Abstract—This study investigates the relationship between man-nature orientation, ecological effect, attitude toward green purchase, green perceived value, subjective norm and green trust of green electronic products purchase intention. To do so, a survey was conducted by distributing 450 questionnaires in 3 selected IT malls in Beijing, China. The Pearson Correlation was used for the data analysis. According to the hypothesis testing results, all of the null hypotheses were rejected. All variables were verified as factors that positively affect green purchase intention. Based on these results, it can help government and green marketer to better understand how environmental issues influenced customer’s attitude toward green purchase intention, and what factors affected customer’s green purchase intention. As a result, it seems that the government needs to adjust low or regulation to remain customer’s environmental concern; the green marketer needs to develop business strategy to increase customer perceived value and trust to increase green purchase intention.

Keywords—Green electronic products, environmental, man-nature orientation, ecological effect, attitude toward green purchase, green perceived value, subjective norm, green trust and green purchase intention.

I. INTRODUCTION

Currently, China is the largest electronic products manufacturing in the world. But at the same time, Head (1996) [8] stated that the problem of environmental degradation has been going on for a longtime. An electronic industry brings serious environmental disasters to China that not only destroys the natural environment but also endanger human health. Such as hazards material “Lead” which polluted water and air even human body. Fortunately, there are more and more Chinese citizens who have realized the case of environmental problems, which are rooted in the catastrophic pollution from the worldwide industrial production activities (Chen, 2011) [5].

Previous studies stated that man-nature orientation, ecological effect, attitude toward green purchase, green perceived value, subjective norm, and green trust is an important factor of customer green purchase intention, perceived value and customer satisfaction is an important factor of customer loyalty.

In this study, the researcher was focused on the factors influence customer’s attitude toward intention to purchase green electronic products. Therefore, the researcher focuses on the relationship between man-nature orientation, ecological effect, attitude toward green purchase, green perceived value, subjective norm and green trust towards green electronic products purchase intention at an IT mall in Beijing, China. The researcher was focused on the customers who have no experience but the intention to purchase green electronic products at an IT mall in Beijing, China.

II. LITERATURE REVIEW

A. MAN-NATURE ORIENTATION

Man-nature orientation can be defined as the friendly performance of humans toward nature, because of the love of nature and the performance of protecting nature behavior (Churchail, 1979) [6]. Miles (1992) [15] defined Chinese always like to keep things like what they are. This concept is published in Tao Te Ching, Lao Tzu who has written this classic text and impact Chinese way of thinking for more than 1000 years.

B. ECOLOGICAL EFFECT


C. ATTITUDE

Attitude can be defined as the degree that an individual expresses his or her liking or dislike to measure a particular behavior in question (Ajzen, 1980) [1]. Thus attitude as a factor to predict consumer’s buying intention and buying behavior,
and the consumer has a more positive attitude toward an action; the consumer has a high intention that will lead to performing the action under their control. Kassarjian (1971) [10] stated that an individual’s attitude is a determining factor that helps forecast the relation of the protection against air pollution activities.

D. PERCEIVED VALUE

Petterson and Spreng (1997) [18] defined green perceived value as the consumers’ overall evaluation of green products and service, and it based on if it will meet the consumers' environmental protection aspirations, sustainable development expectations as well as green demands. Perceived value is represented as the net benefit of the consumers’ overall assessment through the evaluation of a products or service (Bolton and Drew, 1991) [2].

E. SUBJECTIVE NORM

Subjective norm is represented as an individual’s perceived pressure from society to perform their necessary actions. Ajzen (1991) [1] Mentioned subjective norm as a symbol of social factors, the personal subjective influenced by social pressure, so it influences persons to think about whether they should perform a specific behavior. Lee (2008) [12] pointed out that the current society and social influences have a key role to promoting the purchase of green products, especially in the adult population. Moreover, Kalafatis et al (1999) [9] mentioned the friends, parents, religious organizations and other unique reference of personal subjective norms.

F. GREEN TRUST

Green trust is a willingness to depend on one object based on the belief or expectations resulting from its credibility, benevolence, and ability about the environmental performance (Ganesan, 1994) [7]. Rousseau et al., (1998) [19] mentioned trust is the individual with the positive expectation to accept the other party’s behavior or intention.

F. INTENTION

O’keefe (2002) [16] defined the behavioral intention as the most useful factor to predict the individual’s action under many circumstances including those in the “green market”. Intention can be explained as the concept of wants that consumers want to do, it also help to predict individual’s behavior feasibility in the future. Othman (2000) [17] stated that the idea of intention might have influenced the consumer making purchase decisions towards the green products.

III. RESEARCH FRAMEWORK AND METHODOLOGY

A. Research Framework

Base on the several previous usefully theoretical frameworks as a base knowledge to help the researches to improve and create a new research framework to study the green electronic products purchase intention at IT mall in Beijing, China. In the conceptual framework, green electronic purchase intention, the dependent variable, was affected by six independent variables; man-nature orientation, ecological effect, attitude toward green purchase, green perceived value, subjective norm, and green trust. The conceptual framework is shown in Fig.1. There were 6 hypotheses formulated based on the conceptual framework and they are shown as follows:

- H1: There is a relationship between man-nature orientation and consumer’s attitude toward green electronic products.
- H2: There is a relationship between ecological effect and consumer’s attitude toward green electronic products.
- H3: There is a relationship between consumer’s attitude and intention to purchase green electronic products.
- H4: There is a relationship between green perceived value and intention to purchase green electronic products.
- H5: There is a relationship between subjective norm and intention to purchase green electronic products.
- H6: There is a relationship between green trust and intention to purchase green electronic products.

![Fig.1. The factors affecting customer’s attitude toward intention to purchase green electronic products at an IT mall in Beijing, China.](http://dx.doi.org/10.15242/ICEHM.ED1014041)
study collected total 450 data from 3 selected IT mall, which are 150 questionnaires from each.

**Step 3: Convenience Sampling**

Convenience sampling means the sampling refer to pick up the unit or individual who is convenience or available to complete the questionnaires by Zikmund (2003) [20]. The convenience sampling method was used in this research to collect data from anyone who was available. In this research, the researcher distributed the questionnaires to customers who has never purchase green electronic products but intent to purchase electronic product and available to answer the questionnaire at the 3 selected IT mall in Beijing, China.

### IV. Research And Findings

There are six hypotheses set up to be tested according to the request of this research. A Pearson Correlation Coefficient test is applied to examine the relationship between each independent variable and dependent variable. After analyzing the hypotheses, all the null hypotheses were rejected. The results are summarized as follows:

![Table of Hypotheses Testing](image)

**V. Summary and Conclusions**

The researcher focused on the man-nature orientation, ecological effect, attitude toward green purchase, green perceived value, subjective norm, green trust and demographic factors to determine customer green electronic products purchasing intention based on the data analysis. Accordingly, the highest percentage of all respondents were male, with aged between 21 to 25 years old, has been studying at university with a monthly income less than 2,000 Yuan. Moreover, for hypothesis testing, the data had been analyzed by using SPSS program (Statistical Package for the Social Science) to test the hypotheses and find the results for this research.

According to the findings of the (6) hypotheses, all hypotheses have positive relationship between each variable, there was a weak positive relationship between man-nature orientation and attitude toward green purchase, ecological effect and attitude toward green purchase, attitude toward green purchase and green electronic products purchase intention; there was a moderate positive relationship between green perceived value and green electronic products purchase intention, subjective norm and green electronic products purchase intention; there was a strong positive relationship between green trust and green electronic products purchase intention.
VI. RECOMMENDATIONS

This study contributes to the knowledge within the green electronic products industry and relative industries, even government, to provide a high quality of green electronic products in Beijing, China. According to the data analysis of this study, all of the variables in this conceptual framework had significant values. Therefore, here are several recommendations about strategies and plans to develop and improve the green market to attract more potential green customer in the future, the researcher would like to suggest several recommendations as follows:

According to the result of hypothesis one, two and three, man-nature orientation, ecological effect and attitude toward green purchase has significant relationship on customer green electronic products purchase intention as a weak relationship. It implies that, the China government should encourage citizens environmental concerns, to teach environmental education to the different levels of the country’s education system, cooperate with the business community to operate the green concept to build customer’s positive green purchase attitude through the internet, television, radio, newspaper and textbooks.

The result of the hypothesis four showed that, there was significant relationship between green perceived value and green electronic products purchase intention. Kotchen and Reiling (2000) [11] stated that perceived value is the benefit that a customer expects that they will get from the products or service. As a result, if the perceived value matches or higher than their expectation it would bring satisfaction and will deliver a purchase. If the marketer wants to succeed in this new green challenge, they should maximize the advantage of the green products, make it more valuable, durable and environmentally protected. It should be good for innovation and also follow the regulation or laws to control the whole product life cycle since producing, packaging, contributing, and recycling to make sure the products has “environmental friendly” features, such as making with green labeling which can help people easily recognize the difference between green and non-green products.

The result of the hypothesis five indicated that, subjective norm has significant relationship with green electronic products purchase intention. Based on the Chinese culture, Chinese people are easily affected by people around them, therefore, researcher would like to suggest the marketer to use special ways to do marketing promote, such as hiring popular or well-know person as green products ambassador to operating green advertising and the social influence of celebrities could help green marketers send a positive message to the customers.

According to the result of hypothesis six, green trust has significant relationship with green electronic products purchase intention. In order to enhance green trust in the green electronic products, green marketers should build their trust level as high as they can, any type of certificates that can improve how trustworthy a products is, which will consequently encourage customers to feel more comfortable purchasing green products. To try to build trust in the market; green marketer should follow the steps of information openness which shows all of the materials to the customers.

FURTHER RESEARCH

First, this study focused on some factors affecting customer who have no experience in green electronic products purchase intention at IT mall in Beijing, China only. However, study in the future could be designed for the actual green electronic product user within satisfaction as an important factor to help the researcher to get better understand of customer’s expectations from purchasing green electronic products. Second, this study only analyzed the factors that affect the customer’s green purchase intention. Future studies can examine the green purchase behavior, in order to increase study’s practicability. Third, the population in this study only in Beijing, China, different characteristics of customers could be found within different cultures, thus future study can consider non-Chinese customer as a population of research. Four, this study was limited in the understanding of green electronic products purchase intention. In further studies, the researcher can explore more factors to analyze green products; also the researcher would like to suggest a new topic, such as the perception toward green products packaging labels, and after-sales service about green products.

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