

Investigating the effect of product knowledge on customer purchase intent with an emphasis on the main producing country (Case study of the owners of Mazda cars assembled by Bahman Motors Company)

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Abstract

One of the factors affecting the process of buying, is the producing country and the origin of goods. Many people generalize the mentality of a country to all goods made by that country. This could be effective for the brand in taking top brand strategies. In this study, we investigate the effect of the manufacturing country, product knowledge of the customer and nationalism on customer purchasing intent. This is an applied study and regarding the data collection it is a survey study and is a correlational study as well in case of determining the relationship between the variables. The population consisted of Mazda owners in Tehran province. Regarding the infinity of the population, a sample size of 384 subjects were selected according to Morgan table. The customers were selected by random sampling and the questionnaire were completed at a rate of 92% through their database. Validity and reliability of research instrument was approved by the experts and its reliability was approved through Cronbach's alpha and the correlation between the variables was tested on the basis of structural equation modeling (SEM). To analyze the data,

SPSS and SmartPLS software were used. The results indicated that the manufacturing country's image and nationalism have a direct impact on customers' purchase intent. In addition, product knowledge alone has no effect on purchase intent, but when placed in the path of the manufacturing country, it has a significant effect on purchase intent.

KEYWORDS: Country of Origin, customer product knowledge, customer purchase intent

Introduction

Globalization has led to increased competition in the markets and the risk of the introduction of new products. Without doubt, the prerequisite for success in the international arena, is the acceptance of products by customers in the destination markets. Rapid globalization of markets has brought about the unprecedented growth of global trade in recent decades. Simultaneous with this great growth, the marketing experts have also increased their research in this field.

However, in new markets, defining the country of origin is more complex because by the growth of multinational companies and releasing joint market products each part of which are made in different countries, accuracy and validity of label determining the manufacturing country has faded.

Continuous experimental studies have investigated the effect of the country of origin from different aspects. The results of all cases, indicate the effect of the country of origin on customers' evaluation of the product and purchase intentions.

Customer Product Knowledge:

Knowledge as one of the main characteristics of the consumer, is an important factor in studying consumer's behavior. Consumers' with high and low levels of awareness, indicate different behaviors. Knowledge of the products includes the knowledge of different types of products and information about the characteristics and dimensions that are important in making decisions related to the product.

On the other hand, the specific knowledge of the product includes information such as price, color, taste and viability of each product. In short, the generic knowledge of the product is the general knowledge about the product group, whereas the specific knowledge of the product is the knowledge about a particular product.

Country of origin:

The customer confronts many decisions about the product, the method of purchasing and its use while buying. Behavioral scientists have attempted a lot to better understand the formation of these decisions. The effect the COO variable is the most remarkable factor among the numerous factors influencing the decision to purchase and use of a product. Because the mental image of the product manufacturer country reflects the overall customer perception about the quality of the product and the people of that country (Haubl, 1996)

Review of the literature

Mortazavi, Kaffashpoor, Arjmaninejad (2010) examined the mediating role of patriotism and understanding of the product quality on purchasing intent of imported good and the results indicated that the effect of the COO is ineffective on the variable of patriotism and also the effect of the COO on purchase intent increases through the increasing positive mentality of the country of origin, and the willingness to buy its imported products. (Journal of Scientific Executive Management Research, Tenth Year, No. 2, Consecutive 40, Second half of 2010).

Liu, Mi Tru Wiss (2010) examined the impact of COO on consumer behavior and the results of this study indicate that the nationality of the product as a feature affects consumer behavior (Journal of evolution in economy. Volume 9, No. 1)

Bamber, Fadker (2012) investigated the product knowledge, nationalism, purchase intent with an emphasis on the country of origin and the results indicate that nationalism and knowledge of the product and the country of origin have a significant effect on customer purchase intent (Journal of Management Criticism. Volume 12)

Chia, Nao (2012) investigated the combination of the effects of COO, the results of which indicate that COO and nationalism affect customer judgment for purchasing (Socioscientific Journal of Asia, Issues 12).

Research questions

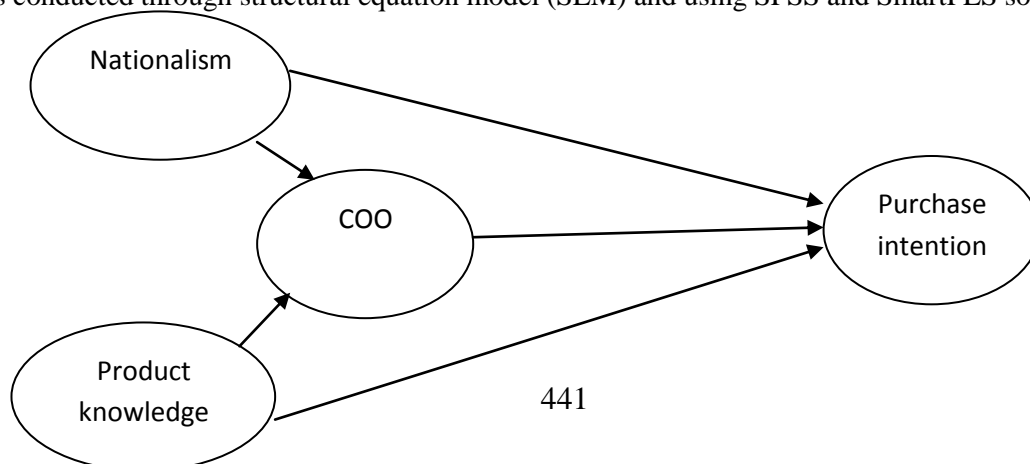
1. To what extent does the customer’s product knowledge affect their purchase intent of Mazda cars assembled by Mahman Motors Company?

Methodology

This study was conducted through a descriptive-survey method. And the descriptive and inferential statistical methods will be used. Its dominant methodology is the covariance-based structural equation modeling based on maximum likelihood (ML).

Data analysis tools:

First, the variables of the model are examined using confirmatory factor analysis and then the fitting of the model is conducted through structural equation model (SEM) and using SPSS and SmartPLS software.



Model 1 Conceptual

The following table shows the correlation matrix model. As it can be seen there is a positive correlation between all variables.

Table 3: correlation between variables

	Product knowledge	Purchase intention	Nationalism	COO
Purchase intention	1.00	1.00	0.703	0.500
Nationalism	0.523	0.703	1.00	0.981
COO	0.588	0.500	0.981	1.00

Convergent validity

Convergent validity means that the reagent set explains the main structure. Fornell and Larker suggest using the average variance extracted (AVE) as a measure of convergent validity. Minimum AVE, equivalent to 0.5 indicates adequate convergent validity, which means that a latent variable can explain more than half of its representatives' dispersion on average.

In PLS output we have:

TABLE 4: AVE

	AVE
Product knowledge	0.575
Purchase intention	0.507
COO	0.583

While Cronbach's alpha has the assumption that all indicators are equally valid, in PLS reliability of each index is evaluated individually. Therefore a more reliable composite can be achieved. Since Cronbach's alpha offers a stricter estimation than internal consistency reliability of latent variables, in models of PLS path another measure with the name of composite reliability is used. The criterion of composite reliability considers different loadings indexes and it can be interpreted in with the same Cronbach's alpha.

Of course it does not matter which coefficient is used. Alpha value less than 0.6 shows a lack of reliability (Azar and Qanavati, 2012: 141).

In this study, for composite reliability, we have:

Table 5: Composite reliability

Product knowledge	0.801
Purchase intent	0.831
COO	0.594

The numbers in the circle also represents R^2 coefficient of determination of the original structure and its value always varies between zero and one. The larger the coefficient of determination, it shows that the regression line was better able to relate the dependent variable changes to independent variable. This coefficient also shows the model's ability to describe or explain the model in the research structure. Significance of factor loadings using BT procedures is in the software and statistical t values appear on the available paths in the model which are as the following:

To confirm a hypothesis at 95% level, minimum t value is equivalent to 1.96. The numbers that are displayed on paths between latent variables are estimations that are obtained using the least partial square algorithm. These coefficients actually respond to research questions.

Investigating the relationship between variables and hypothesis testing

In this section, the proposed hypotheses are investigated and tested using path analysis model. After describing the model and data collection, estimating model with a set of known relationships between measured variables begins. Results on the diagram are shown in the form of table and output of SmartPLS software as seen in Table 6:

Table 6: Path analysis model (standardized coefficients)

	Product knowledge	Purchase intention	National	COO
Product knowledge		0.637		2.888
Purchase intention				
COO		0.633		

Table7: Path analysis model (significant coefficients)

Research hypotheses	coefficient	coefficient	Sig.
Product knowledge → intention	0.637	1.927	0.055
COO → intention	0.633	2.97	0.036
Product knowledge → COO	0.888	3.487	0.001

As it can be seen from all paths have not been approved.

Interpretation of the coefficient of determination R^2 (R Square)

The coefficient of determination examines what percentage of changes in dependent variable is covered and explained by independent variables, or in other words to what extent independent variables have the ability to predict the dependent variable. For the dependent variables we have:

Table 8: The coefficient of determination of R^2

Purchase intention	0.286
COO	1.931

Discussion and Conclusion

In this research the effect of country of origin, brand, product knowledge, on customer purchase intention was examined. The results showed that except the significant effect of product knowledge on customer purchase intention, all the other hypotheses of the study have been confirmed. Perhaps the reason of rejecting the hypothesis as there is a significant effect of product knowledge on customer purchasing intention of Mazda cars assembled in Bahman Motor Company can be interpreted as: according to the fact the studied industry is the automotive industry and a large number of cars on the market in the country are made in China, it can be expected that the attitude of the consumers be effected by the country of origin and brand strength and have persuaded the respondents that product knowledge has no significant effect on purchasing intention. So that when the customer product knowledge is accompanied by the name of the country of origin significantly affects the customer purchase intention. The result of this hypothesis is different from the results obtained from the study of David Bambr et al (2012).

Table 9: investigating the research and basic research

Research hypotheses	Path coefficient	Significance coefficient	Sig.	Confirmation/ rejection of the research	Confirmation/ rejection of the basic research
Product knowledge→ purchase intent	0.637	1.927	0.055	Rejected	Confirmed
COO→purchase intent	0.633	2.097	0.036	Confirmed	Confirmed
Product knowledge→COO	0.888	3.487	0.001	Confirmed	Confirmed

Recommendations for future research

The following suggestions for future studies can be raised.

1. First, in future research, other consumer societies be investigated and their views about the effects of the manufacturer be assessed.
2. Goods with non-familiar brands but strong country of origin be used for research.

Limitations of the study

The present research like any other research has some limitations, including:

Since the population of the present study includes the car owners living in Tehran province, so the results cannot be generalized to other buyers in other provinces. Due to time constraints, studying moderating variables such as brand, price and the like was not possible.

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