A Study on the Factors Influencing Chinese Consumers’ Purchase Intention on Volkswagen Automobiles - Focusing on Country-Of-Origin Image and Corporate Image

Ruan, Xiaowen 1, a

1 Business and Trade Department, Nanjing Vocational Institute of Industry Technology, Nanjing

a email

Key words: Country Of Origin Image; Corporate Image; Brand Attitude; Purchase Intention

Abstract. With the fast economic development, China has been the largest automobiles market in the world since 2009. China has been the most important market for global automobiles enterprises in the past years. Germany Volkswagen brand has been enjoying the top popularity in Chinese market and China has been the largest market for Volkswagen automobiles. This study used an empirical way to examine the factors impacting Chinese customers purchase intentions on Volkswagen automobiles including country-of-origin image and corporate image based on the TRA theory. The findings indicated that the positive Germany country-of-origin image and positive corporate image of Volkswagen automobiles both devoted to a positive brand attitude from Chinese customers. Meanwhile, once Chinese customers have positive brand attitude to Volkswagen automobiles, they will have strong purchase intentions.

Introduction

With its fast economic development, Chinese economy has ranked No.2 in the world since 2010. Benefiting from this fast economic development, China has been the world largest automobile consumer market since 2009. German Volkswagen has been enjoying high popularity among the global market including Chinese market. It has gained huge success in the past years and China has been its most important and successful market in the world. In 2013, the total sales of Germany Brands automobiles ranked No.2 with 3.37 million units in Chinese market; in 2014, the total sales of Germany Brands automobiles ranked No.1 with 3.68 million units. In 2015, the total sales of Germany Brands automobiles ranked No.1 with 3.998 million units. In 2012, the total sales reached 2.81 million units which ranked No.2, which increased 24.5% comparing to 2011; In 2014, Volkswagen delivered 2.5 million vehicles which ranked No.1 in Chinese market and China was still the leading market for Volkswagen. In 2015, Volkswagen delivered 2.63 million vehicles in China which continually ranked No.1 in Chinese market and China still acted as the leading market for Volkswagen.

German Volkswagen was the first company entering Chinese automobile industry in 1984 which built up the jointed venture with Shanghai Automobile Industry Corporation which produced the brands including Santana, Passat, Polo, Touran, Lavida, Tiguan, Fabia, Octavia and Superb; in 1991, Volkswagen also built up another jointed venture with First Automobile Works which produced the brands including Audi A6L, A4L, Q5, Jetta, Bora, Golf, Sagitar, Magotan, CC etc. Volkswagen currently has 12 vehicle and component plants in China. Based on the the success of Volkswagen in Chinese market, this study
employed TRA theory (Fishbein and Ajzen, 1975\textsuperscript{[1]}) to analyze the effect of factors including country-of-origin image and corporate image on their attitude towards Germany automobiles and their intent to purchase Germany automobiles. Meanwhile, this study is to provide suggestions for Chinese Independent automobiles which are implementing globalization in the world market.

**Research Model**

This study employs the TRA theory as a theoretical framework. TRA suggests that an individual’s purchase intention is decided by the attitudes as well as by beliefs of the perceived usefulness and perceived ease of use (Fishbein and Ajzen, 1975; \textsuperscript{[1]})

Figure 1 presents the proposed conceptual model and causally explains the emotion elicitation process and consequence.

Table 1. Notes of Abbreviation Items

| Abbreviation Items | Variables |
|--------------------|-----------|
| **COO**            | **Country -Of -Origin** |
| CI                 | Corporate Image |
| BA                 | Brand Image |
| PI                 | Purchase Intention |
| COO1               | Germany has rich experiences in automobiles manufacture |
| COO2               | Germany has rich knowledge of automobiles manufacture |
| COO3               | Germany has advance technology in automobiles manufacture |
| COO4               | Germany is a developed country |
| CI1                | Volkswagen provides good service |
| CI2                | Volkswagen provides personalized products |
| CI3                | Volkswagen has lots of innovations |
| CI4                | Volkswagen has high social responsibility |
| BA1                | I think Volkswagen automobiles are good |
| BA2                | I believe Volkswagen automobiles are reliable |
| BA3                | Many people purchase Volkswagen automobiles |
| BA4                | My friends have good comments on Volkswagen automobiles |
| PI1                | I will purchase one Volkswagen automobile in future |
| PI2                | I think I will choose Volkswagen automobile when I want to purchase a car |
| PI3                | I will recommend my friends to purchase Volkswagen automobiles |
| PI4                | If I have enough budget, I will purchase a Volkswagen automobile |
H1: The positive country of origin image of Germany will significantly increase Chinese consumers’
positive brand attitude to Germany automobiles

H2: The positive corporate image of Germany automobiles will bring Chinese consumers’ positive
brand attitude to Germany automobiles

H3. Chinese Consumers’ positive brand attitude to Germany automobiles will significantly increase
purchase intentions on Germany automobiles

Findings and Discussions

In this study, there were 300 respondents; males account for 55% and females accounted for 45%. The
main age ranges are from 18-49 which accounted almost 93% of the ages of the respondents. 82% of the
respondents had a university or higher level of education. 60% of the respondents had an annual income
level from 25,000RMB-80,000RMB and have the capacity to purchase automobiles. 80% of the
respondents have jobs and stable incomes.

Three steps of statistical data analysis were conducted sequentially. First, confirmatory factor analysis
(CFA) was conducted as a preliminary data analysis to verify the positive emotions construct. Second,
following two-step modeling recommended by Anderson and Gerbing (1988)[2], a measurement model
was first tested using CFA to confirm the measurement reliability and validity. Finally, to test the 11
proposed hypotheses, a structural model test was conducted. The structural equation modeling program,
Lisrel 8.80, was used for the analyses.

To assess the overall fit of the models, several model fit indexes were used. The first index is $X^2/df< 5/CIMIN/DF<5$, the best $X^2/df< 3/CIMIN/DF< 3$(Bentler & Bonett, 1980[29]). The second index is AGFI AND GFI. AGFI>0.85 and GFI>0.85(Bagozzi, 1988; [30]Bollen, 1989;[31]). At the same time, NFI, IFI AND CFI all should be greater than 0.9; in sum, NFI>0.9. IFI>0.9 and CFI>0.9(Bagozzi, 1988; [30]Bollen, 1989[31]).

Finally, RMSEA should be smaller than 0.1 and the best one is smaller than 0.05. If all above
conditions are met, the model fit is accepted. In a sum, the following Table 3 showed the detailed
information on CFA requirements.

The following Table 2 summarized the results of CFA of the overall model. Convergent validity test
was also examined.

| Index Types       | Index  | Measured Value | Evaluation Criterion | Accepted Fit or Not Accepted Fit |
|-------------------|--------|----------------|----------------------|----------------------------------|
| Absolute Fitting Index | CMIN/DF | 3.23           | <5 or<3 (the best)   | Accepted Fit                     |
| RMSEA             | 0.067  |                | <0.1 or0.05 (the best)| Accepted Fit                     |
| AGFI              | 0.897  |                | >0.85                | Accepted Fit                     |
| GFI               | 0.928  |                | >0.85                | Accepted Fit                     |
| Relative Fitting Index | NFI    | 0.954          | >0.9                 | Accepted Fit                     |
| IFI               | 0.947  |                | >0.9                 | Accepted Fit                     |
| CFI               | 0.937  |                | >0.9                 | Accepted Fit                     |

All factor loadings were statistically significant at p<.001. Convergent validity was also verified
through C.C.R and average variance extracted (AVE). According to the criterion of convergent validity, if
Estimate>0.5, C.R.>1.965, AVE>0.5 and C.C.R.>0.7, than the convergent validity was significant which
is concluded as the following Table 3.

Table 3: Criteria of Convergent Validity

| Items | Criteria |
|-------|----------|
| Estimate | >0.5 |
| C.R. | >1.965 |
| AVE | >0.5 |

The following Table 4 provided the calculated Estimate, C.R., AVE and C.C.R. scores.

Table 4: The Results of the Measurement Model Test

| Items | Estimate | S.E. | C.R. | P. | Standard Estimate | AVE | C.C.R. |
|-------|----------|------|------|----|-------------------|-----|--------|
| COO4  | 1.000    |      |      |    |                   |     | 0.89   |
| COO3  | 1.232    | 0.068| 19.8 | ***| .89               |     |        |
| COO2  | 1.376    | 0.067| 19.3 | ***| .84               | 0.68| 0.89   |
| COO1  | 1.158    | 0.066| 18.5 | ***| .83               |     |        |
| CI4   | 1.000    |      |      |    |                   |     | 0.82   |
| CI3   | .932     | 0.042| 23.2 | ***| .85               |     | 0.98   |
| CI2   | .945     | 0.042| 23.5 | ***| .86               | 0.82| 0.82   |
| CI1   | .958     | 0.043| 22.2 | ***| .87               |     |        |
| BA4   | 1.000    |      |      |    |                   |     |        |
| BA3   | .935     | 0.042| 23.28| ***| .85               |     |        |
| BA2   | .520     | 0.042| 12.22 | ***| .5                | 0.65| 0.82   |
| BA1   | .768     | 0.045| 14.66| ***| .67               |     |        |
| PI4   | 1.000    |      |      |    |                   |     |        |
| PI3   | .772     | 0.044| 21.22| ***| .78               |     |        |
| PI2   | 1.29     | 0.041| 23.34| ***| .92               | 0.69| 0.88   |
| PI1   | .996     | 0.043| 21.56| ***| .82               |     |        |

Note: Significant levels: ***p=0.000

Conclusion and Implications

Based on the result of measuring hypothesis, this study showed that H1, H2 and H3 are all supported which showed that the coefficient were all bigger than “0” and all showed positive scores. It means that the positive country image of German significantly increases Chinese consumers’ positive brand attitude to Germany automobiles; the positive corporate image of Germany automobiles brings Chinese consumers’ positive brand attitude to Germany automobiles and Chinese Consumers’ positive brand attitude to Germany automobiles significantly increases purchase intentions on Germany automobiles. The very positive global image of German greatly devote to its success in automobiles sales. Positive image of German Volkswagen corporation also devoted to its success among Chinese consumers. Eventually, the positive brand attitude from Chinese consumers brought in positive purchase intentions. This study indicated that Chinese customers had very positive comments on Germany country of origin image due to the friendly relationship between China and Germany; due to the popularity of automobiles manufacture and automobiles engineering; due to the fame of Germany which mainly behaved as a
developed country and had rich experiences and innovations in automobiles manufacture and development. This study also indicated that the corporate image of Volkswagen automobile is very positive among Chinese customers due to its heavy advertisements in media; due to the good services and quality assurance; due to its continual innovations and personalized products; due to its devotion to social responsibilities. This study finally indicated that the positive brand attitude to Volkswagen automobiles will probably lead to high level of intent to purchase. Therefore, it is reasonable to explain why Volkswagen automobiles gained huge achievements in Chinese market in the past years.

References:

[1] M. Fishbein, and I. Ajzen, Beliefs, Attitude, Intention and Behavior: An Introduction to Theory and Research. Massachusetts, Reading, MA: Addison-Wesley, 1975.
[2] J. C. Andderson, and D. W. Gerbing, “Structural Equation Modeling in Practice: A Preview and Recommended Two Step Approach. Psychological Bulletin, 103(3), pp. 411-423, 1998.
[3] V. Cordell, “Effects of consumer preferences for foreign sourced products”, Journal of International Business Studies, Vol. 23 No. 2, 251-69, 1992.
[4] R. Pappu, P. G. Quester, and R.W. Cooksey, “Consumer-Based Brand Equity and Country-of-Origin Relationships Some Empirical Evidence”. Eur. J. Market, 40(5/6), pp.696-717, 2006.
[5] K. Thanasuta,, T. Patoomsuwan, V. Chaimahawong, and Y. Chiaravutthi, “Brand and Country of Origin Valuations of Automobiles”. Asia Pacific Journal of Marketing and Logistics, 21(3), pp.355 – 375, 2009.
[6] D. A. Aaker, Managing Brand Equity: Capitalizing On the Value of a Brand Name, Free Press, New York, NY, 1991.
[7] K.L. Keller, “Conceptualizing, measuring, and managing customer-based brand equity”. Journal of Marketing, Vol.57(1), pp.1-10, 1993.
[8] K. Ghalandari, and N. Abdollah “The Effect of Country of Origin on Purchase Intention: The Role of Product Knowledge”. Research Journal of Applied Sciences, Engineering and Technology 4(9), pp. 1166-1171, 2012.
[9] N. M. Yasin, M. N. Noor, and O. Mohamad, “Does Image of Country-of-Origin Matter to Brand Equity? J. Prod”. Brand Manag., 16(1), pp.38-48, 2007.
[10] R. D. Schooler, “Product Bias in Center American Common Market”. Journal of Marketing Research, 2(4), pp.394-397, 1965.
[11] R. D. Schooler, “Bias Phenomena Attendant to the Marketing of Foreign Goods in the U.S.”. Journal of International Business Studies, 2(1), pp.71-80, 1971.
[12] C. Gronroos, “Service Quality: the Six Criteria of Good Perceived Service Quality”. Review of Business, 9(3), pp.10-13, 1998.
[13] T. J. Brown, and P. A. Dacin, “The Company and the Product: Corporate Associations and Consumer Product Responses. Journal of Marketing, 61(1), pp.68-84, 1997.
[14] P. S. Richardson, A. K. Jain, and A. S. Dick, “The Influence of Store Aesthetics on the Evaluation of Private Label Brands”. Journal of Product and Brand Management 5 (1), pp.19-28, 1996.
[15] J. Baker, D. Grewal, and A. Parasuraman, “The Influence of Store Environment on Quality and Store Image”. Journal of the Academy of Marketing Science 22 (4), pp.328-339, 1994.
[16] C. Shapiro, “Consumer Information, Product Quality, and Seller Reputation”. The Bell Journal of Economics, 13(1), pp.20-35, 1982.

[17] T. W. Andreassen, and B. Lindestad, “Customer Loyalty and Complex Services”. International Journal of Service Industry Management, 9 (1), pp.7-23,1998

[18] G. R. Dowling, “Developing Your Company Image into a Corporate Asset”. Long Range Planning, 26(2), pp.101-109, 1993.

[19] V. Rekom. Principles of Corporate Communication. Harlow, Prentice Hall, 1997.

[20] J. M. T. Balmer, and E. R. Gray, “Corporate Brands: What are They? What of Them?”European Journal of Marketing, 37(7/8), pp.972-997, 2003.

[21] A. Chattananon, M. Lawley, and L. Leelayouhayothin, “Impacts of a Thai Cause-Related Marketing Program on Corporate Image”. International Journal of Emerging Markets, 3(4), pp.348-363, 2008.

[22] C. B. Bhattacharya, and S. Sen, “Consumer-Company Identification: a Framework for Understanding Consumers’ Relationships with Companies”. Journal of Marketing, 67(2), pp.76-89,2003.

[23] Z. Peng, M. Lawley, and C. Perry, “Modelling and Testing Effects of Country, Corporate and Brand Images on Consumers’ Product Evaluation and Purchase Intention”. Visionary Marketing for the 21st Century, pp.944-949, 2000.

[24] P. R.Smith, Marketing Communications: An Integrated Approach. London: Kogan Page, 1993.

[25] F. D. Davis, Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. MIS Quarterly, 13(3), pp.319-340, 1989.

[26] E.Karahanna, D.W. Straub, and N.L. Chervany, IT Adoption across Time. MIS Quarterly, 23, 2, pp.183-213, 1999.

[27] R. E. Goldsmith, B. A. Lafferty, and S. J.Newell, “The Dual Credibility Model: the Influence of Corporate and Endorser Credibility on Attitudes and Purchase Intentions”. Journal of Marketing Theory and Practice, 10(3), pp1-6, 2002.

[28] L. G.Gresham, and T. Shimp, “A.Attitude toward the advertisement and brand attitudes: a classical conditioning perspective”. Journal of Advertising. Vol. 14 (1).

[29] P.M .Bentler, and D. G. Bonett, “ Significance tests and goodness of fit in the analysis of covariance structures.” Psychological bulletin. 88(3), pp.588-606,1980.

[30] R. O. Bagozzi, and Y. Yi, “On the evaluation of structural equation models.” Journal of the Academy of Marketing Science, 16(1), pp.74-94,1988.

[31] C.Fornell, and D. Larcker, “ Evaluating Structural Equation Models with Unobservable Variables and Measurement Error.” Journal of Marketing Research, 18(1), pp.39-50,1981.