

A Study on the Analysis of Foreigner's Preference and Purchasing Intention for Korean Crafts

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Abstract

The craft industry in South Korea has a growth potential based on excellent tradition and cultural heritage so that it is a promising industry that can leap into the luxury goods industry. To exchange Korea's craft industry as 21 century's leading cultural industry, we need to understand the preferences and purchasing behaviors of foreigner about Korean crafts. In this paper, we investigate the recognition and preference of foreigners about Korean craft by using questionnaire survey, and analyze the factors that affect purchasing Korean craft using the decision tree model of data mining.

Keywords: Data Mining, Korean Craft, Purchase Intention, Recognition

1. Introduction

Korean wave, the enthusiastic preference about popular culture of Korea, was born from K-dramas and K-pop in 1990s throughout East Asia, including China, Taiwan, Hong Kong, Vietnam, Thailand, Indonesia and the Philippines. The recent Korean wave is developing to the phenomenon of preferring Korean culture, product, Korean and Korea itself. As a result, the number of foreign tourists visiting Korea is showing the continuous bullish trend and the Korean sightseeing market for foreign tourists is rapidly developing in quantitative aspect.

Nevertheless, the tourism balance is failing to escape from a deficit and it has largely extended every year (given in Table 1). To increase tourism revenue, the competitiveness of Korean tourism industry should be improved innovatively, and there is necessity for pursuing a way to provide various tour products that foreigners can purchase. Especially, it is necessary to develop a traditional tourist souvenir which is closely related with our culture because the foreign tourists want to do or buy something special for cherishing one's memory.

A craft is a representative souvenir that symbolizes the country and it is a highly valuable collection. Also, it plays pivotal role in effectively introducing the tradition and culture to the world. And, a craft industry is one of the country-specific industries that present an artifact combined with traditional culture and the identification of the ethnic group. It is a cultural industry of dramatically growing demand in direct proportion to income levels and cultural life of modern people so that it is a promising industry that can leap into the luxury goods industry.

The craft industry of South Korea has a growth potentiality based on excellent tradition and cultural heritage. Despite its potential of growth, Korea's craft industry is beleaguered among China which has price competitiveness and Europe which has high quality design and brand value. The situation is due to lack of awareness on the actual condition of craft industry, the financial structure of small-scale, the distribution structure of pre-modern and the absence of a marketing strategy. Also there weren't actual government policy given with the long term vision and strategy which can lead the worldwide flow. Thus, Korea's craft industry is still trapped in the level the folk craft industry.

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Table 1. Tourism Balance (unit: US\$ million)

Year	2009	2010	2011	2012	2013
Amount	-1,268	-3,987	-3,184	-3,138	-3,640

<Source: Korea Tourism Organization, 2014>

To exchange Korea's craft industry as 21 century's leading cultural industry, optimum industry of high employment creating and regional special industry, the powerful global industry which can use and maintain Korean wave, we need to make research on actual condition. Furthermore, based on this research tactic road map and the vision which can lead the future of Korean craft industry should be built to consider the counter measures of cultural products.

Much research has been concentrated on analyzing the problems of the craft industry, and proposed methods to improve the craft industry. Jeoung¹ examined support projects of government for the craft culture industry and compared support policy cases in five advanced nations. Shin² dealt with the concept of cultural products and the peculiarities of cultural crafted products. Lee and Soh³ studied the foreign tourist's preferences for general color and design as well as the differences and commonality of their purchasing behavior. Kim⁵ conducted a SWOT analysis for Korean and foreign glass studios, and suggested realistic measures to develop Korean glass crafts. Song⁶ suggested the possibility of developing modern culture products using traditional lady's art craft work such as embroidery, patchwork, quilting and knot. Kwak and Lee⁹ identified the realistic position of tourism craft product and presented the ways for growing tourism craft product with regional characteristic. Kim and Kim¹¹ surveyed the current situation of on-line marketing for adapting the SNS marketing into on-line shopping providing traditional crafted products.

However, almost the whole researchers have suggested the vitalization of the craft industry and developed cultural products using the tangible and intangible cultural resources of each region by considering only Koreans as a consumer of crafts. Moreover, previous studies using survey on craft consumption realities have derived the statistical results without the analysis of cultural trait and customer's purchase intention.

Generally specific cultural trait acts as an alternative factor for customers to evaluate the crafts product. When facing unknown or foreign products which cannot be evaluated, customers infer the product to cultural trait

and form some kind of belief. And customer's purchase intention is a psychological state that can be driven into action if the environment or condition is properly managed. Both cultural trait and purchase intention affect customer's purchasing decisions. That is, if we can predict what kind of crafts foreigners want to buy, we can make a plan for revitalization of craft industry.

Therefore, the purpose of this paper is to study and understand the preferences and purchasing behaviors of foreigner about Korean crafts. For this, we investigate the recognition of Korean craft from survey of foreigners, and analyze the factors that affect recognition and purchasing by using the data mining technique to provide a vitalizing measure of Korean crafts industry.

2. The Analysis of Investigation

2.1 The Analysis of Survey

For the survey, the questionnaire is composed of 35 questions that 23 questions are about the awareness of homeland's crafts and 12 questions are about the awareness of Korean craft. The survey is conducted on 248 Malaysians in UTM during 30 days (2012.5.1-30).

To the question that asked about purchasing place of homeland's crafts, the respondents answered as depicted in Figure 1. And, the reason of purchasing crafts is shown as depicted in Figure 2.

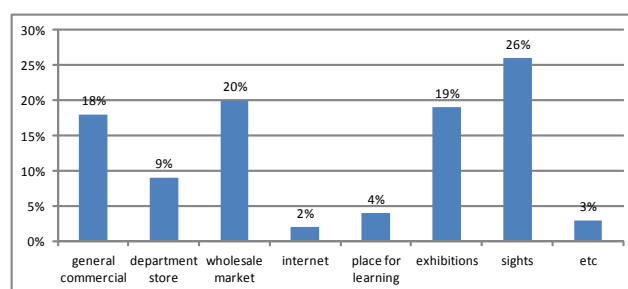


Figure 1. The purchasing place of homeland's crafts.

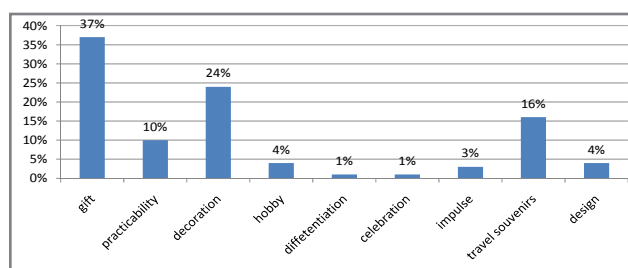


Figure 2. The reason of purchase.

To the question that asked about the important things when making a purchase, the respondents selected two reasons in ordered as depicted in Figure 3.

77% of respondents knew about Korea via K-dramas and K-pop, and 10% of them visited Korea. Also 35% of respondents are aware of Korean crafts and the information sources of the crafts are shown as depicted in Figure 4.

To the question that asked about representative craft according to material in their residence, 51% of the respondents answered wood, 19% answered textile, and 13% answered ceramic. And, the craft that is representing its region is recognized as interesting craft, and it then leads to purchasing as depicted in Figure 5.

The interest and purchase of Korean crafts according to material are shown as depicted in Figure 6. Just like homeland's crafts, they are interested and purchased in the order of wood and textile. That is, even though the crafts are from foreign country, they had a high purchasing power if the crafts were representative in their own region.

When the crafts are classified by purpose, the interest and purchase of Korean crafts are shown as depicted in Figure 7. Accessory that ranks first of interest is the actually mostly purchased just like homeland's crafts.

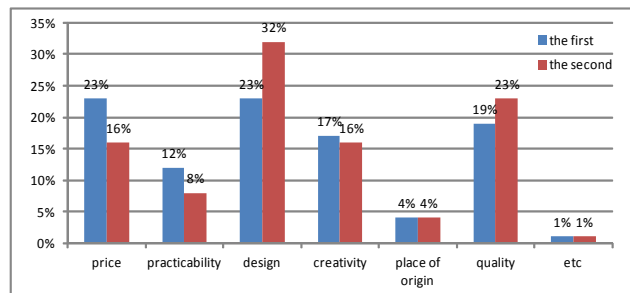


Figure 3. The importance factors of purchase.

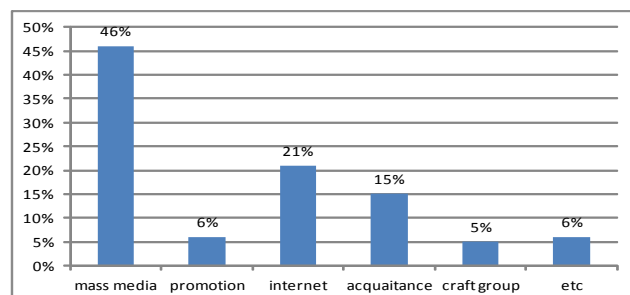


Figure 4. The information sources of Korean crafts.

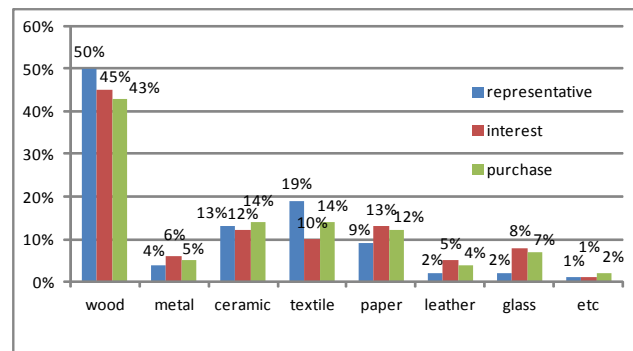


Figure 5. The preference of homeland's crafts according to material.

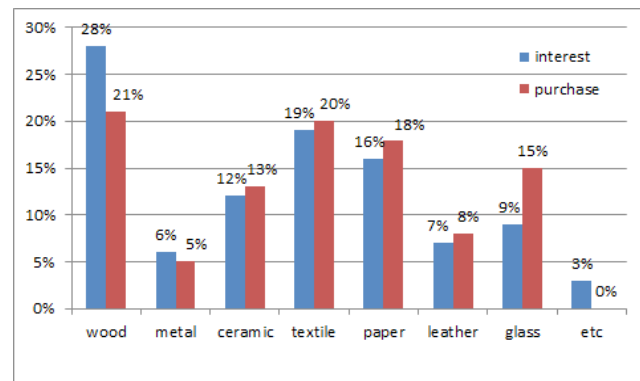


Figure 6. The preference of Korean crafts according to material.

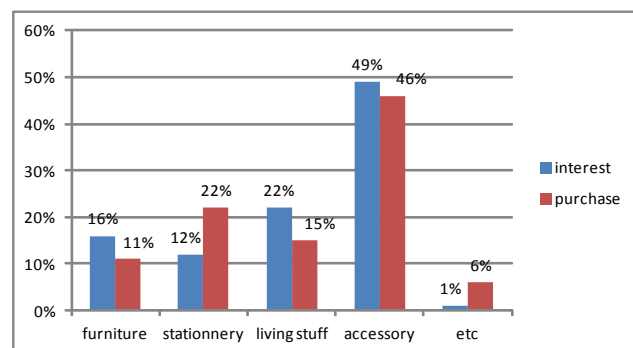


Figure 7. The preference of Korean crafts according to purpose.

The importance of each factor that respondents consider when purchasing Korean crafts is depicted in Figure 8.

And, the satisfaction of Korean crafts which respondents purchased is shown as depicted in Figure 9.

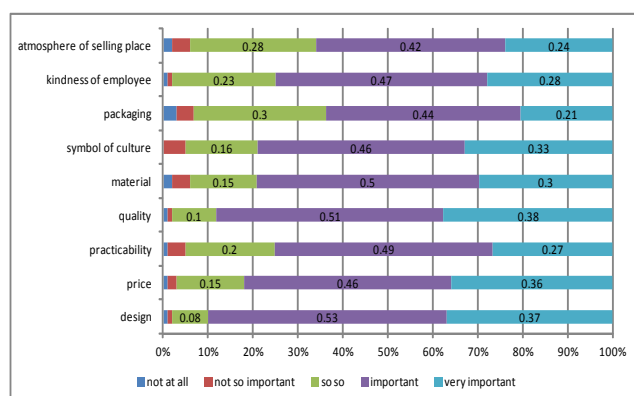


Figure 8. The importance of purchasing criterion.

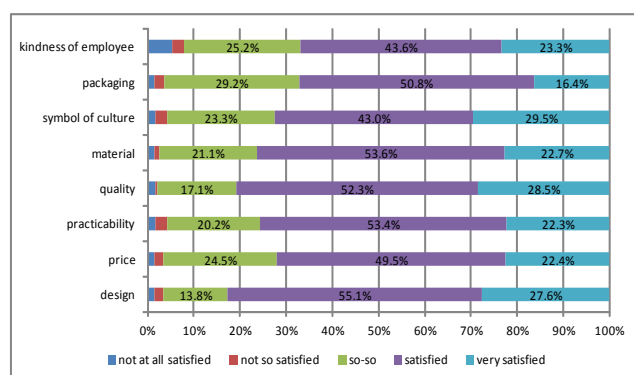


Figure 9. The satisfaction of purchased Korean crafts.

2.2 The Analysis of Data Mining

The data mining analysis is the process of posing various queries and extracting useful information, patterns and trends often previously unknown from a data set as shown in Figure 10.

The key to creating a mining model is the data mining algorithms such as clustering, association, sequence detection and classification, which make it easy to build a comprehensive solution for a variety of projects, including market basket analysis, forecasting analysis, and targeted mailing analysis.

The decision tree model that is used extensively for classification, examines how each input attribute in the dataset affects the result of the predicted attribute, and then it uses the input attributes with the strongest relationship to create a series of splits, called nodes. The model seeks to find a combination of attributes and their states that create a disproportionate distribution of states in the predicted attribute, therefore allowing you to predict the outcome of the predicted attribute⁷.

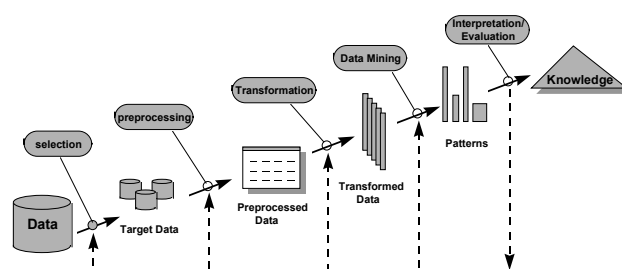


Figure 10. The process of data mining.

To get some more useful information, we use the data mining analysis. Particularly, the decision tree technique is carried out to find the significant factors about purchasing Korean craft using the SAS E-miner.

The code for distinguishing between purchaser and non-purchaser of Korean craft is set as a target variable and input variables are selected using the variable selection node of E-miner that supports variable selection by R^2 or Chi-square statistics between target variable and input variable. As a result, 16 input variables among 78 variables are selected such as material and purpose of crafts, reason and place of purchasing, whether they have been to Korea, whether they recognize Korean crafts, the important factor of purchasing Korean craft, etc.

The results show that a decision of buying Korean crafts are related to whether they visited Korea, the material of interest craft, the practicality of purchasing Korean crafts, the dissatisfaction of homeland's craft, and whether they recognize Korean craft as depicted in Figure 11.

Total 245 cases that consist of 92 purchasers and 153 non purchasers are used for building a decision tree model. The first criterion of split is the experience of visiting Korea and the data set are divided into 25 cases which have experience visiting and 220 cases that have no experience visiting Korea.

35 (22.7%) respondents who have never been to Korea and were interested in materials such as wood, metal, ceramic and textile have purchased Korean craft and 119 (77.3%) answered they haven't purchased Korean craft.

And, respondents who have never been to Korea and were interested in materials such as paper, leather and glass/jewelry 36 (54.5%) answered they have purchased Korean craft and 30 (45.5%) answered they haven't purchased Korean craft. Among them 13 respondents (81.3%) who answered the important factor of purchasing Korean

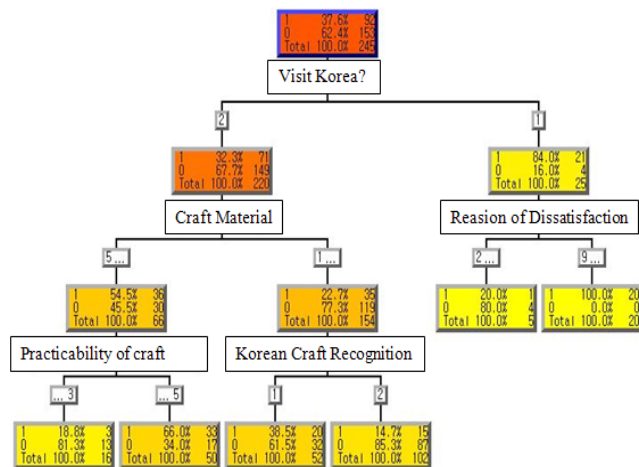


Figure 11. The factors of purchasing decision.

craft-practicability is below normal has shown that they haven't purchased Korean craft.

Additionally, the decision tree technique is carried out to find the significant factors about purchasing own country's craft. The code for distinguishing between purchaser and non-purchaser of homeland's craft is set as a target variable and 14 input variables are selected such as reason of purchase, design, price, practicality, material, purpose, historic symbolization, residence, etc.

The decision tree's results for finding a purchase factors between buyer and non-buyer are shown as depicted in Figure 12. According to this result, the factors depend on design, the purpose of interest crafts and price.

Data for building a decision tree model consist of 221 buyers and 27 non-buyers. The first criterion of split is the importance of design when buying crafts and the data sets are divided into 10 cases which the design is not matter and 238 cases that the design is important.

For the people who answered the design is important, the result shows that 217 respondents (91.2%) have an experience of purchase and that 21 respondents (8.8%) have no purchasing experience.

193 (93.7%) respondents who answered the design is important and purpose of interest crafts is furniture, living stuff and accessory, have a experience of purchase, and that 13 (6.3%) have never purchased. 24 (75%) respondents who answered the design is important and purpose of interest crafts is stationary, have an experience of purchase and 8 (25%) haven't purchased homeland's craft. Among them, 17 (94.4%) excluding respondents who answered the price is very important, have purchased own country's crafts.

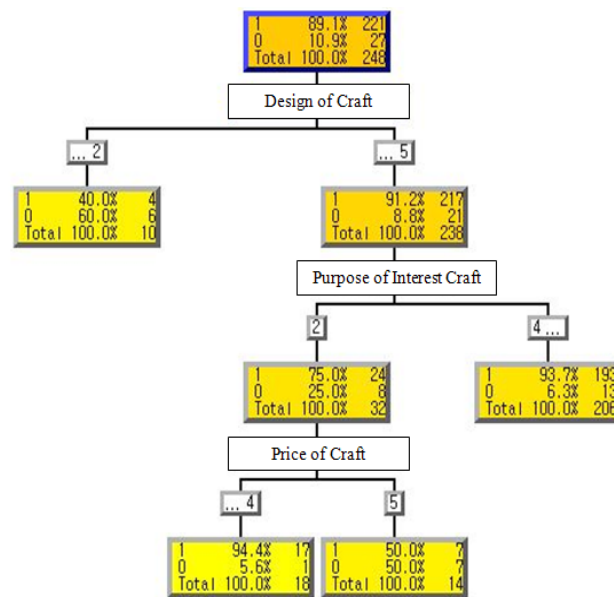


Figure 12. The purchasing factors of homeland's crafts.

On the other hand, we figure out that the foreigners consider the handicrafts more valuable and are proud of using the crafts. Also, the foreigners use crafts in their daily lives so that the design and practicality are more important factors for purchasing crafts of them. Thus, we need to develop a revitalization strategy that is suitable for foreigners because the craft industry is changing as a big market.

3. Concluding Remarks

A craft industry in South Korea has a growth potential based on excellent tradition and cultural heritage so that it is a promising industry that can leap into the luxury goods industry. To exchange Korea's craft industry as 21 century's leading cultural industry, we need to understand the preferences and purchasing behaviors of foreigner about Korean crafts.

In this paper, we investigated the recognition and preference of foreigners about Korean craft using questionnaire survey, and analyzed the factors that affect purchasing Korean craft using the decision tree model of data mining. And we obtained the meaningful results for revitalization of Korean craft industry.

As a further research, it is necessary to conduct the survey considering the people of variety country and we will suggest a revitalization strategy based on the results of this study.

4. Acknowledgement

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