



Examining the variables that influence consumers' intent to purchase goods with intellectual property protected by place name: a case study conducted in Bac Ninh Province, Vietnam

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Abstract The present study employed a survey of 300 customers in retail establishments, supermarkets, and neighborhood markets in the Bac Ninh province to examine the variables influencing consumers' propensity to purchase goods bearing the names of locations that are protected by intellectual property rights. The multidimensional link between variables—brand awareness, brand association, perceived quality, brand loyalty, and local features in the model—by using the PLS-SEM linear structural model. Local Characteristics and Brand Awareness are the two that have the biggest effects on product purchase intention and satisfaction, as demonstrated by the decision to buy.

Keywords sản phẩm mang tên địa danh; ý định mua sản phẩm; sở hữu trí tuệ; Bắc Ninh, Việt Nam

1. Introduction

The concept of intellectual property rights is broad. However, according to the World Intellectual Property Organization (WIPO), "intellectual property rights include rights relating to scientific, artistic, and literary works; performances by artists, recordings, and radio and television programs; inventions in all fields of human activity; scientific inventions; industrial designs; trademarks, service marks, designations, and trade names; protection against unfair competition and all other rights resulting from intellectual activity in the industrial, scientific, literary, or artistic fields". "Intellectual property rights are the rights of organizations and individuals to intellectual property, including copyright and rights related to copyright, industrial property rights, and rights to varieties Crops," states the National Assembly of Vietnam (2019). Consequently, there are two ways to understand intellectual property rights: Aspect of objectivity: Intellectual property rights consist of a set of legal regulations that govern the social interactions that arise during the creation, utilization, and disposal of intellectual property items; Subjective aspect: The rights and obligations that come with intellectual property belong to the individuals and organizations that are the subjects of such rights. Only when intellectual property rights are formed or established in compliance with legal provisions regarding the circumstances and duration of the rights' emergence are they deemed lawful.

There is currently no standard notion for items named after locations throughout the world. When referring to items with geographical names, experts and researchers utilize several terminologies, some common words are: *produit de terroir*, *produit d'origine*, *local product*, *regional products*, *specialty*

De Kop, Sautier, and Gerz (2006) define specialties as goods that can only be produced in a specific geographic area where human production practices combined with cultural factors over a long period of time have



contributed to creating unique biological properties for the product. Buil et al. (2008) define *produit de terroir* as "products (or main components of products) produced in a certain and homogeneous geographical area, products with significantly different characteristics from other products on the market based on the specific characteristics of the production area". Specialties typically have higher added value than standard products of the same sort because of their reputation, quality, and geographic distinctiveness. This value belongs to the community that develops the product over many years, even generations, and turns it into a specialty that helps the neighborhood in the long run.

In actuality, place-named products are frequently made by local residential communities using traditional knowledge and production techniques. This allows them to effectively take advantage of the local environment, the region's distinct culture, and the local populace, producing goods that are either very different from other products on the market or very similar to them.

Thus, according to the research team: A product named after a place is a product produced or exploited by the population in a geographical area according to a certain production and exploitation process and practice that creates Quality and features that are rarely available elsewhere.

Place-named products are precious assets that are made using traditional expertise and are regarded as local brands. These things are also locally produced; the market defines and validates the notion of "local." This demonstrates that these goods have long-term potential benefits for society as well as the economy. The social component in this situation is the acknowledgment of conventions and practices, which raises traditional knowledge and values and fosters a sense of affinity between the people and their history and traditions (Ambler et al., 1996; Vu Quynh Nam, 2022).

As a result, the intellectual property rights to goods with place names are frequently safeguarded as geographical indications or trademarks (collective marks, certification marks). In other words, place names are the primary means by which we register collective marks, certification marks, and geographical indications for products nowadays. In this case, the subjects of registration of collective marks, certification marks, and geographical indications for these products are primarily place names (signs indicating the geographical origin of the product). It is the duty and right of the local populace in each area, as well as the responsibility of State management agencies, to register, preserve, and develop landmarks connected to products.

Ajzen (2002) states that intention refers to the motivating elements that affect each person's conduct; these elements represent the degree of effort or willingness that each person will put forth to exhibit behavior. Elbeck (2008) defined intention to use or purchase as the likelihood that a customer will buy or utilize a certain product. In summary, the desire to purchase goods carrying place names protected by intellectual property rights indicates a person's readiness to pay for goods that have been identified as having distinctive qualities specific to a location and that have legal protection for their intellectual property rights.

2. Literature review

The planned behavior theories of Ajzen, the reasoned action theory of Fishbein & Ajzen, and several published works served as the foundation for the research, which was carried out based on the following: The Theory of Planned Behavior (TPB) model (Ajzen, 2002) [1]. This concept explains consumer motivation by positing that intention is the fundamental component guiding each person's purchasing behavior. According to research by the author group Blackwell & colleagues (2001) [3], they see consumer behavior as a multi-stage decision-making process with close interactions between them. Customers' goals and attitudes will influence their decisions. Furthermore, those with intimate ties to consumers—friends, family, etc.—also have a direct impact on their purchasing decisions.

The theory of reasoned action (TRA) of Fishbein & Ajzen (1975) [6] pointed out that: "Each individual's intention is based on two basic factors: the consumer's attitude toward behavior and subjective norms of consumers". The study also demonstrates that the degree to which relevant people's opinions toward buying the goods will influence the "subjective norm" element, as will consumers' willingness to comply with influential people's recommendations.

The theoretical framework for CBBE by Srinivasan (1979) of quantifying brand equity through customer preferences obtained from multi-attribute association analysis was expanded by Aaker (1991) and Keller (1993). The five primary components of CBBE were initially proposed by Aaker (1991), and they are as follows: brand



awareness, brand association, perceived quality, brand loyalty, and other intellectual assets (patents, trademarks, etc.).

Research by Lassar et al. (1995): Using a survey of buyers of Asics and Reebok sports shoe products, the author employs a scale to quantify customers' opinions about enjoying a branded product. This is the first empirical study on CBBE to measure brand equity.

According to research by Yoo and colleagues (2001), the authors used the SEM structural model to estimate the model parameters in order to explore the relationship between marketing mix elements and brand equity components, as well as the impact of these components on overall brand equity. The survey consisted of 569 university students in the US who were asked about sports shoes and color televisions.

Research by Le, N. Q. & associates (2014) and Vu Quynh Nam (2022) indicates that brand association and brand awareness come together to form one component. This demonstrates how the variables influencing brand equity vary depending on the research field.

Research Tong, X., & Hawley, J. M. (2009), through structural modeling (SEM). The research results have proposed a model to represent customer-oriented brand equity through the variables: Perceived quality, Brand awareness, Brand association, Brand loyalty.

A model of customer-oriented brand equity was proposed by Isabel Buil, Eva Marti'nez, and Leslie de Chernatony (2013) based on survey data from consumers who used products from well-known brands like Adidas and Nike for sportswear, Sony and Panasonic for electronics, and BMW and Volkswagen for automobiles in the UK and Spain. The invariance and stability of the model across two nations are measured by the authors utilizing a multifactor analysis and a 7-point Likert scale in the SEM linear structural model analysis approach.

3, Research models

When researching the intention to buy products named after places protected by intellectual property rights in Bac Ninh province, Vietnam. We propose the following model:

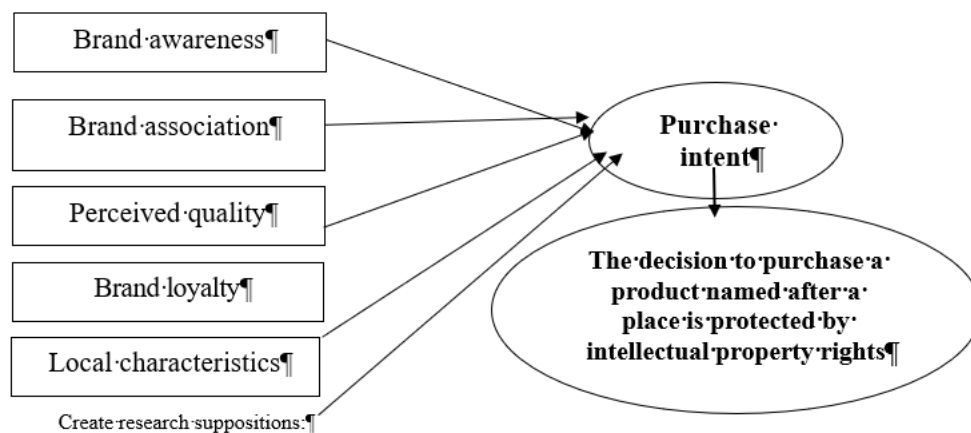


Figure 1: Model of factors affecting the intention to purchase products bearing protected place names in Vietnam's Bac Ninh province

H1: Brand awareness has a positive impact on the decision to purchase products bearing the names of places in Bac Ninh province that are protected by intellectual property rights.

H2: Brand association has a positive impact on the decision to purchase products named after places of Bac Ninh province that are protected by intellectual property rights.

H3: Perceived quality has a positive impact on the decision to purchase products named after places of Bac Ninh province that are protected by intellectual property rights.

Brand loyalty has a positive impact on the decision to buy products bearing the names of Bac Ninh province's places that are protected by intellectual property rights.

H5: Local characteristics have a positive impact on the decision to buy products bearing the names of Bac Ninh province's places that are protected by intellectual property rights.



4, Research Methods

Research variables and how to measure variables

Aaker (1991), Keller (1993), Yoo et al. (2001), Bui et al. (2008), and the study's author included four questions in the assessment variables for brand awareness: (NB1) I am familiar with brand X; (NB2) I can distinguish brand X from its competitors. When considering products named after locations, local brands come to mind first (NB4). I can rapidly recall the name or emblem of brand X (NB3).

The measurement variables developed for brand associations were taken from Keller (1993); Buil et al. (2008); Tong, X., et al (2009), who posed the following seven questions: Place-name product brands perform the fundamental duties of a good product or service category better than other brands in the category (LT1). What unique qualities does this brand possess? (LT2); This brand is fairly priced (LT3); The company shows great regard for the interests of its customers (LT4); Is this a brand you can use in a variety of settings? (LT5); I can clearly see the kind of person who would use brand X (LT6); When it comes to competing brands, X has a very distinct brand image (LT7).

The measurement variables developed for perceived quality were applied from Yoo et al. (2001) including 4 questions: Product function of brand X works very well (CN1); Great features (CN2); During use, this brand is very unlikely to fail (CN3); High durability (CN4).

The measurement variables developed for brand loyalty are adopted from Yoo et al. (2001); Keller (1993); Tong, X et al (2009) includes 4 questions: I will not buy other brands if X is available in the store (TT1); I really love this brand (TT2); Brand X is my first choice (TT3); I'm still willing to buy X even if its price is a little higher than its competitors (TT4).

The measurement variables developed for local characteristics are adopted from Kim (2012); Vu Quynh Nam (2022); Orth et al (2005); The author's research includes 5 questions: Origin of product brand named Dia Anh (DP1); Product differentiation has place names (DP2); Social benefits of products bearing geographical names (DP3); Product brands named after places help promote local specialty products (DP4); Local policies promote consumption of products named after places (DP5).

The measurement variables developed for intention to purchase products bearing intellectual property protected place names are applied from Yoo et al. (2001); Keller (1993); Elbeck Mattt, Tirtiroglu Ercan. (2008); Tran, D. V. (2019) includes 4 questions: Even if another brand has the same features as X, I still want to buy X (SHTT1); If there is another brand as good as X, I like to buy X (SHTT2); It makes sense to buy X instead of any other brand, even if they are the same (SHTT3); It would be smarter to buy X even if there is another brand similar to X (SHTT4).

5, Results and data analysis

Through measurement of the Cronbach's Alpha value, the study has validated the validity of the author's data. This demonstrates how dependable the respondents' responses were.

Table 1: Cronbach's Alpha values of the study

Dimension	Cronback's alpha
Perceived quality	0,794
Local characteristics	0,900
Brand association	0.900
Brand awareness	0.824
Brand loyalty	0.813

Evaluating discriminant validity is critical to determining a study's trustworthiness. The discriminant value ensures that each variable is unique and has no redundancy by indicating the degree of uncorrelation between the observed variables (Fornell & Larcker, 1981). The Fornell-Larcker criterion was applied to ascertain the discriminant validity and correlation of the latent variables, as seen in Table 2. This extensively used method is based on examining the correlation between the constructions and the square root value of AVE. As per Hair Jr et al. (2016), the tabulated findings indicate that the square root value of AVE was higher than the correlation value, hence verifying discriminant validity and satisfying the Fornell-Larcker criterion.



We also looked at the ratio of Heterotrait - Monotrait (HTMT). According to Henseler et al. (2015), HTMT values below 0.9 are preferred, and if HTMT values are below 0.9, discriminant validity between two factors will be proven. All HTMT values were below the 0.9 threshold, as shown in Table 3, supporting the conclusion that the required validity and reliability standards were satisfied. Consequently, steps were done to verify the elements in the model's discriminant validity.

Table 2: Criteria for Fornell-Larcker

	CN	LT	NB	SHTT	TT	ĐP
CN	0.776					
LT	0.700	0.790				
NB	0.763	0.639	0.813			
SHTT	0.720	0.651	0.736	0.798		
TT	0.696	0.676	0.732	0.698	0.797	
ĐP	0.710	0.582	0.738	0.709	0.698	0.845

Analyze structural models and test hypotheses

To understand the relationships between the factors of the study, an in-depth analysis of the structural model was performed. This analysis serves to explain the effects between brand awareness, brand associations, perceived quality, brand loyalty, local identity, and intention to purchase products with intellectual property rights.

The results of the analysis presented in Figure 2 and Table 3 help to visually understand the complex connections between factors, while the tabulated data provide evidence to underpin the relationship between variables. However, these results present a comprehensive and detailed view of the interaction between factors, helping to better understand the roles of brand awareness, brand association, perceived quality, brand loyalty, local characteristics affect the intention to purchase products with intellectual property rights bearing the name of a place

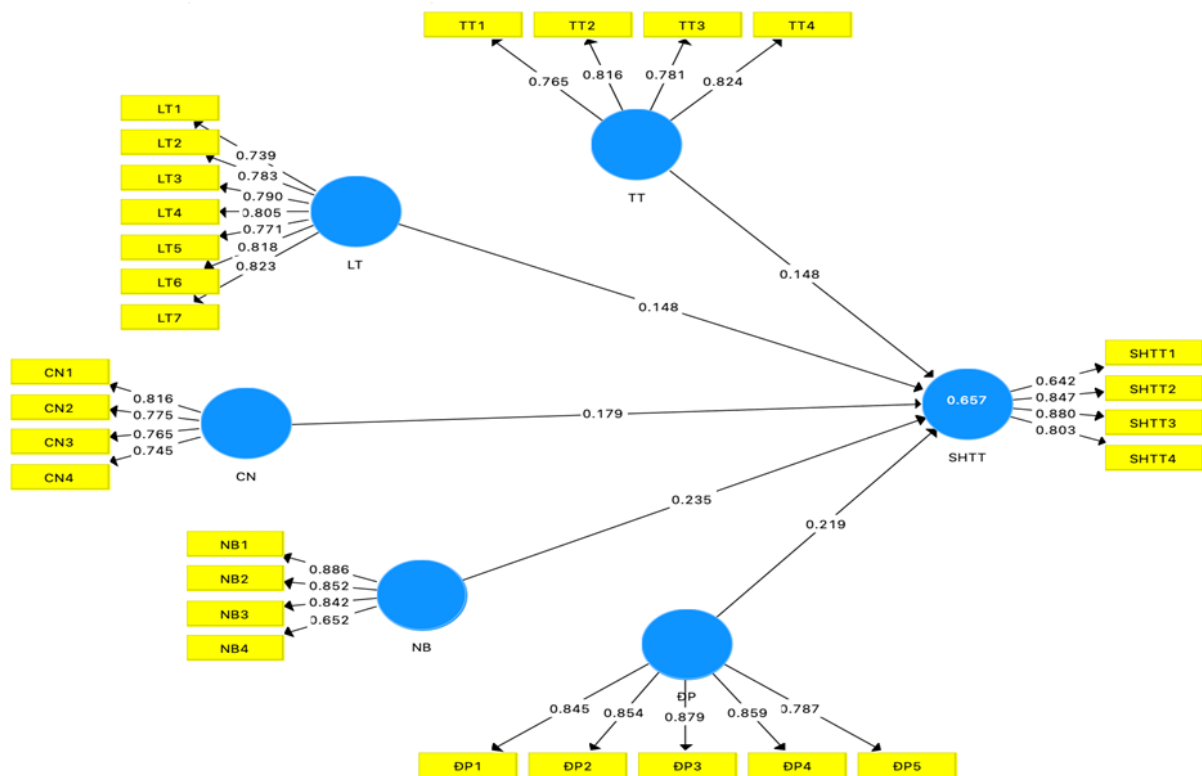


Figure 2: Path (correlation) coefficient of the PLS algorithm



Table 3: Path analysis and hypothesis testing

Hypothesis	Regression coefficient	Mean	SE	T	P	Result
H1: NB -> SHTT	0.235	0.243	0.094	2.493	0.013	Accept
H2: LT -> SHTT	0.148	0.135	0.071	2.094	0.037	Accept
H3: CN -> SHTT	0.179	0.189	0.091	1.975	0.049	Accept
H4: TT -> SHTT	0.148	0.151	0.075	1.979	0.048	Accept
H5: ĐP -> SHTT	0.219	0.214	0.081	2.716	0.007	Accept

Based on the results of path analysis and structural model testing in Table 3, it can be concluded that factors such as Brand awareness; Brand association; Perceived quality; Brand loyalty; Local characteristics all affect the intention to purchase products with intellectual property rights bearing the name of a place. The analysis results show that all hypotheses H1, H2, H3, H4, H5 are accepted (Significance level (P) < 0.05), and at the same time that these factors have a significant influence on the intend to buy the product.

Among the factors, there are two factors that have the greatest impact on the intention to buy products with intellectual property rights bearing geographical names: Brand awareness and Local characteristics with beta coefficients of 0.235 respectively and 0.219. This shows that when a product has intellectual property rights bearing the name of a place and also has unique local characteristics and is recognized by the public and associated with the brand, the likelihood of customers buying that product increases. However, the factors brand association and brand loyalty have the smallest impact on product purchase intention, with a beta coefficient of only 0.148. This means that brand associations and brand loyalty do not play a decisive role in consumers' decisions to purchase products with intellectual property rights bearing place names.

Overview of the model, the coefficient of determination is explained by $R^2 = 0.657$. This means that the factors Brand Awareness, Brand Association, Perceived Quality, Brand Loyalty and Local Characteristics described in the model account for about 65.7% of the variation in intend to purchase products with intellectual property rights bearing geographical names, 34.3% can be explained by other factors outside the model. Overall, these results provide important information for businesses and managers to better understand the impact of factors such as brand, local identity and product quality on purchase intention the product has intellectual property rights bearing the name of the place. Understanding these factors can help increase your chances of success in reaching the market and attracting customers.

6, Conclusion and recommendations

Conclusion

The two criteria that have the biggest effects on consumers' intentions to purchase products named after locations in the province of Bac Ninh are "Brand awareness" and "Local characteristics". Customers will find it easier to discern products with protected place names from those that are not yet protected if they can recall or recognize photographs of goods with the protected place names of the Bac Ninh province. Customers are therefore likely to be more aware of products bearing the protected place names of Bac Ninh province when the province appropriately invests in ensuring brand awareness throughout. From there, the legitimacy of the brand of goods bearing the names of the province's locations is confirmed.

Next, "perceived quality" is a significant factor that influences consumers' propensity to buy goods with protected place names. Bac Ninh province's products will have a competitive edge over those from other locales after consumers are satisfied with the exceptional qualities or attributes of goods wearing protected place names. It is acknowledged that better product design would result from Bac Ninh province's assurance of high standards for food safety and product quality. Customers' perceptions of local items will improve as a result of this.

The inclination to buy goods bearing the protected place names of the province of Bac Ninh is influenced by the variables "Brand association" and "Brand loyalty". Bac Ninh province's typical products will have an edge in the market by reinforcing their reputation and brand through anything that can relate, either directly or indirectly, to customers' minds when they think about products having protected place names. If the product fulfills customer needs and guarantees quality and design, it will help customers associate Bac Ninh products more clearly, which will aid in their decision to purchase and make consistent product choices.



Recommendations

First and foremost, the province of Bac Ninh must concentrate on enhancing efforts to establish brand awareness for goods bearing place names covered by the province's intellectual property rights. The province of Bac Ninh should establish locations for the introduction of protected agricultural products in malls, supermarkets, shops, and tourist destinations nearby in order to highlight and advertise regional speciality goods. In order to diversify identification channels for products bearing protected place names, Bac Ninh province should increase communication through the Internet in addition to traditional channels.

Second, in order to prevent fake and subpar goods from imitating local products, which would damage the reputation of and undermine consumer confidence in locally protected goods, Bac Ninh province must develop and strictly oversee products bearing geographical names that have been protected as intellectual property in the region.

Third, in order to develop and expand the market consumption market to neighboring provinces and improve the reputation of local products, Bac Ninh province needs to establish connections with nearby localities such as Hanoi, Bac Giang, Thai Nguyen, or Quang Ninh, where there is a significant demand for specialty products with geographical names.

Fourth, Bac Ninh province must increase knowledge among companies and individuals who manufacture and trade products bearing place names in order to foster confidence and loyalty for those products. When consumers choose items with protected place names, intellectual property rights help to maintain their loyalty by enabling manufacturers to match consumer demands for product quality, design, and packaging style.

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