradually become a major stream of modern business. A consumer no longer considers “location of manufacture” as a single source of reference information, he/she particularly perceives that country-of-origin image makes a great influence. Hong and Wyer (1989) report in their research, that the country-of-origin information does influence a consumer to evaluate the country’s product quality. Moreover, Han (1990) and Papadopoulos and Heslop
(1993) point out that, country image does influence a consumer's purchase decision. Especially when the COM image appears negative, a consumer might have a negative image of that country's product. Lee (1999) and Tseng (2001) assert that country-of-origin brand does affect product and service and the purchasing intention. Therefore the country-of-origin brand and its country image do play a very important role when a consumer makes a decision and would affect a consumer's preference level and furthermore affect his/her purchasing intention and information search intention.

(2) The influence of product knowledge on consumer purchase decision
Research of consumer behavior and product knowledge plays a significant role. During his/her purchasing process, the amount of knowledge consumer has of about a product would not only affect his/her information search behavior (Brucks, 1985; Rao and Sieben, 1992), but also, at the same time, affect his/her information and decision-making processing. Furthermore, it influences the consumer purchasing intention. Zhu (2004) indicates that concerning the RV leisure van, when a consumer selects a product, he/she usually evaluates it based on his/her understanding of it, and his/her understanding would affect consumer information search processing, attitude, and information search quantity. A consumer's knowledge about a product would determine consumer purchase decisions, and would indirectly affect his/her purchase intention.

(3) The influence of product involvement on the consumer purchase decision
Friedman and Smith (1993) discover in their research concerning service that when consumer selects a service and his/her involvement increases, he/she will search for further more information. Goldsmith and Emmert (1991) report that product involvement plays an important role in consumer behavior. When his/her involvement level increases, the consumer will search for further information. Petty et al. (1983) adopt the Elaboration Likelihood Model (ELM) and discover that high product involvement, brand attitude and purchase intention have a much higher correlation than that of low product involvement. Neese and Taylor (1994) discover in their research concerning automobiles comparison advertisement that, under a different level of advertise information, high involvement of a product causes a distinctly positive purchase intention, whether in the advertising attitude, brand recognition, and brand attitude, than with a low involvement product.

(4) The moderate effect of product involvement on the country-of-origin image, product knowledge and consumer purchase decisions
Arora (1993) discovers in his comparative research between three kinds of service businesses, that medicine, beauty shop, and insurance verify that the involvement theory could be adapted in service marketing. He also states, the relationship between expected service quality and recognized quality under different levels of involvement would help constitution of service marketing strategy. Chin (2002) discovers that with high product involvement, a consumer would appear that have a higher level product information search intention, product evaluation, and purchase intention than from middle or low COM image.

Petty and Cacioppo (1981) present the ELM, which explains thoroughly and systematically the high/low involvement purchase behavior and its solutions. When a consumer considers purchasing a product which has a fairly high level (high product involvement), he/she will carefully evaluate product advantages and disadvantages. However, when a consumer owns product relevant or important information (high product knowledge), he/she will only concentrate on search and evaluate limited information, thus his/her information search intention is not high.

III. Research methods

1. Conceptual structure
In the field of international marketing research, many scholars considered the country image and country-of-origin effect as important issues. Hong and Wyer (1989) discovered that when a consumer evaluates a foreign country product, he/she will mostly likely adopt a country-of-origin image as the most easy to obtain information. In a product, except for the country-of-origin image, a consumer would also consider product knowledge of some concern in purchasing. Brucks (1985) states that it does not whether matter the level of consumer knowledge is high or low, it all affects the consumer information search and information processing procedure. Rao and Monroe (1988) report that product knowledge would affect the relationship between consumer price and quality perception. Depending on the level of consumer product knowledge, it would affect him/her when evaluating product quality. With a different level of involvement, a consumer would have different purchase behavior, such as a different information processing method, different attitude, different level of information collection and purchase decision behavior. Zaiakhowsky (1986) summarized scholars' research concerning product involvement and point out that product feature affects how a consumer perceives a product. Yang (2001) states that with a consumer of high product involvement, his/her decision processing feature would be extensive problem-solving (EPS). The consumer would carefully and widely evaluate and aggressively perform an information search before purchasing. However, to a consumer of low product involvement, his/her decision feature is the opposite, which belongs to limited problem-solving (LPS).

The aim of this research is to explore the effect of the country-of-origin image, product knowledge, and product involvement towards consumer purchase decision, and mainly to verify the effect of these three variables on consumer purchase decisions, and choose product involvement as the moderate variable between the country-of-origin image and product knowledge on the consumer purchase decision. Based on the reference of the scholastic stated above, the conceptual structure of this paper is developed and illustrated in Figure 1.

2. Hypothesis development
Manrai and Manrai (1993) find that when a country brings a rather positive country image to the consumer, then he/she would have a rather high quality perception and overall evaluation to a product manufactured in that country and furthermore would increase his/her purchase intention. Roth and Romeo (1992) state if a country is known for a rather
positive image, and this image is very important to product classification, a consumer would have a higher purchase intention to products from this country. Lee (1999) and Tseng (2001) discovered that the country-of-origin image does affect product and service and purchase intention. Wall et al. (1991) and Ahmed and Astous (1996) both assert product information search is essential to level of country-of-origin effect. Chin (2002) also discovers that with higher COM images, the consumer would have a higher intention of information search. Based on the above literature, the first hypothesis for this study is developed as follows:

H1. The country-of-origin image asserts a significantly positive impact on the consumer purchase decision.

H1-1. The country-of-origin asserts a significantly positive impact on the consumer information search intention.

H1-2. The country-of-origin asserts a significantly positive impact on the consumer purchase intention.

Brucks (1985) and Rao and Sieben (1992) point out that, during purchase processing, a consumer's knowledge of the product would not only affect his/her search behavior, but also affect his/her information treatment and decision-making processing, and would furthermore, affect his/her purchase intention. Zhu (2004) reports this in his research concerning the RV leisure van, when a consumer selects a product, he/she usually uses his/her understanding of the product to make evaluation. His/her understanding of a product would also affect consumer information search processing, attitude, and information search quantity. A different level of product knowledge would determine a consumer's purchase decision and would indirectly affect his/her purchase intention. Moore and Lehmann (1980) discovered that, in their empirical study, consumer product knowledge has a significantly positive impact on his/her effort in information search. According to the above literature it would conclude the second hypothesis for this study as follows:

H2. Consumer product knowledge has a significantly positive impact on consumer purchase decision.

H2-1. Consumer product knowledge has a significantly positive impact on consumer information search intention.

H2-2. Consumer product knowledge has a significantly positive impact on consumer purchase intention.

Krugman (1965) adopts involvement concept, and uses a low involvement concept to explain a television advertisement effect. Friedman and Smith (1993) discovered in their research concerning service that, when a consumer selects service with an increasing involvement level, he/she will search for higher level information. Goldsmith and Emmert (1991) reveal that product involvement plays an important role in consumer behavior. With an increasing involvement level a consumer would search for higher level product information.

Petty et al. (1981) adopt the ELM and discover that, with high product involvement, the correlation between brand attitude and purchase intention is significantly higher than that with low product involvement. Neese and Taylor (1994) discover that, in an automobile comparison advertisement with different information advertisement load, a product of high involvement would have a much more positive influence on advertisement attitude, brand loyalty, and brand attitude, than that with a product of low involvement. Based on the above literature, the conclusion of a third hypothesis for this study is inferred as follows:

H3. Product involvement has a significantly positive impact on consumer purchase decision.

H3-1. Product involvement has a significantly positive impact on consumer information search intention.

H3-2. Product involvement has a significantly positive impact on consumer purchase intention.

In his research concerning three kinds of service businesses, doctor, beauty shop, and insurance, Arora (1993) verifies that the involvement theory can be applied to service marketing. Ahmed and Astous (1995) discovered that the country-of-origin would have a larger influence than the COM under high product involvement. In addition, when a product appears at a higher involvement level, a consumer would also notice other information, such as brand and price; therefore, the manufacture and country-of-origin effect would simultaneously decrease. Ahmed et al. (2004) also point out that the country-of-origin would affect a purchase decision when a consumer evaluates low product involvement. But, if there are any outside clues, then the country-of-origin effect would decrease.

Mitchell (1981) reports in his research that at a higher product involvement level, a consumer will aggressively search for relevant information and furthermore evaluate the product. Otherwise, on a lower product involvement level, the consumer might be reluctant to make an effort on product selection and evaluation. This finding matches the conclusion revealed by Swinyard (1993). Chin (2002) discovers that at a
high product involvement level, a consumer would have a higher information search intention, product evaluation, and purchase intention for high, than that for a middle or low country-of-manufacture image. Therefore, according to the above literature the fourth hypothesis for this study is inferred as follows:

**H4.** Country-of-origin image has a significantly positive impact on the consumer purchase decision on a different product involvement level.

**H4-1.** With an increasing product involvement level, the country-of-origin image has a significantly positive impact on the consumer information search intention.

**H4-2.** With an increasing product involvement level, the country-of-origin image has a significantly positive impact on the consumer purchase intention.

Petty and Cacioppo (1981) assert that when a consumer has higher concern to purchasing product (high product involvement), he/she would carefully examine product advantages and disadvantages. However, when a consumer has relevant or important product information (high product knowledge), he/she would only concentrate on searching and evaluating limited information, thus his/her intention in information search is not high. Rao and Sieben (1992) report that in purchase processing, a consumer’s understanding of a product would not only affect his/her information search behavior, but also his/her information treatment and decision-making processing, and furthermore affect consumer purchase intention. Moore and Lehmann (1980) discover in their empirical study that consumer product knowledge has a positive influence on consumer’s effort in information search. Friedman and Smith (1993) found, in their research concerning service, that when consumer selects service, with increasing involvement level, he/she would search for higher level information. Goldsmith and Emmert (1991) state that on an increasing involvement level a consumer will search for higher level information when he/she performs product selection. Petty et al. (1983) adopt the ELM and discover that, with a high product involvement level, brand attitude and purchase intention would have a significantly higher correlation than that with low product involvement. According to the above literature the fifth hypothesis for this study is inferred as follows:

**H5.** Product knowledge has a significantly positive impact on the consumer purchase decision under different product involvement level.

**H5-1.** With increasing product involvement level, consumer product knowledge has a stronger impact on the consumer information search intention.

**H5-2.** With increasing product involvement level, consumer product knowledge has a stronger impact on the consumer purchase intention.

### 3. Operational definition and variables measurement

#### (1) Country-of-origin image

By adopting references from Saeed (1994), Nagashima (1970), and Roth and Romeo (1992) this paper defines and measures the country image, and also considers the overall country image and product image. This study defines the country-of-origin image as a consumer’s overall recognition to a country-of-origin and perception level on the product quality of a specific service.

Han and Terpstra (1988) refer to Nagashima’s (1970) research, employ factor analysis refines four factors from selected 14 measure items, thus advanced technology, reputation, skill and economics, additional subjective concerns about service and overall evaluation as dimensions used to measure country image. In country image measurement, this paper adopts methods used by Martin and Eroglu (1993) and Nagashima (1970), refers to and makes some revisions to Chen’s (2000) research. Country-of-origin image measurement includes eight dimensions, which are:

1. economics development level;
2. political and democratic level;
3. industrialization level;
4. living standard;
5. technology developing level;
6. product quality;
7. self-confident level for owning this product; and
8. product reliability.

When a seven-point Likert scale is employed to measure a respondent’s opinions; 1 represents absolutely disagree and 7 means absolutely agree.

#### (2) Product knowledge

In adopting the reference from Brucks (1985) and Park and Lessig (1981) for their definition about consumer’s subjective knowledge, this paper defines product knowledge as a consumer’s awareness or understanding level of a specific service.

In product knowledge measurement, Rudell (1979) uses examination scores and a self-measure scale to measure subjective knowledge. Lin and Zhen (2005) adopt the reference from Brucks (1985) for his definition of product knowledge. They use a seven-point Likert scale to measure a consumer’s understanding level about product attribute and information of laptop. Measurement of product knowledge relating to insurance and catering service in this paper is used to measure the level of consumer understanding, and cumulative experience after enjoying a meal and the purchase of insurance. A seven-point Likert scale is used to measure a respondent’s opinions about insurance and catering services; 1 means very little and 7 means very much.

#### (3) Product involvement

By adopting the reference from Cohen (1983) and Zaichkowsky (1986) study for their definition of product involvement, this paper defines product involvement as a consumer’s subjective self-perception of product importance and his/her involvement level concerning a specific service.

To measure product involvement, Zaichkowsky (1985) mainly adopts a semantic differential scale and develops a set of scales that measures product the involvement of the consumer, which is called personal involvement inventory. Also, Chin (2002) adopts a reference from Zaichkowsky (1985) study about personal involvement inventory, after reliability and validity tests, he contracts to ten items, using Likert’s seven-point scale method. In this paper, a multiple dimension is used to measure a consumer’s product involvement level. Based on personal involvement inventory submitted by Zaichkowsky (1985) and revised by Chin (2002), this study selects six measure items to measure a consumer product involvement level. Using
Likert’s seven-point scale method to measure a respondent’s opinion, 1 means absolutely disagree and 7 means absolutely agree.

4. Consumer purchase decision

In adopting the reference from Solomon (1997) and McQuarrie and Muson (1992) study for their definition of information search intention, this paper defines information search intention as information search efforts consumer would spend on a specific service.

McQuarrie and Muson (1992) adopt Likert’s seven-point scale method to measure information search intention. Chin (2002) adopts reference from McQuarrie and Muson (1992) study, and uses Likert’s seven-point scale method to measure information search intention. This study, as far as selecting information search intention items, mainly adopts references from McQuarrie and Muson (1992) studies, which include four items and use Likert’s seven-point scale method to measure a respondent’s opinion. Amongst that, 1 means absolutely disagree and 7 means absolutely agree.

Consumer purchase intention means the possibility and probability of a consumer’s willingness to purchase a specific product (Dodds et al., 1991). This study adopts reference from Dodds et al.’s (1991) study and defines purchase intention as the possibility of a consumer’s willingness to purchase a specific service.

Dodds et al. (1991) use five questions, however, Klein et al. (1998) use six questions, and adopt Likert’s seven-point scale method to measure a consumer purchase intention. As far as selecting purchase intention items, this study mainly adopts reference from the Dodds et al. (1991) and Klein et al. (1998) studies, which include two measure items. Likert’s seven-point scale method is used to measure a respondent’s opinion, 1 means absolutely impossible and 7 means absolutely possible.

4. Questionnaire design

The questionnaire design in this paper includes five major parts, which are: country-of-origin image, product knowledge, product involvement level, and consumer purchase decision (including information search intention and purchase intention), and a respondent’s basic information.

In order to measure the country image in this study, the perspectives of Martin and Eroglu (1993) are adopted, and Chen’s (2000) measure method is referred and revised. The questionnaire on product knowledge measurement, which is developed based on referring the studies of Brucks(1985) and Lin and Zhen (2005), mainly measures consumer’s understanding and perception level, memory storage level, and after-purchase or after-use experience about product in insurance and catering services.

As far as selecting the dimension of product involvement measurement, this study adopts multiple dimensions to measure consumer product involvement level. The personal involvement inventory developed by Zaichkowsky in 1985 is adopted, referring Chin’s (2002) measurement items, this study selects six items to measure the consumer’s product involvement level. As far as measuring a consumer’s purchase decision, including consumer information search intention and purchase intention, this study mainly takes reference from the McQuarrie and Muson (1992) and Chin (2002) studies concerning information search intention and items selection. In addition, this study mainly takes reference from Dodds et al. (1991) and Klein et al. (1998) concerning measuring purchase intention and item selection.

A respondent’s basic information includes whether he/she had purchased insurance or catering services, current residence, gender, age, career, educational background, and average monthly income.

5. Sampling design

(1) Country-of-origin selection

The research target in this study is the consumer of insurance and catering service. The insurance service takes reference from information on the web site of the Life Insurance Association of the ROC and the Non-life Insurance Association of the ROC. The catering service takes reference from a study of Wu (2001). Wu (2001) reports that, since the end of the Ching Dynasty, the catering service in Taiwan has been greatly influenced by China and the USA, such as the Taiwanese most favorite fast food culture is mainly American-style food. Furthermore, Chinese catering culture, such as dumplings and noodles are greatly preferred by Taiwanese consumers. Therefore, we choose countries that have interactions with Taiwan in either culture or economics as the target of the country-of-origin image in this study, which is Taiwan, China, and the USA.

(2) Sampling targets

This study chooses the Taipei area as a sampling area, and the sampling target is general consumers above 18 years old. Taipei area includes Taipei county and Taipei city. We choose Tamsui in Taipei county as the sampling location for considering economic progress in recent years, there are many sightseeing spots, convenient traffic, and large crowds in this location. This study choose downtown Taipei City as the sampling location with the consideration that many head quarters of financial and insurance company are located there and also it is convenient for getting to the source of communication and information, higher income and consumption levels, and frequent interactions of social activities; therefore, this location has more opportunities to interact with catering and insurance services.

(3) Sampling method and sample size

To consider the convenience and efficiency of this sampling, the study employs convenience sampling of non-probability. For data collection and questionnaire distribution personal interviews are adopted. The distribution and collection of questionnaire was done by the researcher.

According to four principles presented by Roscoe (1975), this study picks two items as reference standards. Therefore, sample size determination in this study includes:

1. appropriate sample size is 30 to 500;
2. performing multivariate analysis, sample size must exceed many times the variables in the research, and te times or above would be most appropriate.

Except for this, using simple random sampling to evaluate sample size, and inferring effective sample size would be more than 385. Based on these principles, this study calculates the appropriate sample size would be approximately 385 (Yen, 1996). In reference to these conditions, this study has distributed a total of 400 questionnaires. Among that, for this study picks Tamsui in Taipei county as sampling location, and considering difference of population only; therefore,
distribute 100 questionnaires in Tamsui area and 300 in Taipei area.

(4) Pre-test
To make sure of the reliability of the questionnaire used in this study to meet the requirement of research design, as well as sampling convenience, we performed a pre-test in Tairei subway Tamsui station before formal interviews to determine if reliability of questionnaire met the requirements. During the pre-tests, a total of 55 questionnaires were distributed, and 50 effective questionnaires were collected. The result shows that Cronbach’s α value of every variable is more than 0.8 as shown in Table I, which it means that there is high consistency in variable measurement in this study.

6. Data collection and analysis method
This study chooses Taipei subway Tamsui station in Tamsui, and Taipei train station in Taipei City as sampling locations. The sampling time was from 8 a.m. to 6 p.m., including weekdays and holidays and consisted of interviewing people who come in and out of the station, asking them to answer the questionnaire, and collecting primary data.

The SPSS 10.0 version and LISREL 8.5 version is used for data analysis and comparison. Using Cronbach’s α value to examine if the measure of variables in this paper meets the requirements of consistency, using factor loading and SMCs value to examine structure validity and convergent validity, and using stepwise regression analysis to test hypothesis.

IV. Data analysis

1. Sample description
A total of 400 questionnaires were distributed in this study. After canceling 31 un-completed questionnaires, 369 effective questionnaires were collected; the effective return rate was 92.25 percent. According to the result of the questionnaire analysis, respondents who live in Taipei county and Taipei City are very close, which is 42.9 percent and 51.5 percent respectively. Female respondent (59.3 percent) is more than male respondent (40.7 percent). The respondents’ age mainly lie between 20-29 years old (33.3 percent), and their education level mainly lies at college level (61.2 percent). The respondent’s career background mainly lies in two major categories, business (30.4 percent) and student (16.5 percent), and personal average monthly income mainly lies at more than NT$45,000 (28.2 percent) and less than NT$15,000 (23.3 percent).

2. Reliability and validity analysis
The purpose of reliability is to examine the level of non-error in measurement, which means to examine the consistency of measurement. This study adopts Cronbach’s α value as a tool for reliability examination. Based on suggestion of Guielford (1965), the bigger in Cronbach’s α value, the higher internal consistency is. If α value is bigger than 0.70, then it shows reliability of measurement is fairly high.

The examination result of this study shows that, no matter whether during pre-test or formal investigation, Cronbach’s α value in every variable is higher than 0.8, as shown in Table I, which means high reliability. It also shows that every variable has a fairly good internal consistency.

Validity means the measuring tool can measure the level of intended-to-measure object. The content validity, construct validity, and convergent validity were used in this paper to examine the validity of the questionnaire.

Content validity is performed based on the researcher’s professional ability to judge subjectively if the selected scale can measure the researcher’s intended-to-measure feature correctly. The dimensions and items explored in this study are based on relevant theory. This inventory or measuring item was used by many scholars both locally and globally. In addition, we carried out a pre-test and did some revision before setting out the questionnaire. Therefore, the questionnaire as a measuring tool used in this study should meet the requirement of content validity.

This study applies further confirmatory factor analysis to examine the construct validity and convergent validity of this questionnaire. The results are shown in Table II.

Chang (2001) and Chiu (2003) point out that, when the factor loading of measuring questions in a research are all higher than 0.5, it means the overall questionnaire quality is good and has a better construct validity. This study shows, according to the figures in Table II, factor loading of every question as being higher than 0.5. This means that the questionnaire used in this study performs a better construct validity.

In addition, Horng and Shen (2003) explain that, when SMCs is higher than 0.5, then a questionnaire has a convergent validity. This study shows that, based on figures in Table II, the average SMCs of variables, except for the country-of-origin image, is higher than 0.5. Although, the average SMCs of country-of-origin image is merely 0.46, but is also very close to 0.5. Therefore, it also means that the questionnaire used in this study performs convergent validity.

3. Correlation analysis
This study adopts Pearson’s correlation coefficient analysis and its result is shown in Table III. With the judgment of the figures of correlation coefficients, we can examine correlation level of these variables. According to the figures shown in Table III, we find clearly the relationship between constructs in this study shows a highly positive correlation.

4. Hypothesis testing
The data collected in this study adopt stepwise regression analysis to verify the hypothesis. A total of 16 stepwise regression models were developed to test hypothesis. The hypothesis testing result is shown as Tables IV and V.
The impact of country-of-origin image on information search intention

Based on the testing result from model 2 in Table IV, the explanatory power of model 2 is 6.2 percent (8.1 percent-1.9 percent), and the p value that determinates the good of fitness is 0.000 < 0.01, which shows it reaches statistical significance. This also means that, product knowledge does cause a distinct effect on consumer information search intention, and the regression coefficient is 1.26, which shows that product knowledge has a significantly positive impact on consumer information search intention. Therefore, H2-1 is strongly supported.

The impact of product involvement on information search intention

Based on the testing result from model 4 in Table IV, the explanatory power of model 4 is 23.1 percent (25 percent-1.9 percent), and the p value that determinates the good of fitness is 0.000 < 0.01, which shows it reaches statistical significance. This also means that, product knowledge does cause a distinct effect on consumer information search intention, and the regression coefficient is 1.33, which shows that product involvement has a significantly positive impact on consumer information intention. Therefore, H3-1 is strongly supported.

The moderate effect of product involvement under the influence of country-of-origin image on information search intention

Based on the testing result from model 6 in Table IV, the explanatory power of model 6 is 0.3 percent (26.4 percent-26.1 percent), and the p value that determinates the good of fitness is 0.000 < 0.01, which shows it reaches statistical significance. This also means that, product knowledge does cause a distinct effect on consumer information search intention, and the regression coefficient is 1.26, which shows that product knowledge has a significantly positive impact on consumer information search intention. Therefore, H2-1 is strongly supported.

The impact of product knowledge on information search intention

Based on the testing result from model 3 in Table IV, the explanatory power of model 3 is 19.5 percent (21.4 percent-1.9 percent), and the p value that determinates the good of fitness is 0.000 < 0.01, which shows it reaches statistical significance. This also means that, product knowledge does cause a distinct effect on consumer information search intention, and the regression coefficient is 1.26, which shows that product knowledge has a significantly positive impact on consumer information search intention. Therefore, H2-1 is strongly supported.

The impact of product involvement on information search intention

Based on the testing result from model 4 in Table IV, the explanatory power of model 4 is 23.1 percent (25 percent-1.9 percent), and the p value that determinates the good of fitness is 0.000 < 0.01, which shows it reaches statistical significance. This also means that, product knowledge does cause a distinct effect on consumer information search intention, and the regression coefficient is 1.33, which shows that product involvement has a significantly positive impact on consumer information intention. Therefore, H3-1 is strongly supported.

The moderate effect of product involvement under the influence of country-of-origin image on information search intention

Based on the testing result from model 6 in Table IV, the explanatory power of model 6 is 0.3 percent (26.4 percent-26.1 percent), and the p value that determinates the good of fitness is 0.000 < 0.01, which shows it reaches statistical significance. This also means that, product knowledge does cause a distinct effect on consumer information search intention, and the regression coefficient is 1.26, which shows that product knowledge has a significantly positive impact on consumer information search intention. Therefore, H2-1 is strongly supported.

The impact of product knowledge on information search intention

Based on the testing result from model 3 in Table IV, the explanatory power of model 3 is 19.5 percent (21.4 percent-1.9 percent), and the p value that determinates the good of fitness is 0.000 < 0.01, which shows it reaches statistical significance. This also means that, product knowledge does cause a distinct effect on consumer information search intention, and the regression coefficient is 1.26, which shows that product knowledge has a significantly positive impact on consumer information search intention. Therefore, H2-1 is strongly supported.

The moderate effect of product involvement under the influence of country-of-origin image on information search intention

Based on the testing result from model 6 in Table IV, the explanatory power of model 6 is 0.3 percent (26.4 percent-26.1 percent), and the p value that determinates the good of fitness is 0.000 < 0.01, which shows it reaches statistical significance. This also means that, product knowledge does cause a distinct effect on consumer information search intention, and the regression coefficient is 1.26, which shows that product knowledge has a significantly positive impact on consumer information search intention. Therefore, H2-1 is strongly supported.
Table IV Stepwise regression analysis (reactive variable: information search intention)

<table>
<thead>
<tr>
<th>Explanatory power</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Age</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Education level</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Income</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Career</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Country-of-origin image</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product knowledge</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country-of-origin image × product</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>involvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product knowledge × product</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>involvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>$F$</td>
<td>7.145 *</td>
<td>16.213 *</td>
<td>49.868 *</td>
<td>60.969 *</td>
<td>42.964 *</td>
<td>43.548 *</td>
<td>73.456 *</td>
<td>41.240 *</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.019</td>
<td>0.081</td>
<td>0.214</td>
<td>0.250</td>
<td>0.261</td>
<td>0.264</td>
<td>0.286</td>
<td>0.312</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>0.019</td>
<td>0.018</td>
<td>0.014</td>
<td>0.017</td>
<td>0.011</td>
<td>0.014</td>
<td>0.054</td>
<td>0.007</td>
</tr>
<tr>
<td>Adj-$R^2$</td>
<td>0.016</td>
<td>0.076</td>
<td>0.210</td>
<td>0.246</td>
<td>0.255</td>
<td>0.258</td>
<td>0.283</td>
<td>0.304</td>
</tr>
<tr>
<td>Overall model $p$ value</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Note: * $p < 0.01$
Table V  Stepwise regression analysis (reactive variable: purchase intention)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 9</th>
<th>Model 10</th>
<th>Model 11</th>
<th>Model 12</th>
<th>Model 13</th>
<th>Model 14</th>
<th>Model 15</th>
<th>Model 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country-of-origin image</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product involvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country-of-origin image × product involvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product knowledge × product involvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- \( F \)  
- \( R^2 \)  
- \( \Delta R^2 \)  
- Adj-\( R^2 \)  
- Overall model \( p \) value

Note: * \( p < 0.01 \)
An empirical study of insurance and catering services
Long-Yi Lin and Chun-Shuo Chen

Journal of Consumer Marketing
Volume 23 · Number 5 · 2006 · 248–265

consumer information search intention. Therefore, \(H4-1\) is strongly supported.

- The moderate effect of product involvement under the influence of product knowledge on information search intention. Based on the testing result from model 8 in Table IV, the explanatory power of model 8 is 2.6 percent (31.2 percent-28.6 percent), and the \(p\) value that determines the good of fitness is 0.000 < 0.01, which shows it reaches statistical significance. This also means that, product knowledge and product involvement have an interactive relationship, and the regression coefficient is 0.0694, which shows that as the product involvement level increases, product knowledge has a greater influence to consumer information search intention. Therefore, \(H5-1\) is strongly supported.

(2) Testing of purchase intention

- The impact of country-of-origin image on purchase intention. Based on the testing result from model 10 in Table V, the explanatory power of model 10 is 5.3 percent (8.7 percent-3.4 percent), and the \(p\) value that determines the good of fitness is 0.000 < 0.01, which shows it reaches statistical significance. This also means that the country-of-origin image does cause a distinct effect on consumer purchase intention, and the regression coefficient is 0.76, which shows that country-of-origin image asserts a significantly positive influence on the consumer purchase intention. Therefore, \(H1-2\) is strongly supported. According to previous testing, we examined the \(H1-1\) is strongly supported; therefore, from the combination of these two testing result, \(H1\) is strongly supported.

- The impact of product knowledge on purchase intention. According to the testing result from model 11 in Table V, the explanatory power of model 11 is 20 percent (23.4 percent-3.4 percent), and the \(p\) value that determines the good of fitness is 0.000 < 0.01, which shows it reaches statistical significance. This also means that that country-of-origin image does cause a distinct effect on consumer purchase intention, and the regression coefficient is 1.34, which shows that product knowledge causes a significantly positive influence on consumer purchase intention. Therefore, \(H2-2\) is strongly supported. According to previous testing, we examined the \(H2-1\) is strongly supported; therefore, from the combination of these two testing results, \(H2\) is strongly supported.

- The impact of product involvement on purchase intention. Based on the testing result from model 12 in Table V, the explanatory power of model 12 is 17 percent (20.4 percent-3.4 percent), and the \(p\) value that determines the good of fitness is 0.000 < 0.01, which shows it reaches statistical significance. This also means that, country-of-origin image does cause a distinct effect on consumer purchase intention, and the regression coefficient is 1.21, which shows that product involvement causes a significantly positive influence to consumer purchase intention. Therefore, \(H3-2\) is strongly supported. According to previous testing result, we found \(H3-1\) is strongly supported; therefore, from the combination of these two testing results, \(H3\) is strongly supported.

- The moderate effect of product involvement under the influence of country-of-origin image on information search intention. Based on the testing result from model 14 in Table V, the explanatory power of model 14 is 0.2 percent (21.8 percent-21.6 percent), and the \(p\) value that determines the good of fitness is 0.000 < 0.01, which shows it reaches statistical significance. This also means that, there is an interactive effect between country-of-origin image and consumer purchase intention, and the regression coefficient is 0.0355, which shows that, as product involvement level increases, country-of-origin image would cause a significantly positive influence on consumer purchase intention. Therefore, \(H4\) is strongly supported. According to previous testing result, we examined \(H4-1\) is strongly supported; therefore, from the combination of these two testing result, \(H4\) is strongly supported.

V. Conclusion and suggestion

1. Conclusion

The verification of the hypotheses in this paper leads to five conclusions:
1. country-of-origin image has a significantly positive influence on consumer purchase decision;
2. consumer product knowledge has a significantly positive influence on consumer purchase decision;
3. product involvement has a significantly positive influence on consumer purchase decision;
4. country-of-origin image has a significantly positive influence on consumer purchase decision under different product involvement levels; and
5. product knowledge has a significantly positive influence on consumer purchase decision under different product involvement levels.

2. Management implication

(1) Theory implication

- Provide a more thorough structure about consumer purchase decision. In research concerning consumer purchase behavior, the past literature has used product evaluation, purchase intention, or re-purchase intention as research variables. This study focuses more on overall perspectives, and adds information search intention as one of important variables in consumer purchase decision, and develops more thorough and well-structured consumer purchase decision structure, complement part of the disadvantages in past theoretical structure.
An empirical study of insurance and catering services
Long-Yi Lin and Chun-Shuo Chen

- Verify the relationship between product knowledge and information search quantity. Moore and Lehmann (1980) discovered in their empirical study that consumer product knowledge has a significantly positive influence on consumer information search efforts. Newman and Staelin (1972) report that information search quantity has a negative relation with product experience level. Therefore, it shows that, scholar's opinion on relationship between product knowledge and information search quantity is not yet clearly defined. This study verifies that, product knowledge has a significantly positive relationship with information search intention. Therefore, it clarifies part of doubts and debates.

(2) Practical implication
- Company must face competitive strategies from many countries. Country-of-origin image does affect consumer purchase decision. The rise of the World Trade Organization (WTO) facilitates consumers to see and enjoy products from many different countries. Therefore, when company promotes their products to the global market, except for considering a product's brand image, they must also consider the country-of-origin image then develop the most appropriate competitive strategy. As far as the country-of-origin image is concerned, in a company's short-term marketing strategy, if a country has a good image, then its company would benefit from international marketing. Otherwise, if this country does not have a good image, then a company's marketing strategy should focus on the attribute of a product's features. Execution of a series of marketing activities helps a consumer to better understand the advantages of a product, in order to change a consumer's product evaluation principles. Other than this, a company can also adopt a strategy alliance or other strategies to decrease negative influences caused by a bad country image.
- The effect of consumer product knowledge on business competitive strategy. When a company uses consumer product knowledge to develop proper competitive strategy, it is similar to a two-sided knife. If used properly, then its marketing strategy is like a sharp knife, which can easily win a share of mind and encourage a consumer to purchase a product. Consumer product knowledge has a distinct positive influence on a consumer's information search intention; therefore, he/she must first have a certain level of product knowledge then search for a wider range of relevant information. Therefore, a company's developing marketing strategy should be fair to all consumers and expose a proper amount of relevant product information. Only if a company assists consumer to absorb its product information, will it raise the consumer purchase intention.

3. Limitation
Although this research attempts for a more planned and objective design, and has come to a concrete conclusion, it still has somehow in perfectly performed during the research process. There are three limitations in this study list as follows:

1. Unable to infer to national consumers: this study adopts convenience sampling and the sampling area is restricted in Taipei area. From the perspective of statistical theory, samples may lack generalization power, and may not be suitable to infer to general national citizens or other consuming groups.
2. Unsuitable to infer to other service area: this study only performs research based on insurance and catering services. Although it obtains concrete conclusion the research result may be unsuitable to infer to other types of services.
3. Explanatory power of some empirical model is relative low: this study adopts stepwise regression analysis to test hypothesis, but the explanatory power of H4-1, H4-2, H5-1, and H5-2 is relative low. Therefore, it becomes a restriction of statistics theory in this study.

4. Suggestion
(1) Suggestions to manufacturers
When manufacturers export their products to other countries, they should first examine the evaluation of consumers in these countries to the product's country-of-origin image, then develop an appropriate marketing strategy, in order to actually attract consumer attention and increase their purchase intention. Moreover, when manufacturers attempt to promote a service product, they should first explore relevant product information through many kind of media or marketing activities, in order to prevent consumers stepping backwards and lose a great deal of business opportunities for consumer's personal mental factors, such as self-contained and fear.

This study discovers that, consumer product knowledge is an important factor in influencing their purchase intention. Therefore, when manufacturers attempt to develop a marketing strategy and project, they must first understand the consumer's attitude in dealing with relevant product information, in order to increase marketing strategy effect.

(2) Future research suggestion
This study only performs research based on two items of services, insurance and dining. Future research can be chosen in different service items for comparing differences of other service items. Moreover, the country-of-origin in this study only chooses Taiwan, Mainland China, and the USA. For future research, it can include other countries or measure other countries directly for comparing differences of other countries. Besides, it is advisable to study services in different industries, and compare differences of these researches.

References
An empirical study of insurance and catering services

Long-Yi Lin and Chun-Shuo Chen


Lee, C.-F. (1999), “The influences of product involvement, brand equity, and market characteristics in evaluating and
An empirical study of insurance and catering services
Long-Yi Lin and Chun-Shuo Chen

choosing brand”, Masters degree thesis, Graduate School of Business Administration, National Cheng Kung University, Tainan City.


Rudell, F. (1979), Consumer Food Selection and Nutrition Information, Praeger, New York, NY.


Yang, S.-C. (1994), “The country image effect on the purchase intention of service products”, Masters degree thesis, Graduate School of International Business, National Taiwan University, Taipei.


About the authors

Long-Yi Lin, also known as Nicholas Lin and is an Assistant Professor of the Graduate School of Management Sciences of Aletheia University in Taipei, Taiwan. Long-Yi Lin obtained his PhD from National Taipei University, Taipei, Taiwan. He majored in marketing management and second majored in organizational management. Before teaching in graduate school, Long-Yi Lin worked for Hey-Song Corporation, which is the biggest soft drinks manufacturer in Taiwan. During 33 years working career, he worked very hard and was fortunate to have many good chances of being in charge of many important works, in the role of personnel manager, general affairs manager, sales promotion manager, purchasing manager, plant manager, business planning director, and marketing director. These working experiences in practice contribute greatly to his teaching career. Reading and studying is Long-Yi Lin' favorite pastime. He has translated 21 English books into Chinese for text book and business use. He has also published more than 100 articles in business newspapers in Taiwan.

Chun-Shuo Chen obtained the MBA degree from Aletheia University in Taipei. Chun-Shuo Chen is now living in Tamshui.

Executive summary and implications for managers and executives

This summary has been provided to allow managers and executives a rapid appreciation of the content of the article. Those with a particular interest in the topic covered may then read the article in toto to take advantage of the more comprehensive description of the research undertaken and its results to get the full benefit of the material present.

Country of origin and its image

There is plenty evidence to indicate that consumers evaluate products differently depending on their country of origin (COO) or country of manufacture (COM). Most of the research into this area has concentrated on manufacturing, industry or consumer products. Lin and Chen’s aim is to investigate the influence of COO on information search and consumer purchases within the insurance and catering sectors, where little previous study has been carried out.

Extant literature suggests that the distinction between COO and COM often becomes blurred and sometimes merge into a single construct. Consequently, COO can refer to either or both.

COO image is formed through such as economic development, political background, level of industrialization, technology development, historical factors and tradition. This image gives rise to stereotypes that consumers relate to in order to evaluate products from a given country. Many observers argue that a damaging COO image exerts a more powerful influence on consumers, who then extend negative perceptions to goods produced in that country. Essentially, COO image influences a consumer’s trust and evaluation of a product - particularly when the consumer has no prior knowledge of the product itself. This is also likely to influence evaluation of a brand.

Product knowledge and product involvement

In addition to COO image, it is accepted that consumers generally search for additional information before making purchase decisions. This makes product knowledge an important factor. However, indications are that influence of such knowledge has previously tended to be more significant in relation to products than services.

Product knowledge has attracted different definitions and some analysts have subdivided the concept into categories such as objective knowledge and experienced based knowledge. Effectively, however, product knowledge refers to the consumer’s level of awareness and understanding about a product and has been measured by the amount of purchase, usage and information stored in the memory.

Lin and Chen also consider the effect of product involvement, which relates to the importance that consumers attach to the product and their level of interest in it. Correlation exists between interest and involvement levels. This concept is also sometimes subdivided, this time into advertising involvement, product involvement and purchasing involvement. In addition to COO image, the authors investigate the effect of product knowledge and product involvement on information search and purchase decisions in the aforementioned service industries. The relationship between the factors is also analyzed.

A structured questionnaire was distributed to consumers in the Taipei area of Taiwan and 369 were properly completed and selected as part of the survey. Taiwan, China and the US were chosen for COO image mainly because the other two countries have significantly influenced catering in Taiwan.

The results indicated that all three factors exert a significant influence on information search and purchase intention. This substantiated earlier claims that consumers evaluate products based on their knowledge and understanding of them. Likewise, findings here also indicated support for the notion that consumers with higher levels of product involvement would search for more information to help their purchase decision. Previously, it had also been claimed that such consumers had a more positive attitude towards brands and advertising connected to them.
Lin and Chen also explored the relations between the different factors and concluded, for instance, that the effect of COO increases when the consumer’s interest or involvement in the product is higher. However, earlier investigation revealed that consumers with higher levels of product involvement would also seek information relating to other attributes such as brand or price. This served to dilute the effect of COO and COM on information search.

Findings also indicated an interactive relationship between product involvement and product knowledge. The authors conclude that as product involvement increases, the influence of product knowledge on both information search and purchase decision becomes greater. Previous studies have not been conclusive in this area. In one example, consumers with high product knowledge were found to be less inclined to search for additional information. This suggests that firm conclusions should not yet be drawn about the relationship between these factors.

Some analysts argue that consumer purchase decision contains two stages: information search that includes evaluation of alternatives; and buying intention. Following their study, Lin and Chen conclude that information search has an important influence on the purchase decision.

Implications
In view of the influence of COO image, the authors advise companies to adopt an appropriate strategy when marketing their products in different parts of the world. If the COO image is positive, then marketers should strive to exploit this to their advantage by incorporating COO attributes in their advertising strategies. Conversely, when a COO image is negative it is much wiser to focus on the product itself and promote it through a range of marketing activities that highlight the product features most likely to appeal to the consumer. An effective campaign can also successfully deflect attention from and reduce the harmful effects of a negative COO image.

It is additionally recommended that companies would benefit by making more effort to better inform consumers about their products. Apart from the influence on purchase intention, consumers equipped with higher levels of knowledge about a specific product are less likely to be apprehensive about using it. The informing process can be achieved using various media channels. Such as strategy may also help companies acquire an insight into how the consumer processes product information, which the authors believe could be particularly useful and informative.

Lin and Chen point out that the localized nature of their investigation means that any conclusions do not necessarily apply nationally. Likewise, generalizations cannot be drawn about other service sectors since the study concentrated only on insurance and catering. In addition to expanding such issues, further research could also include other countries to further the knowledge about the effect of COO image.

(A précis of the article “The influence of the country-of-origin image, product knowledge and product involvement on consumer purchase decisions: an empirical study of insurance and catering services in Taiwan”. Supplied by Marketing Consultants for Emerald.)