# Research on Purchase Decision Factors to TV Home Shopping Product: Digital • Home Appliance 

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#### Abstract

Purpose - The purpose of this research was to suggest purchasing decision factors through understanding the context of purchasing behavior and to figure out variables related to purchasing decision, purchasing cognition, and attitude.


Research design / data / methodology - By random sampling, 200 consumers who are over 20, have purchased Digital'home appliance on TV home shopping, and have lived in the Seoul area were chosen as sample subjects. Questionnaires data were obtained from all subjects by self-administration method.

Results - Result of analysis could be summarized as following. Analysis of the cognition of digital/home appliance product features, and influence of digital/home appliance product feature to purchasing intention are presented in the following order; price (3.50), diversity (3.10), brand (3.00). Also, analysis of the cognition of TV home shopping feature and influence of TV home shopping feature to purchasing of digital/home appliance are presented in the following order; awareness (3.63), safety of delivery (3.38), safety of transaction (3.28), product test (3.27).

Conclusions - Purchasing attention of TV home shopping features presented difference in awareness, safety of delivery, safety of transaction, and product testing factors. In order to vitalize home shopping, impossibility of quality confirmation should be overcome and reinforcement of brand power should be considered.

Keywords : TV Home Shopping Product, Purchase Decision Factor, Purchasing Behavior.

JEL Classifications : L81, M20, M31, R22.

## 1. Introduction

The consumer market has been segmenting and diversifying

[^0]recently. Value of information and time are more important than physical value. Consumers' behavior has shifted from the preference of low price to time and energy saving, and consumers now prioritize the convenience factor when shopping (Jung, 2007).

In addition to the traditional distribution system, new distribution industries such as home shopping, which means direct marketing by use of catalogue, computer, and CATV, has became popular recently. Consumer needs and purchasing patterns are also diversifying. It is home shopping which presents more interest and is now more popular than before. Home shopping considers the customer's convenience, so it has become a big market with change of lifestyles.

Even though Doody and Davidson (1967) predicted innovative growth of home shopping, it was in 2000 that home shopping aroused more serious interest. Home shopping, which is as new distribution system without limit of space and time, has experienced a very sharp growth rate through maintaining the balance between the requirements of customer, such as convenience and efficiency, and those of manufacturers, such as reducing distribution margin and increasing production line. Growth of Income, increase in female workers, and change of lifestyle, such as convenience, preferred tendency in shopping, increases of service requirements, and credit purchasing, are all factors that have contributed to the growth of consumers' interest in home shopping. Corporations should have a differentiation strategy and service to survive and grow under the competitive, segmented market through satisfying consumer needs. TV home shopping is one of the business strategies with vertical marketing, a distribution system, which distributes product and service through wholesale and retail stores (Ahn, 2010).

In order to help to establish marketing strategy for corporations, the purpose of the research was to determine purchasing decision factors through understanding the purchasing contexts, whether variables related to purchase decision, represented as purchasing intention and attitudes, and research of attributes for purchasing decision.

Goals of the research were as follows;

1. Analysis of differences of digital/home appliance purchasers based on demographic factors.
2. Analysis of differences of purchasing decision factors of digital/home appliance purchasing based on product features.
3. Analysis of differences of purchasing decision factors based on TV home shopping features.
4. Based on these above analyses, provide effective marketing methods for TV home shopping.

## 2. Theoretical Background

### 2.1. Concept and Feature of TV Home Shopping

Home shopping can be interpreted as shopping at home and is used recently as a new distribution method. In other words, it is the process of purchasing products without visiting the store. This is a terms focused on behaviors which is different from the location and situation of the consumer (Kim, 1998). Home shopping originated in the USA originally to provide services for disabled and remote consumers (Gang, 1995). However, its development comes from the development and popularization of internet communication which resulted in a change of life. Convenience preference factors, income growth, increases in the average age of the population and life expectancy, and popularization of credit cards have accelerated the development of the TV home shopping industry. The pros and cons are highlighted below;

The major benefit from the point of the advertiser is the increase in advertising efficiency with lower cost than TV advertisement and from the point of the consumer is the increase in cost efficiency of purchasing products through saving the consumers' time, money and endeavor. However, product restrictions, delivery problems, impulse purchasing could be possible downsizes of the TV home shopping industry.

TV home shopping could satisfy consumers' needs, such as the need to obtain product information, deal with the salesperson directly and purchase products at a lower price than the price of the market (excluding online), and have the produce delivered to consumers' residence (Hong 1995). However, the disadvantage of TV home shopping is the impossibility of quality confirmation. The gap comes from image distortions, exaggerations of the product benefits, and impulse purchasing, which are also serious problems (Ahn, 2010).

### 2.2. Constituents of TV Home Shopping

### 2.2.1 Product

Beauty, Fashion, and Sport/health products, and Digital/Home appliances are popular items to sell on TV home shopping. Beauty products include cosmetics, beauty instruments, diet goods, etc., which requires high emotional involvement for decision making. Fashion products are sorts of items which include apparels, accessories - casuals, suit, golf wear, hand bag, jewel - which are affected by high emotional and feeling involvement for decision making. Sports/health items are sorts of items which include running machine, and sky/golf/climbing equipments mainly related to health. Those are not necessities but decision making mostly depends on personal preferences and high involvement.

Digital/home appliances are sorts of items that includes TV, computer, digital camera, oven, and electric range, which are all expensive products. These are high involvement products which are affected by function, reliability, and terms rather than emotion. Food and kitchen items - kimchi, fish, fruit, and kitchen utensils - are low
involvement items affected by rational decision making rather the decision making heavily influenced by emotions and feelings.

### 2.2.2 Methods of Communication

Consumer attraction by use of TV as a communication method is the goal of TV home shopping. Message methods of home shopping includes linguistic and non-verbal form simultaneously for advertising and communicating the information of the product. Considering internal factors, the amount of sale largely depends on ability of the shopping host because the host provides information about the product through the TV channel. The ability and characteristics of the informer are presented immediately, which means the influence from the shopping host - provides various information for purchasing product - is very crucial.

### 2.2.3 Customers

Housewives - as prime TV viewers - are major customers of TV home shopping. Among them, housewives in their 30 s and 40 s are considered the most. As told before, impulse purchasing is very pervasive in home shopping, so female customers affected from emotion is dominant.

### 2.3. Advanced Research of TV Home Shopping

As mentioned Doody and Davidson's research (1967), many research predicted growth of home shopping as an innovative retail method. Consumer interest to home shopping began in 2000, while academic research began in 1990 and researches were "Success factors of marketing through TV home shopping" (Lee 2003), "Effect of housewares price to sales amount in TV home shopping" (Cho et al, 2009), "Impulse purchasing of TV home shopping customers" (Lee, 2005), and so on.

Concerning this research, Gang's research in 1955, "Research on purchasing process of TV home shopping users" categorized reasons of TV home shopping purchasing as relative advantages, sufficient information, and situational factors. Relative advantages included time, save endeavor, reliability, and convenience. Kim's research in 1966, "Research on customer attitude, advantage pursued and risk perception base on purchasing tendency in TV home shopping" argues convenience pursuit and adventurous sprit affect purchasing intention. And one who has high purchasing intention evaluates time saving as the biggest advantage. while risk of delivery, watching, and unplanned purchasing were highly perceived. Choi and Kim's research in 2003, "Comparative methods of apparel purchasing characteristics between Internet shopping mall and cable TV home shopping" suggested that sex, educational age, and incomes affected access to and the use of the internet. The low cost, time reductions in shopping time, and convenience are prime factors for the use of internet shopping mall. Informativeness, selectivity, involvement, and frequency of TV viewing affect the usage of TV home shopping and purchasing intention (Lee, 2009). Cho (2010) argues that food garnered high loyalty on
internet shopping mall, and the design of the homepage, availability, brand reliability, consumer service, and convenience are prime factors of purchasing. Chung's (2007) "Research on purchasing decision factors of TV home shopping" presented high purchasing intention of beauty product on Home shopping. Design and diversity of products presented a litter high cognition, and brand and quality presented a litter lower cognition. Ahn's (2010) "Purchasing decision factors and repurchasing intention on TV home shopping" presented price as the prime purchasing decision factor and the intention are affected from price and ability of shopping host.

As reviewed, most of advanced research focused on customer attitude rather than purchasing decision factors. Litter researches have focused on purchasing decision factors of digital/home appliance. This research focused on purchasing decision factors of digital/home appliance by empirical analysis.

## 3. Substance and Methods of Study

### 3.1. Substance

This study focuses on draw of purchasing decision factors through understanding of purchasing context, variables related to purchasing decision, and whether it affects purchasing intention and attitude.

Even though purchasing decision factors of TV home shopping could be varied, this research analyzes product features and TV home shopping features.

Price (Burt \& Gabbott, 1995; Woodside \& Trappey, 1992), quality (Arnold, et al, 1996), and diversity (Arnold, et al, 1996; Baker et al, 1992) are considered as influential factors, This research analyzes price, quality, diversity with design, and brand as product feature. TV home shopping features are also very influential to purchasing decision, such as approval, security system (Egger, 2000; Yun, 2000), personal information policy (Schoder \& Yin, 2000; Wagner \& Rydstrom, 2001), and certification mark(Camp, 2000; Tan \& Thoen, 2001), and those are very important to sales amount. Purchasing behaviors are affected by product feature and TV home shopping features.

This research focuses on draw out purchasing decision factors through understanding of purchasing context, variables related to purchasing decision, and whether it affects purchasing intention and attitude.

Hypothesis are
Hypothesis, 1; Usage condition based on consumers' characteristics of TV home shopping is different.
Hypothesis, 2; Features of digital/home appliance affect purchasing intention on TV home shopping positively.
Hypothesis, 3; Features of TV home shopping affect purchasing intention on TV home shopping positively.

<Figure 1> Methods of Study

### 3.2. Methods of Study

To reach the purpose, this research includes both documentary survey and questionary survey.

### 3.2.1 Variables

Independent variable for product features are design, brand, diversity, and price, and independent variable for TV home shopping are awareness, product testing, safety of transaction, and safety of delivery. Dependent variable are customers' purchasing intentions.

### 3.2.1.1 Independent variable

(1) Product Feature Variable

Product feature variable means characteristics of the product and includes design, brand, quality, diversity, and price. Questionaries are based on Chung (2007) and Cho (2010)'s research and are based on the 5-point Lickertis scale.

## (2) Variable of TV Home Shopping Features

Variable of TV home shopping features include awareness, product test, safety of transaction, safety of delivery. Questionaries are based on Chung (2007) and Lee (2005)'s research and are based on the 5-point Lickertis scale.

### 3.2.1.2 Dependent Variable

Dependent variable are customer's purchasing intention. Purchasing intention means predicted/planned behavior and possibility of the shift that briefs and attitudes into action (Eagel etc, 1995) Questionaries are based on Lee and Bang (2004), Chung (2007)'s research and are based on the 5 -point Lickertis scale.

### 3.2.2 Data Collection and Analysis

### 3.2.2.1 Data Collection and Analysis

200 subjects over 20 that live in the Seoul area and have had TV home shopping experience or purchasing power are sampled.

Questionnaires data were obtained from all subject by self-administration method.

SPSS/PC 18.0 program was used. Frequency analysis was conducted to examine demographic factors. Chronbach's $\alpha$ was conducted to examine reliability and factor analysis was conducted to examine validity. Also cross-tabulation, ANOVA, correlation analysis, and multiple regression analyses were conduct to verify the hypothesis.

### 3.2.2.2 Questionnaire

This research composes 43 questionnaires and it includes demographic characteristics, usage condition of TV home shopping, product feature, TV home shopping feature and purchasing intention.
<Table 1> Composition of Questionnaire

| Classification | items | number of <br> question |
| :---: | :---: | :---: |
| Demographic <br> characteristics | sem, age, educational back ground, <br> job, income | 5 |
| Usage condition of <br> TV home shopping | frequency, usage motivation, price, <br> obstacle factors for usage | 5 |
| Product feature | design, brand, quality, diversification, <br> price | 19 |
| TV home shopping <br> feature | awareness, product test, safety of <br> transaction, safety of delivery | 10 |
| Purchasing intention | purchasing intention | 4 |

## 4. Results

### 4.1. Characteristics of Subjects

<Table 2> presents characteristics of the subjects. $31,5 \%$ are male and $68.5 \%$ are female of all respondents, respondents in their 20 s are $57.5 \%$, $8 \%$ are in their 30 s, $8,5 \%$ are in their 40 s, and $2 \%$ are in their 50 s.

Considering educational background, $57.5 \%$ are lower than high school, $16.5 \%$ are college graduates, $21.5 \%$ are university graduates, and $4.5 \%$ are graduates of graduate schools. Considering occupation, $48 \%$ are students, $10 \%$ are housewives, $22.5 \%$ are salary man, $9 \%$ are self-employed, $2 \%$ are civil servants, and $8.5 \%$ have specialized jobs. Considering monthly income, $6.5 \%$ earn less than 2 million won, $31.5 \%$ earn between 2 million won and 3 million won, $37 \%$ earn between 3 million won and 4 million won, $25 \%$ earn more than 4 million won.

### 4.2. The results of reliability and validity

### 4.2.1 Reliability and Validity of Product Feature Items

<table 3> presents validity of product feature items. Five items are samples, such as price, brand, design, diversity, and quality.

Cronbach's $\alpha$ of product feature items are presented as design at 0.853 , brand at 0.868 , quality at 0.804 . diversity at 0.817 , and price at 0.889 . Reliability of all items presents at 0.922 , which illustrates high reliability.

### 4.2.2 Reliability and Validity of TV Home Shopping Feature

<Table 4> presents validity of TV home shopping feature items such as awareness, safety of delivery, safety of transaction, and prod-
uct test.
Cronbach's $\alpha$ of TV home shopping feature items are presented as awareness at 0.781 , safety of delivery at 0.712 , safety of transaction at 0.801 . product test at 0.817 , and product test at 0.829 . which illustrates items' high reliability. Reliability of all items presents at 0.860 , which illustrates the items' high reliability.
<Table 2> Characteristics of Subject

| Variables |  | frequency | percentage |
| :---: | :---: | :---: | :---: |
| sex | make | 63 | 31.5 |
|  | female | 137 | 68.5 |
| age | 20years | 115 | 57.5 |
|  | 30years | 16 | 8 |
|  | 40years | 17 | 8.5 |
|  | over 50years | 52 | 26 |
| education | lower high school | 115 | 57.5 |
|  | college graduate | 33 | 16.5 |
|  | university graduate | 43 | 21.5 |
|  | graduate school | 9 | 4.5 |
| Job | student | 96 | 48 |
|  | housewife | 20 | 10 |
|  | salary man | 45 | 22.5 |
|  | self-employed | 18 | 9 |
|  | civil servant | 4 | 2 |
|  | specialized job | 17 | 8.5 |
| income | less than 2 million won | 13 | 6.5 |
|  | 2million- 3million won | 63 | 31.5 |
|  | 3million-4million won | 74 | 37 |
|  | more than 4million won | 50 | 25 |
| Total |  | 200 | 100 |

<Table 3> Validity of Product Feature

| questionnaire |  | 요인 적재치 | Cronbach' $\alpha$ |  |
| :---: | :---: | :---: | :---: | :---: |
| price | reasonable price | 0.860 | 0.889 | 0.922 |
|  | high discount rate | 0.818 |  |  |
|  | cheaper than other | 0.805 |  |  |
|  | discount price is very cheap | 0.733 |  |  |
| brand | famous brand | 0.856 | 0.868 |  |
|  | reliable brand | 0.798 |  |  |
|  | popular brand | 0.785 |  |  |
|  | preference brand | 0.778 |  |  |
| design | very fashionable | 0.795 | 0.853 |  |
|  | latest design | 0.768 |  |  |
|  | luxurious | 0.737 |  |  |
|  | tasted design | 0.619 |  |  |
| diversity | brand variety | 0.832 | 0.817 |  |
|  | diversity of product item | 0.710 |  |  |
|  | price diversity | 0.597 |  |  |
|  | various design | 0.596 |  |  |
| quality | usage of latest part | 0.803 | 0.804 |  |
|  | higher perfection | 0.771 |  |  |
|  | high quality | 0.632 |  |  |

### 4.2.3 Reliability of Purchasing Intention Items

$<$ Table $5>$ presents validity of digital/home appliance purchasing intention. Reliability of all items presents at 0.913 which means items's high reliability.
<Table 4> Validity of TV Home Shopping Feature

| questionnaire |  | 요인 적재치 | Cronbach' $\alpha$ |  |
| :---: | :---: | :---: | :---: | :---: |
| awareness | familiar home shopping | 0.875 | 0.781 | 0.860 |
|  | very famous | 0.847 |  |  |
| safety of delivery | no delivery problems | 0.831 | 0.712 |  |
|  | perfect guarantee for damaged good | 0.798 |  |  |
| safety of transaction | suggest certification mark | 0.853 | 0.801 |  |
|  | prevent privacy | 0.702 |  |  |
|  | safety of transaction | 0.560 |  |  |
| product test | provide additional service | 0.931 | 0.829 |  |
|  | information to deliverly | 0.608 |  |  |
|  | fast response | 0.603 |  |  |

<Table 5> Reliability of Purchasing Intention Items

| questionnaire |  | Cronbach' $\alpha$ |
| :---: | :---: | :---: |
| purchasing <br> intention | Will shopping on TV home shopping |  |
|  | Intend to recommend TV home shopping | 0.913 |
|  | Will tell merit of TV home shopping |  |
|  | Intend to purchase through TV home shopping |  |

### 4.3. Analysis of Usage Condition of TV Home Shopping

Usage condition items such as frequency, usage motivation, price, product, impediment factor were presented <Table $6>.41 .5 \%$ of all respondents purchased once for every $2-3$ months, and $26 \%$ of all respondents frequent 1-2 times every week. These difference may be based on sex, age, job, and income. Female, subjects in their 20s and those over 50 present high frequency, and students, salary man, and those whose income is between 3 million won and 4 million won present high frequency.

Among usage motivation items, convenience presents $27 \%$ and price presents $23.5 \%$ of all respondents. Considering demographic factors, sex, ages, job, and income present difference. Female, those in their 20s, students, and those whose income is between 3 millions won and 4 millions won present convenience and price as the two most prime motive factors for TV home shopping.

Base on price analysis, $29.5 \%$ of all respondents replied between 11 hundred thousand won and 15 hundred thousand won and $28.5 \%$ of all respondents replied between 40 thousand won and 70 thousand won. These difference may be based on sex, ages, job, and income. Females mainly purchase products between 11 hundred thousand won and 15 hundred thousand won. Student and salary man make up the most number of consumers, and those whose income is between 2 million won and 3 million won are also prime consumer.

Based on product analysis, fashion apparels present $35 \%$ and daily necessities present $25 \%$. Sex, age, and job present differences.
<Table 6> Usage Condition of TV Home Shopping

|  |  | sex |  | age |  |  |  | job |  |  |  | income/month |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | male | female | 20years | 30years | 40 years | over 50years | student | housewife | salary man | etc | 200 less than 200 | $\begin{gathered} 200 \\ \sim<300 \end{gathered}$ | $\begin{gathered} 300 \\ \sim<400 \end{gathered}$ | $\begin{aligned} & \geq 400 \text { over } \\ & \text { than } 400 \end{aligned}$ |  |
| I | every day | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 2 \\ (1) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ |
|  | 3-4times/ week | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | 16 <br> (8) | $\begin{gathered} 6 \\ (3) \end{gathered}$ | 8 <br> (4) | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 6 \\ (3) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (3) \end{gathered}$ | 4 <br> (2) | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $8$ (4) | 8 <br> (4) | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | $\begin{gathered} 17 \\ (8.5) \end{gathered}$ |
|  | 1-2times/ week | 8 <br> (4) | $\begin{gathered} 44 \\ (22) \\ \hline \end{gathered}$ | $\begin{gathered} 25 \\ (12.5) \end{gathered}$ | $\begin{gathered} 6 \\ (3) \\ \hline \end{gathered}$ | $8$ (4) | $\begin{gathered} 13 \\ (6.5) \end{gathered}$ | $\begin{gathered} 25 \\ (12.5) \end{gathered}$ | $8$ (4) | $\begin{gathered} 7 \\ (3.5) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (3) \\ \hline \end{gathered}$ | $\begin{gathered} 20 \\ (10) \end{gathered}$ | $\begin{gathered} 19 \\ (9.5) \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $\begin{gathered} 52 \\ (26) \\ \hline \end{gathered}$ |
|  | $\begin{aligned} & \text { 2-3times/ } \\ & \text { month } \end{aligned}$ | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | $\begin{gathered} 19 \\ (9.5) \end{gathered}$ | $16$ (8) | $\begin{gathered} 2 \\ (1) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 4 \\ (2) \\ \hline \end{gathered}$ | $6$ (3) | $\begin{gathered} 11 \\ (5.5) \end{gathered}$ | $\begin{gathered} 2 \\ (1) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | $\begin{aligned} & 12 \\ & (6) \end{aligned}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | 14 <br> (7) | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | $\begin{gathered} 28 \\ (14) \end{gathered}$ |
|  | 1time/month | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $\begin{gathered} 8 \\ (4) \end{gathered}$ | $\begin{gathered} 13 \\ (6.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (1) \\ \hline \end{gathered}$ | $\begin{array}{r} 7 \\ (3.5) \\ \hline \end{array}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | 6 <br> (3) | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | 6 <br> (3) | 6 <br> (3) | $\begin{gathered} 15 \\ (7.5) \end{gathered}$ |
|  | 1time/ 2-3month | $\begin{gathered} 38 \\ (19) \end{gathered}$ | $\begin{gathered} 45 \\ (22.5) \end{gathered}$ | $\begin{gathered} 50 \\ (25) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{gathered} 28 \\ (14) \end{gathered}$ | $\begin{gathered} 42 \\ (21) \end{gathered}$ | 4 <br> (2) | $\begin{gathered} 27 \\ (13.5) \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $\begin{gathered} 25 \\ (12.5) \end{gathered}$ | $\begin{gathered} 27 \\ (13.5) \end{gathered}$ | $\begin{gathered} 24 \\ (12) \end{gathered}$ | $\begin{gathered} 83 \\ (41.5) \end{gathered}$ |
|  | $\chi$ 2-value | 23.180** |  | 60.241** |  |  |  | 90.620** |  |  |  | 25.505* |  |  |  |  |
| II | inexpensive | $\begin{gathered} \hline 23 \\ (11.5) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (12) \\ \hline \end{gathered}$ | $\begin{gathered} 36 \\ (18) \end{gathered}$ | $\begin{gathered} 2 \\ (1) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 9 \\ (4.5) \\ \hline \end{gathered}$ | $\begin{gathered} 28 \\ (14.5) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{array}{r} 10 \\ (5) \\ \hline \end{array}$ | $\begin{gathered} 5 \\ (2.5) \\ \hline \end{gathered}$ | 4 <br> (2) | 14 <br> (7) | $\begin{gathered} 13 \\ (6.5) \end{gathered}$ | $\begin{array}{r} 16 \\ (8) \\ \hline \end{array}$ | $\begin{gathered} 47 \\ (23.5) \end{gathered}$ |
|  | reliability | $\begin{gathered} \hline 3 \\ (1.5) \\ \hline \end{gathered}$ | $\begin{array}{r} 18 \\ (9) \\ \hline \end{array}$ | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} \hline 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 17 \\ (8.5) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | $\begin{gathered} \hline 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{array}{r} 18 \\ (9) \\ \hline \end{array}$ | $\begin{gathered} 2 \\ (1) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{aligned} & 16 \\ & (8) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 21 \\ (10.5) \end{gathered}$ |
|  | convenience | $\begin{array}{r} 14 \\ (7) \\ \hline \end{array}$ | $\begin{gathered} 40 \\ (20) \\ \hline \end{gathered}$ | $\begin{gathered} 22 \\ (11) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (3) \\ \hline \end{gathered}$ | $8$ (4) | 18 <br> (9) | $\begin{gathered} 23 \\ (11.5) \end{gathered}$ | $8$ <br> (4) | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $\begin{array}{r} 16 \\ (8) \\ \hline \end{array}$ | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | 14 <br> (7) | $\begin{gathered} 23 \\ (11.5) \end{gathered}$ | $\begin{gathered} 8 \\ (4) \\ \hline \end{gathered}$ | $\begin{gathered} 54 \\ (27) \\ \hline \end{gathered}$ |
|  | time saving | $\begin{aligned} & 12 \\ & (6) \end{aligned}$ | $\begin{gathered} 23 \\ (11.5) \end{gathered}$ | $\begin{gathered} 19 \\ (9.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $\begin{gathered} 6 \\ (3) \end{gathered}$ | $\begin{aligned} & 10 \\ & (5) \end{aligned}$ | $\begin{gathered} 6 \\ (3) \end{gathered}$ | $\begin{gathered} 6 \\ (3) \end{gathered}$ | $\begin{gathered} 13 \\ (6.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | $\begin{array}{r} 14 \\ (7) \\ \hline \end{array}$ | $\begin{aligned} & 12 \\ & (6) \end{aligned}$ | $\begin{gathered} 35 \\ (17.5) \end{gathered}$ |
|  | events | $\begin{aligned} & 10 \\ & (5) \end{aligned}$ | $\begin{gathered} 26 \\ (13) \end{gathered}$ | $\begin{gathered} 30 \\ (15) \end{gathered}$ | $\begin{gathered} 2 \\ (1) \end{gathered}$ | $\begin{gathered} 2 \\ (1) \end{gathered}$ | $\begin{gathered} 2 \\ (1) \end{gathered}$ | $\begin{gathered} 26 \\ (13) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $4$ (2) | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 17 \\ (8.5) \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $12$ (6) | $\begin{gathered} 36 \\ (18) \end{gathered}$ |
|  | etc | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | $\begin{gathered} 6 \\ (3) \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | 4 <br> (2) | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | $\begin{gathered} 2 \\ (1) \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ |
|  | X2-value | 11.602* |  | 75.314** |  |  |  | 123.782** |  |  |  | 46.556** |  |  |  |  |
| III | 40-70 thousand | $\begin{gathered} 24 \\ (12) \end{gathered}$ | $\begin{gathered} 33 \\ (16.5) \end{gathered}$ | $\begin{gathered} \hline 44 \\ (22) \end{gathered}$ | $\begin{gathered} 2 \\ (1) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 11 \\ (5.5) \end{gathered}$ | $\begin{gathered} 42 \\ (21) \end{gathered}$ | $\begin{gathered} \hline 9 \\ (4.5) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} \hline 3 \\ (1.5) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (1) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (12) \end{gathered}$ | $\begin{array}{r} 16 \\ (8) \\ \hline \end{array}$ | $\begin{gathered} \hline 15 \\ (7.5) \\ \hline \end{gathered}$ | $\begin{gathered} 57 \\ (28.5) \end{gathered}$ |
|  | 80-100 <br> thousand | $\begin{gathered} 20 \\ (10) \end{gathered}$ | $\begin{gathered} 34 \\ (17) \end{gathered}$ | $\begin{gathered} 39 \\ (19.5) \end{gathered}$ | $\begin{gathered} 2 \\ (1) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $8$ (4) | $\begin{gathered} 27 \\ (13.5) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | 14 <br> (7) | $\begin{aligned} & 10 \\ & (5) \\ & \hline \end{aligned}$ | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | $\begin{gathered} 15 \\ (7.5) \end{gathered}$ | $\begin{gathered} 26 \\ (13) \end{gathered}$ | $\begin{array}{r} 12 \\ (6) \\ \hline \end{array}$ | $\begin{gathered} 54 \\ (27) \end{gathered}$ |
|  | 110-150 thousand | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | $\begin{gathered} 50 \\ (25) \end{gathered}$ | $\begin{gathered} 28 \\ (14) \end{gathered}$ | $\begin{gathered} 8 \\ (4) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (2) \end{gathered}$ | $\begin{gathered} 19 \\ (9.5) \end{gathered}$ | $\begin{gathered} 24 \\ (12) \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{gathered} 23 \\ (11.5) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $\begin{aligned} & 10 \\ & (5) \end{aligned}$ | $\begin{gathered} 19 \\ (9.5) \end{gathered}$ | $\begin{aligned} & 18 \\ & (9) \end{aligned}$ | $\begin{array}{r} 12 \\ (6) \\ \hline \end{array}$ | $\begin{gathered} 59 \\ (29.5) \end{gathered}$ |


|  | $\begin{gathered} 160-200 \\ \text { thousand } \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{gathered} 17 \\ (8.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | 4 <br> (2) | $\begin{gathered} 6 \\ (3) \end{gathered}$ | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{gathered} 11 \\ (5.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $14$ <br> (7) | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 22 \\ (11) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | over 210 thousand | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 2 \\ (1) \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 8 \\ (4) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 8 \\ (4) \end{gathered}$ | $\begin{gathered} 8 \\ (4) \end{gathered}$ |
|  | X2-value | 15.303** |  | 52.754** |  |  |  | 132.393** |  |  |  | 50.528** |  |  |  |  |
| IV | fashion apparels | $\begin{aligned} & 16 \\ & (8) \end{aligned}$ | $\begin{gathered} 54 \\ (27) \end{gathered}$ | $\begin{gathered} 52 \\ (26) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $18$ <br> (9) | $\begin{gathered} 42 \\ (21) \end{gathered}$ | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | $\begin{aligned} & 10 \\ & (5) \end{aligned}$ | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $\begin{gathered} 22 \\ (11) \end{gathered}$ | $\begin{gathered} 23 \\ (11.5) \end{gathered}$ | 18 <br> (9) | $\begin{gathered} 70 \\ (35) \end{gathered}$ |
|  | household items | $\begin{gathered} 13 \\ (6.5) \end{gathered}$ | $\begin{gathered} 37 \\ (18.5) \end{gathered}$ | $\begin{gathered} 32 \\ (16) \end{gathered}$ | $4$ (2) | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | $\begin{gathered} 27 \\ (13.5) \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | $\begin{gathered} \hline 24 \\ (12) \end{gathered}$ | $14$ <br> (7) | $\begin{gathered} 50 \\ (25) \end{gathered}$ |
|  | kitchen appliance | $\begin{gathered} 2 \\ (1) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 22 \\ (11) \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ (4.5) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | 4 <br> (2) | $\begin{gathered} 6 \\ (3) \end{gathered}$ | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 8 \\ (4) \end{gathered}$ | 4 <br> (2) | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (3) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 15 \\ (7.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 24 \\ (12) \\ \hline \end{gathered}$ |
|  | computer \& peripheral | $12$ <br> (6) | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | 2 <br> (1) | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | 4 <br> (2) | $12$ (6) |
|  | etc | $\begin{gathered} 20 \\ (10) \end{gathered}$ | $\begin{gathered} 24 \\ (12) \end{gathered}$ | $\begin{gathered} 13 \\ (6.5) \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | 8 <br> (4) | $16$ (8) | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | $\begin{gathered} 19 \\ (9.5) \end{gathered}$ | $\begin{gathered} 15 \\ (7.5) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 19 \\ (9.5) \end{gathered}$ | $\begin{gathered} 11 \\ (5.5) \end{gathered}$ | $\begin{gathered} 11 \\ (5.5) \end{gathered}$ | $\begin{gathered} 44 \\ (22) \end{gathered}$ |
|  | X2-value | 57.350** |  | 85.322** |  |  |  | 130.431** |  |  |  | $65.174^{* *}$ |  |  |  |  |
| V | difficulty of purchasing process | $\begin{gathered} 6 \\ (3) \end{gathered}$ | $\begin{gathered} 6 \\ (3) \end{gathered}$ | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 11 \\ (5.5) \end{gathered}$ | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | $\begin{gathered} 2 \\ (1) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 6 \\ (3) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | 8 <br> (4) | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | $\begin{aligned} & 12 \\ & (6) \end{aligned}$ |
|  | no preference product | $\begin{gathered} 8 \\ (4) \end{gathered}$ | $\begin{gathered} 29 \\ (14.5) \end{gathered}$ | $\begin{gathered} 21 \\ (10.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{aligned} & 10 \\ & (5) \end{aligned}$ | $\begin{gathered} 15 \\ (7.5) \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{aligned} & 12 \\ & (6) \end{aligned}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{aligned} & 12 \\ & (6) \end{aligned}$ | $\begin{gathered} 11 \\ (5.5) \end{gathered}$ | $\begin{gathered} 11 \\ (5.5) \end{gathered}$ | $\begin{gathered} 37 \\ (18.5) \end{gathered}$ |
|  | infringement of personal information | $\begin{gathered} 6 \\ (3) \end{gathered}$ | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{gathered} 2 \\ (1) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 4 \\ (2) \end{gathered}$ | $\begin{gathered} 6 \\ (3) \end{gathered}$ | $\begin{gathered} 2 \\ (1) \end{gathered}$ | $\begin{gathered} 2 \\ (1) \end{gathered}$ | $\begin{gathered} 2 \\ (1) \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $\begin{gathered} 4 \\ (2) \end{gathered}$ | $\begin{gathered} 15 \\ (7.5) \end{gathered}$ |
|  | unbelievable | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{array}{r} 10 \\ (5) \\ \hline \end{array}$ | $\begin{gathered} 13 \\ (6.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (6.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 13 \\ (6.5) \end{gathered}$ |
|  | inconvenience for refund | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $16$ (8) | $8$ <br> (4) | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $8$ <br> (4) | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | $8$ <br> (4) | $\begin{gathered} 6 \\ (3) \end{gathered}$ | 4 <br> (2) | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $\begin{gathered} 9 \\ (4.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 23 \\ (11.5) \end{gathered}$ |
|  | impossibility of quality confirmation | $\begin{gathered} 33 \\ (16.5) \end{gathered}$ | $\begin{gathered} 64 \\ (32) \end{gathered}$ | $\begin{gathered} 64 \\ (32) \end{gathered}$ | $\begin{gathered} 5 \\ (2.5) \end{gathered}$ | $\begin{gathered} 7 \\ (3.5) \end{gathered}$ | $\begin{gathered} 21 \\ (10.5) \end{gathered}$ | $\begin{gathered} 53 \\ (26.5) \end{gathered}$ | $\begin{gathered} 8 \\ (4) \end{gathered}$ | $\begin{aligned} & 16 \\ & (8) \end{aligned}$ | $\begin{gathered} 20 \\ (10) \end{gathered}$ | $\begin{gathered} 4 \\ (2) \end{gathered}$ | $\begin{gathered} 27 \\ (13.5) \end{gathered}$ | $\begin{gathered} 38 \\ (19) \end{gathered}$ | $\begin{gathered} 28 \\ (14) \end{gathered}$ | $\begin{gathered} 97 \\ (48.5) \end{gathered}$ |
|  | etc | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.5) \end{gathered}$ |
|  | X2-value | 6.184 |  | $63.757^{* *}$ |  |  |  | 75.286** |  |  |  | 27.577 |  |  |  |  |

* p < 0.05, ** p < 0.01

I-frequency, $\Pi$-usage motiv, II-price, IV -product V-impediment factors

Fashion apparel is the main purchase product for females. those in their 20 s , and students, and these groups are the main consumers. Those whose income is between 3 million won and 4 million won are also main customers.

Based on impediment factors analysis, $48.5 \%$ present impossibility of quality confirmation, and $18.5 \%$ present no preference product. Age and job present differences. Those in their 20s and students present impossibility of quality confirmation as the most impediment factor.

### 4.4. Influence of Product Feature to Purchasing Behavior

### 4.4.1 Different Cognition of Digita//Home Appliance on TV Home Shopping

<Table 7> presents cognition of feature of digital/home appliance on TV home shopping such as price, brand, design, diversity, and quality. Price as most cognition feature presents an average of 3.50 , and were followed by diversity (3.10) and brand (3.00). Quality (2.94) and design (2.80) present lower cognition than other features.

Price presents differences based on age, job, income, those in their 50 s , housewives, students, and those whose income is between 3 million won and 5 million won present cognition of TV home shopping as low price. Brand presents differences on age and job items. Brand is important for students, those in their 20s, and housewives. Design presents differences on sex, age, and job. Females, those in their 20s, students, and those whose income is between 3 million won and 4 million won present importance of design. Diversity presents differences on income. One whose income is between 2 million won and

3 million won presents diversity of TV home shopping. Quality present no difference in demographic factors.
<Table 7> Cognition of Product Feature in TV Home Shopping

| Variables |  | price | Brand | Design | Diversity | Quality |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| sex | male | $3.63 \pm 0.791)$ | $2.91 \pm 0.65$ | $2.85 \pm 0.59$ | $2.83 \pm 0.85$ | $2.96 \pm 0.79$ |
|  | female | $3.50 \pm 0.70$ | $3.03 \pm 0.73$ | $2.87 \pm 0.62$ | $3.12 \pm 0.75$ | $2.95 \pm 0.63$ |
|  | t-value | 0.657 | 1.424 | -1.987* | 0.433 | 0.955 |
| age | 20years | $3.50 \pm 0.69$ | $3.08 \pm 0.80$ | $3.07 \pm 0.61$ | $3.02 \pm 0.74$ | $2.99 \pm 0.67$ |
|  | $30 y$ ears | $3.45 \pm 0.55$ | $2.96 \pm 0.66$ | $2.86 \pm 0.57$ | $3.32 \pm 0.73$ | $2.79 \pm 0.61$ |
|  | 40years | $3.46 \pm 0.73$ | $2.93 \pm 0.64$ | $2.86 \pm 0.61$ | $3.03 \pm 0.75$ | $2.91 \pm 0.74$ |
|  | over 50years | $3.68 \pm 0.84$ | $3.02 \pm 0.74$ | $2.04 \pm 0.63$ | $3.04 \pm 0.83$ | $3.18 \pm 0.66$ |
|  | F -value | 4.322** | 6.214** | 14.668** | 1.748 | 1.934 |
| job | student | $3.63 \pm 0.76$ | $3.04 \pm 0.79$ | $3.07 \pm 0.57$ | $2.95 \pm 0.83$ | $2.96 \pm 0.71$ |
|  | housewife | $3.56 \pm 0.81$ | $3.14 \pm 0.84$ | $2.68 \pm 0.67$ | $3.46 \pm 0.62$ | $3.06 \pm 0.61$ |
|  | salary man | $3.40 \pm 0.61$ | $3.01 \pm 0.50$ | $2.81 \pm 0.59$ | $3.08 \pm 0.73$ | $3.01 \pm 0.60$ |
|  | self employed | $3.41 \pm 0.70$ | $3.00 \pm 0.64$ | $2.61 \pm 0.65$ | $3.28 \pm 0.97$ | $2.94 \pm 0.64$ |
|  | etc | $3.28 \pm 0.55$ | $2.95 \pm 0.72$ | $3.04 \pm 0.52$ | $3.20 \pm 0.66$ | $2.68 \pm 0.73$ |
|  | F-value | 4.915** | 4.025** | 4.406** | 0.716 | 0.953 |
| income | less than | $3.37 \pm 0.65$ | $2.95 \pm 0.72$ | $2.83 \pm 0.68$ | $3.07 \pm 0.71$ | $2.85 \pm 0.76$ |
|  |  | $3.57 \pm 0.82$ | $3.01 \pm 0.69$ | $2.85 \pm 0.63$ | $3.09 \pm 0.77$ | $3.04 \pm 0.71$ |
|  | 3~4million | $3.67 \pm 0.80$ | $2.99 \pm 0.74$ | $2.88 \pm 0.56$ | $2.95 \pm 0.92$ | $2.99 \pm 0.64$ |
|  | over 4 million | $3.51 \pm 0.58$ | $3.00 \pm 0.69$ | $2.81 \pm 0.61$ | $3.09 \pm 0.82$ | $2.93 \pm 0.62$ |
|  | F-value | 3.079* | 1.782 | 10.300** | 9.790** | 0.313 |
| Total |  | $3.50 \pm 0.70$ | $3.00 \pm 0.70$ | $2.80 \pm 0.60$ | $3.10 \pm 0.77$ | $2.94 \pm 0.67$ |

[^1]* $\mathrm{p}<0.05, \quad * * \mathrm{p}<0.01$
<Table 8> Factor Analysis of Purchasing Decision in TV Home Shopping

| dependent variable | independent variable | unstandardized coefficient |  | standardized coefficient | t | p | R2 | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | 표준오차 | 베타 |  |  |  |  |
| purchasing intention | constant | 1.290 | . 054 |  | . 000 | 1.000 | 0.44 | $\begin{gathered} 30.446 \\ (\mathrm{p}=.000) \end{gathered}$ |
|  | price | . 382 | . 054 | . 382 | 7.107 | . 000 |  |  |
|  | brand | . 088 | . 054 | . 088 | 1.637 | . 103 |  |  |
|  | design | . 295 | . 054 | . 295 | 5.490 | . 000 |  |  |
|  | diversity | . 151 | . 054 | . 151 | 2.811 | . 005 |  |  |
|  | quality | . 420 | . 054 | . 420 | 7.810 | . 000 |  |  |

<Table 9> Cognition Difference on TV Home Shopping Feature

| variable |  | Awareness | product test | safety of transaction | safety of deliverly |
| :---: | :---: | :---: | :---: | :---: | :---: |
| sex | male <br> female | $\begin{gathered} 3.63 \pm 0.751) \\ 3.70 \pm 0.63 \end{gathered}$ | $\begin{aligned} & 3.27 \pm 0.67 \\ & 3.28 \pm 0.57 \end{aligned}$ | $\begin{aligned} & 3.40 \pm 0.68 \\ & 3.27 \pm 0.57 \end{aligned}$ | $\begin{aligned} & 3.41 \pm 0.71 \\ & 3.39 \pm 0.66 \end{aligned}$ |
|  | t-value | -1.441 | -1.074 | -0.597 | 2.492* |
| age | 20years 30years 40years over 50years | $\begin{aligned} & 3.68 \pm 0.71 \\ & 3.65 \pm 0.74 \\ & 3.56 \pm 0.62 \\ & 3.75 \pm 0.60 \end{aligned}$ | $\begin{aligned} & 3.22 \pm 0.53 \\ & 3.42 \pm 0.61 \\ & 3.16 \pm 0.74 \\ & 3.41 \pm 0.60 \end{aligned}$ | $\begin{aligned} & 3.21 \pm 0.62 \\ & 3.49 \pm 0.56 \\ & 3.12 \pm 0.53 \\ & 3.54 \pm 0.58 \end{aligned}$ | $\begin{aligned} & 3.34 \pm 0.66 \\ & 3.16 \pm 0.70 \\ & 3.61 \pm 0.74 \\ & 3.59 \pm 0.61 \end{aligned}$ |
|  | F-value | 4.123** | 4.679** | 1.913 | 2.525 |
| job | student house wife salary man self-employed etc | $\begin{aligned} & 3.79 \pm 0.62 \\ & 3.59 \pm 0.55 \\ & 3.45 \pm 0.83 \\ & 3.39 \pm 0.77 \\ & 3.65 \pm 0.59 \end{aligned}$ | $\begin{aligned} & 3.33 \pm 0.60 \\ & 3.13 \pm 0.35 \\ & 3.16 \pm 0.57 \\ & 3.23 \pm 0.61 \\ & 3.34 \pm 0.77 \end{aligned}$ | $\begin{aligned} & 3.41 \pm 0.60 \\ & 3.28 \pm 0.63 \\ & 3.16 \pm 0.64 \\ & 2.99 \pm 0.52 \\ & 3.25 \pm 0.57 \end{aligned}$ | $\begin{aligned} & 3.48 \pm 0.69 \\ & 3.43 \pm 0.71 \\ & 3.19 \pm 0.64 \\ & 3.20 \pm 0.44 \\ & 3.44 \pm 0.72 \end{aligned}$ |
|  | F-value | 0.925 | 2.466* | 4.611** | 0.808 |
| income | less than 2millions won 2-3millions won 3-4 million won over 4 millions | $\begin{aligned} & 3.46 \pm 0.79 \\ & 3.79 \pm 0.57 \\ & 3.67 \pm 0.69 \\ & 3.77 \pm 0.61 \end{aligned}$ | $\begin{aligned} & 3.16 \pm 0.52 \\ & 3.37 \pm 0.54 \\ & 3.27 \pm 0.74 \\ & 3.32 \pm 0.52 \end{aligned}$ | $\begin{aligned} & 3.05 \pm 0.66 \\ & 3.49 \pm 0.56 \\ & 3.36 \pm 0.60 \\ & 3.32 \pm 0.59 \end{aligned}$ | $\begin{aligned} & 3.13 \pm 0.57 \\ & 3.63 \pm 0.64 \\ & 3.39 \pm 0.74 \\ & 3.41 \pm 0.67 \end{aligned}$ |
|  | F-value | 1.789 | 1.204 | 8.290** | 3.791* |
| Total |  | $3.63 \pm 0.67$ | $3.27 \pm 0.59$ | $3.28 \pm 0.59$ | $3.38 \pm 0.66$ |

1) mean $\pm$ standard deviation

* $\mathrm{p}<0.05,{ }^{* *} \mathrm{p}<0.01$
<Table 10> Analysis of Purchasing Decision Factors Based on TV Home Shopping Feature

| dependent variable | independent variable | unstandardized coefficient |  | standardized coefficient | t | p | R2 | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | standard error | $\beta$ |  |  |  |  |
| purchasing intention | constant | 7.951 | . 053 |  | . 000 | 1.000 | 0.443 | $\begin{gathered} 38.788 \\ (\mathrm{p}=.000) \end{gathered}$ |
|  | awareness | . 373 | . 053 | . 373 | 6.974 | . 000 |  |  |
|  | product test | . 486 | . 053 | . 486 | 9.093 | . 000 |  |  |
|  | safety of transaction | . 106 | . 053 | . 106 | 1.989 | . 048 |  |  |
|  | safety of deliverly | . 238 | . 053 | . 238 | 4.457 | . 000 |  |  |

### 4.4.2 Analysis of Purchasing Factor of Digital/Home Appliance in

## TV Home Shopping

In order to understand the influence of digital/home appliance feature to purchasing intention in TV home shopping, multiple regress analyses was conducted with purchasing intention as the dependent variable and product feature as the independent variable. <Table 8> presents the results.

Price, design, diversity, and quality presents differences ( $\mathrm{p}<0.05$ ). The result presents $44 \%$ as accountability and quality (Beta $=.420, \mathrm{p}<0.05$ ) and those are the most effective factor for purchasing intention.

Purchasing intention is affected by price, design, diversity, and quality, and quality is most considerable to increase purchasing intention.

### 4.5. Influence of TV Home Shopping Feature to Purchasing Behavior

### 4.5.1 Cognition Difference to TV Home Shopping Feature

Cognition of TV home shopping feature such as awareness, product test, safety of transaction, and safety of delivery are presented <Table $9>$. The result presents awareness (3.63), safety of delivery (3.38), safety of transaction (3.28) and product test(3.27).

Awareness factor presents differences on age and those over 50. Product factor presents differences on age and job. Especially, those in their 30s, students, those who hold specialized jobs, and civil servants present high cognition to product testing.

Safety of transaction factor presents differences on job and income. Students and one whose income is between 2 million won and 3 million won present high cognition to safety of transaction. Safety of deliverly factor presents differences on sex and income. Males and one whose income is between 2 million won and 3 million won presents high cognition to safety of deliverly.

### 4.5.2 Analysis of Purchasing Decision Factor Based on TV Home Shopping Feature

In order to understand influence of TV home shopping feature to purchasing intention in TV home shopping feature, multiple regress analyses were conducted; purchasing intention as the dependent variable and TV home shopping feature as the independent variable.
$<$ Table10> presents the result. Awareness, product test, safety of transaction, and safety of deliverly present difference ( $\mathrm{p}<0.05$ ). The result has $44.3 \%$ of accountability and product test factor is the most affective factor to purchasing intention. Purchasing intention is affected by awareness, product test, safety of transaction, safety of deliverly, and product test factor ( $\mathrm{Beta}=.486, \mathrm{p}<0.05$ ) is most considerable to increase purchasing intention.

## 5. Conclusion

This research was conducted to understand the context feature of purchasing behavior and to figure out variables related to purchasing decision to become purchasing cognition and attitude. The purpose of this research was to suggest purchasing decision factors by studying consumer's attributes for purchasing decision.

A literature review of advanced research for TV home shopping was conducted. By random sampling, 200 subjects who are over 20 , live in the Seoul area, and have purchased a digital/home appliance on TV home shopping were sampled. Questionnaires data were obtained from all subjects by self-administration method.

Result of analysis could be summarized as following.
First, $41.5 \%$ of response presented 1 time purchasing every 2-3 months. Convenience was the main reason for TV home shopping and it represented $27 \%$ of all responses. Price average range was 110.000 to 150.000 won and it represented $29.5 \%$ of all responses. Apparel was the most popular purchasing item and it represented $35 \%$ of all responses. Impossibility of quality confirmation is the most impediment factor and it represented $48.5 \%$ of all responses.

Second, analysis of cognition of digital/home appliance product features and influence of digital/home appliance product features to purchasing intention presents as follows; price (3.50), variety (3.10), and brand (3.00). However, quality (2.94) and design (2.00) presented low degrees. Purchasing intention of digital/home appliance in TV home shopping presents differences on price, design, diversity, and quality.

Third. Analysis of cognition of TV home shopping features and influence of TV home shopping feature to digital/home appliance presents as follows; awareness (3.63), safety of delivery (3.38), safety
of transaction (3.28), and product testing (3.27). Considering regression, purchasing intention based on TV home shopping feature presents differences on awareness, safety of delivery, safety of transaction. and product testing.

The research imply suggests as follows;
First, Impossibility of quality confirmation should be overcome. Detailed explanation, methods, information such as sale schedule, organization information are required to provide.

Second, Cognition of digital/home appliance presents price, design, diversity, quality and brand order. So, methods to increase brand power should be consider seriously.

Third, competitive price and diversity of product are necessary to increase purchasing intention in TV home shopping. A system to increase product test, relatively low factor than other factors, should be considered also.

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[^1]:    1) mean $\pm$ standard deviation
