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CONSUMER INNOVATIVENESS IN PURCHASE OF HI-TECH HOME APPLIANCES AND THE FACTORS INFLUENCING CONSUMER BEHAVIOR IN ELECTRONICS MARKET - A FIELD STUDY FROM ESKISEHIR , TURKEY

Abstract:

This study intends to find out the consumer innovativeness and perceived risk in high technology product adoption. A survey on 460 respondents who are selected via stratified sampling of whom 452 are found eligible to be analyzed. The respondents are required to answer 50 questions of which three on ordinal scale and the five are related to demographic characteristics of these respondents. The rest 42 are statements which are designed to reflect the purchase and usage behavior of high-tech products of these people. The study consists of five parts. The first part is an introduction where the scope and the purpose of the study are concisely stated. The second part relates to the theoretical background of the subject matter and the prior researches carried out so far. The third part deals with research methodology, basic premises and hypotheses attached to these premises. Research model and analyses take place in this section. Theoretical framework is built and a variable name is assigned to each of the question asked or proposition forwarded to the respondents of this survey. 42 statements or propositions given to the respondents are placed on a five-point Likert scale. Three statements are placed on ordinal scale and reflect the traits attached on hi-tech products ranking in terms of importance. The remaining five questions about demographic traits as age, gender, occupation, educational level and monthly income are placed either on a nominal or ratio scale with respect to the nature of the trait. Ten research hypotheses are formulated in this section. The fourth part mainly deals with the results of the hypothesis tests and a factor analysis is applied to the data on hand. Here exploratory factor analysis reduces 42 variables to seven basic components as "Technological innovativeness, perceived risks, creative reuse, consumer innovativeness, cognitive innovativeness, technology readiness and technological sophistication. Cronbach's Alpha for scale reliability is (α = 0.747) and the sample adequacy ratio (KMO) is 0.938. In addition non-parametric bivariate analysis in terms of Chi-Square is applied to test the hypotheses formulated in this respect. The fifth part is the conclusion where findings of this survey is listed.

Keywords:

Consumer innovativeness, risk perception, creative reuse, technological sophistication, cognitive innovativeness.

JEL Classification: M31

1. Introduction

Consumer behavior is an important part of marketing science to ensure success in marketing strategies of the marketing environment. The company's marketing strategy should be in compliance with the consumers' buying decisions to secure a good fit to the marketing demand of the products. Consumer behavior is mainly composed of psychological factors pertaining to the buyers' decision process to buy stemming from their needs and wants. The complexity of consumer behavior offers a challenging and painstaking research task in front of the researchers where they have to discard their prejudices about the plausible and most likely outcomes from the relationships between the factors pertaining to their subject matters. The authors of this study therefore aim to re-investigate all possible relationships between the demographic factors, innovativeness, new-product adoption behavior, risk perception, information search behavior and technology proneness of consumers regardless of the likelihood of their outcomes. On the other hand, consumer electronics industry attributes more emphasis to create new products than the other sectors in order to cope with the heavy competition and enable a long survival. Consequently new product introduction or product differentiation activities are accentuated heavily in this sector all over the globe

2. Literature Review and Prior Research

2.1 Consumer Risk Perception and Product Involvement

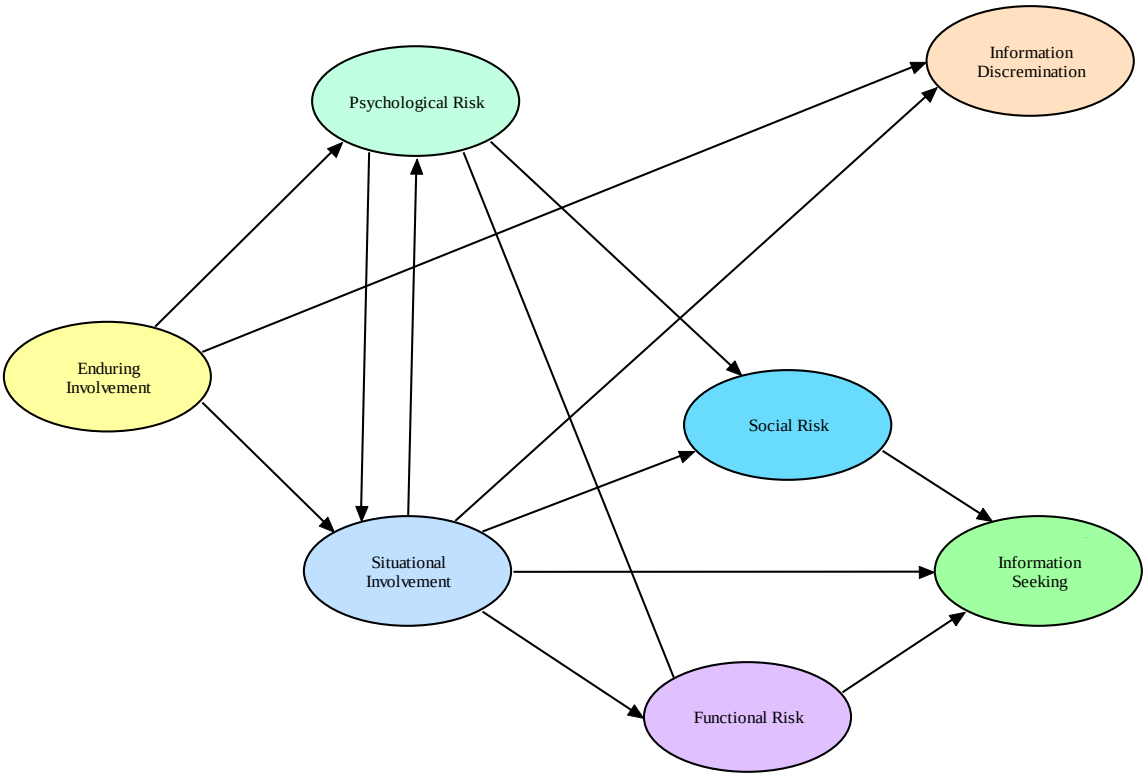
There are a number of studies to find out the relationship between product involvement and consumer risk perception (Richins et al, 1992; Venkatraman, 1989; Laurent and Kapferer, 1985). These two concepts further lead to consumer search and decision making criteria. Because of uncertainty, consumers want to manage their risk in exchanges. As said Bienstock (2002), customers use information to increase certainty and lower the risk. Similarly, Mitra, Reiss and Capella (1999) stated that perceived risk is used as a variable to explain the risk perception. Murray (1991) expressed the greater the degree of perceived risk in a pre- purchase context, the greater the consumer propensity to seek information about the product. In the marketing literature, Jacopy and Kaplan's risk definition and classification used widely. Especially, they have some researches about perceived risk. (Jacoby and Kaplan, 1972; Kaplan *et al*., 1974). According to them, perceived risk has been operationalized by five specific risk types (Jacoby and Kaplan, 1972; Kaplan *et al*., 1974). Five different risk dimensions identified are these (Jacoby and Kaplan, 1972):

- Financial (monetary);
- Performance (functional);
- physical;
- social; and
- psychological risk

However, Roselius (1971) identified the sixth important risk parameter which is time risk (Mitra, Reiss and Capella , 1999). *Time risk involves the possible loss of convenience or time associated with the satisfactory delivery of a service* according to Mitra, Reiss and Capella, (1999). On the other hand, product involvement is defined as "an internal state variable that indicates the amount of arousal, interest and drive evoked by a product class" (Dholaika, p.1341). The elements of involvement can be considered in two broad as, *stable enduring elements* and *transient situational*

elements. These two broad element types play different roles in consumer risk perception. Enduring involvement is “an ongoing concern for a product class that is independent of specific purchase situations, and essentially arises as a result of ongoing interest with the product class, and its association with the individuals self-concept, values and ego. Such enduring involvement results from the products ability to satisfy consumers’ enduring and self-identity-related needs, rather than from specific purchase or usage goals” (Richins and Bloch, 1986, p.282). The situational involvement, on the other hand “is fundamentally different in origin, and refers to the raised level of interest arising from a specific situation, typically a purchase occasion” (Bloch and Richins, 1983, p.72). The following figure depicts the relationship between product involvement and risk perception (Dholakia, 2001, p.1349):

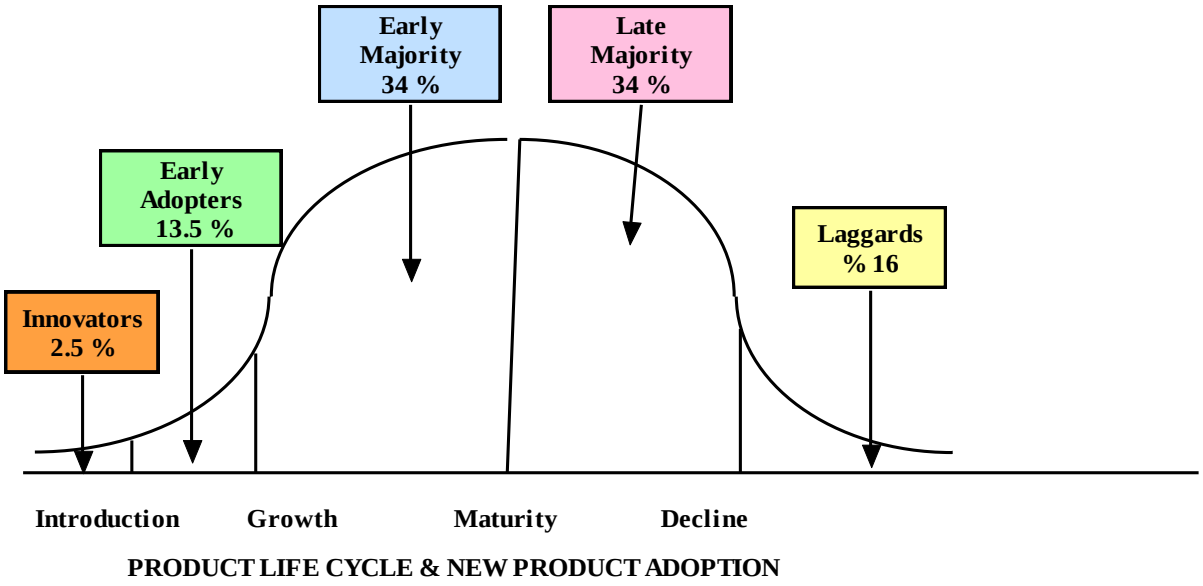
Figure 1. Motivational Process Model of Product Involvement and Consumer Risk Perception



2.2. Consumer Innovativeness and New Product Adoption

Consumer innovativeness plays an important role in the diffusion and adoption of new products and this is especially true for high-tech products where functional risk is a dominant factor. The term innovativeness is related to an individual difference variable where reaction to new and different is circumscribed (Goldsmith et al. 2003, p.55). Here a set of reactions from the most positive to the most negative take place where the distribution of the population takes approximates a normal distribution (Solomon, Michael R., pp. 567-570)

Figure 2: Consumer Product Adoption Behavior



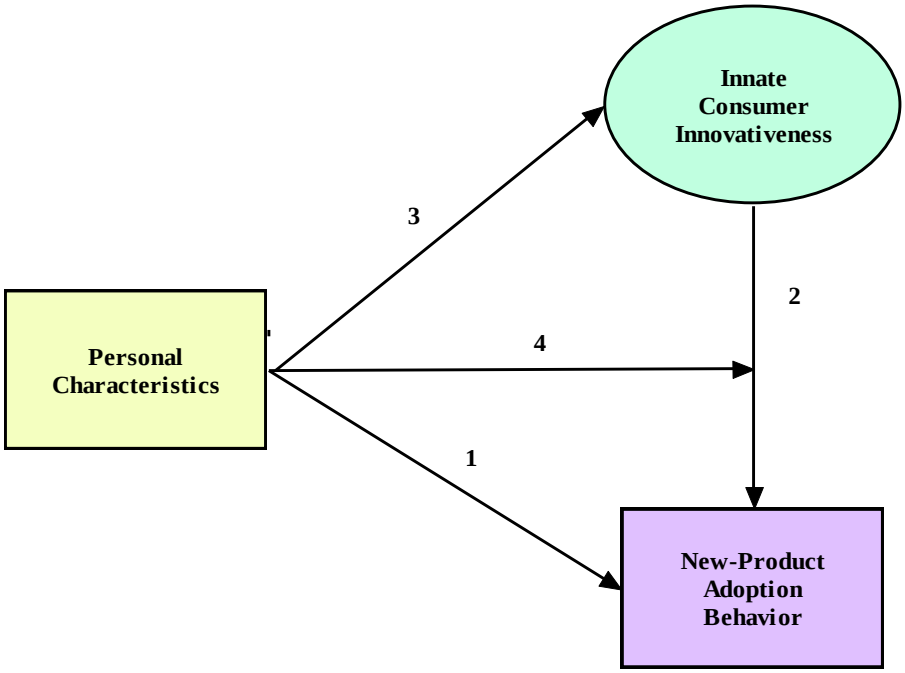
As seen in the above diagram product adoption process overlaps product life cycle where one can get a compromise between product and consumer traits. Innovation is a pure-perception process where a product or process is deemed to be new by the consumers. In most of the cases innovators are taken together with early adapters and this sub-population approximately comprises one-sixth of the total consumer population and may show some differences across cultures and countries. At the same time the time lag between adoption levels may differ as far as the product characteristics are concerned.

The share of the innovators in the new product adoption process is only 2.5 %, which may appear as a negligible amount and may be deemed as disregarded or underestimated by the marketing managers. In fact the reality is just the opposite and the great amount of marketers' interest is devoted on these people. On the other hand it is not wise to say that these people always act as innovators towards all product categories since they tend to be category-specific. It is also hard to determine the exact profile of these consumers even though some recent studies suggest that in American context, innovators are highly-educated and belong to higher income groups whereas it is hard to find out such a correlation in terms of socio-demographic variables in European studies. It is however will not be a mistake to assert that these people like to take risks and are risk-prone.

An empirical study has been carried out by Subin et al in 2003 where the relationship between consumer new product adoption and consumer innovativeness is moderated by personal characteristics. The authors suggest four possible links between innate consumer innovativeness, personal characteristics, and new-product adoption behavior. The first link which is between *personal characteristics* and *new-product adoption behavior* has significant impacts where findings reveal that the ownership of home solar energy system is related to consumer age, income, education and occupational status (Labay and Kinnear, 1981). Similarly age, income and education explains home computer adoption (Dickerson and Gentry, 1983) and income, age and employment status reveals significant difference between innovators and non-innovators 'adopters and non-adopters) in terms of consumer electronics (Martinex et

al., 1998). The second link, where *new product adoption behavior* is related to *innate consumer innovativeness* reveals that these two concepts are positively related for products where consumer involvement is high (e.g. software products); but there is no evidence of relationship for products where consumer involvement is low (e.g. foodstuffs) (Foxall, 1995). Further research carried on the consumer innovativeness, as an explanatory variable for new-product adoption process reveals that "innovativeness as consumer novelty seeking is related to the initial adoption stags represented by actualized novelty seeking and new product awareness, while the innovativeness as communication independence is here related to the later adoption stages of new-product trial" (Manning et al., 1995). The third link relates *personal characteristics* to *innate consumer innovativeness.* As the name implies innate consumer innovativeness is defined as "an individual's inherent innovative personality, predisposition, and cognitive style toward innovations that can be applied to consumption domains across product classes" (Subin, 2003, p. 65). Finally, the fourth link takes the consumers' personal characteristics as a moderating variable between *innate consumer innovativeness* and *new-product adoption behavior.* In this respect, consumers with high innate innovativeness may not always adopt new products earlier than the others due to moderating effects of the demographic and psycho-graphic traits of such consumers. The figure below clearly indicates the possible relationships between three consumer dispositions (Subin, p.63):

Figure 3. Relationships between Personal Characteristics, Innate Consumer Innovativeness and New-Product Adoption Behavior



A factor analysis carried out by Thomas Tan Tsu Wee on Australian consumer concludes that the following factors affecting the new-product adoption in the consumer electronics industry (mainly audio equipment) (Thomas, 2003, pp.61-64):

Table 1. Factors Affecting New-Product Adoption in Consumer Electronics:

	Factors						
Variables	**Relative Advantage**	**Risk**	**Complexity**	**Compatibility**	**Observability**	**Image**	**Triability**
Price					□		
Cost					□		
Warranty					□		
User Friendliness							□
Learning Time							□
Before Purchase Testing						□	
Trial Period						□	
Portability	□						
Weight	□						
Accessories	□						
Product Information	□						
No. of Retailers	□						
Ads	□						
Sound Quality		□					
Functions		□					
Storage Capacity		□					
Battery Life		□					
Skip Protection		□					
Design (player)			□				
Image			□				
Design (accessories)			□				
Ergonomic Features			□				
Availability of Music Tracks				□			
Computer Linkage				□			
Compatibility with Home Entertainment Systems				□			
Compatibility with One's Lifestyle				□			

□□= Variables Listed Under Relevant Component

3. Research Model and Hypotheses

This field research was conducted in May 2014 in Eskisehir, Turkey, a large city with 700,000 inhabitants. A survey on 460 respondents who are selected via stratified sampling of which 452 are found eligible to be analyzed. Fifty-nine senior students taking a “Marketing Research and Decision Models” course were selected as pollsters and given extra credits for collecting reliable information. The respondents are required to answer 50 questions of which three on ordinal scale and the five are related to demographic characteristics of these respondents. The rest 42 are statements which are designed to reflect the purchase and usage behavior of high-tech products of these people and placed on a five-point Likert scale type ranging from “1= strongly disagree” to “5= strongly agree.” The remaining five questions about demographic traits as age, gender, occupation, educational level and monthly income are placed either on a nominal or ratio scale with respect to the nature of the trait. Ten research hypotheses are formulated in this section.

The variables used in the analyses and their explanations are as follows:

Table 2. Variables and Their Explanations

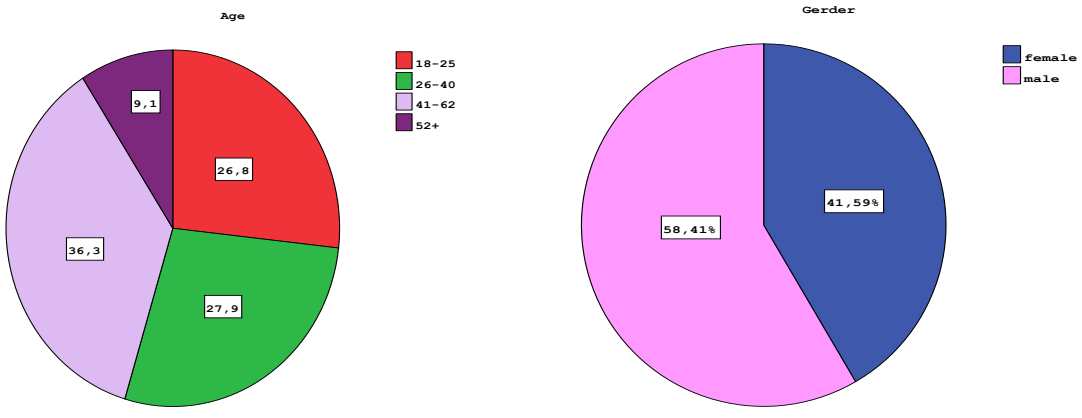
Variable	Explanation	Mean	SD
PREFASSM	I always prefer assembled sophisticated products even they cost more than unassembled ones.	3.10	1.32
NEWACCESS	After purchase of a product such as a stereo or camera, I try to keep track of new accessories that come out into the market.	2.94	1.28
MOREFREE	Technology gives me more freedom of mobility.	3.75	1.32
HIGHESTM	If I bought an cheap electronic product, I think I would be held in debase by my circle of friends and acquaintances	2.52	1.31
EASYASSM	I can say that I frequently experience difficulty in assembling the functions of technologically sophisticated products that I use	3.01	1.21
NEWPRUSE	I take great pleasure in adapting products to new uses that the manufacturer never intended.	2.78	1.21
HEARHİTE	When I hear about a new high-tech product, I take advantage of the very first occasion to find more about it.	2.95	1.22
CNSRFOOL	Purchasing an expensive electronic product would cause me to be considered foolish by some people whose opinion I value	3.01	1.15
LOOKFORN	I frequently look for new electronic products.	2.84	1.26
VALRLUSE	A product's value is directly related to the ways that it can be used.	3.94	0.99
FEELUNCO	In general I feel uncomfortable with technologically sophisticated electronic products	3.08	1.32
FINALOSS	Purchasing an expensive electronic product could involve important financial losses	3.45	1.19
EXPOINFO	I like to go to places where I'll be exposed to information about electronic products and brands.	3.31	1.25

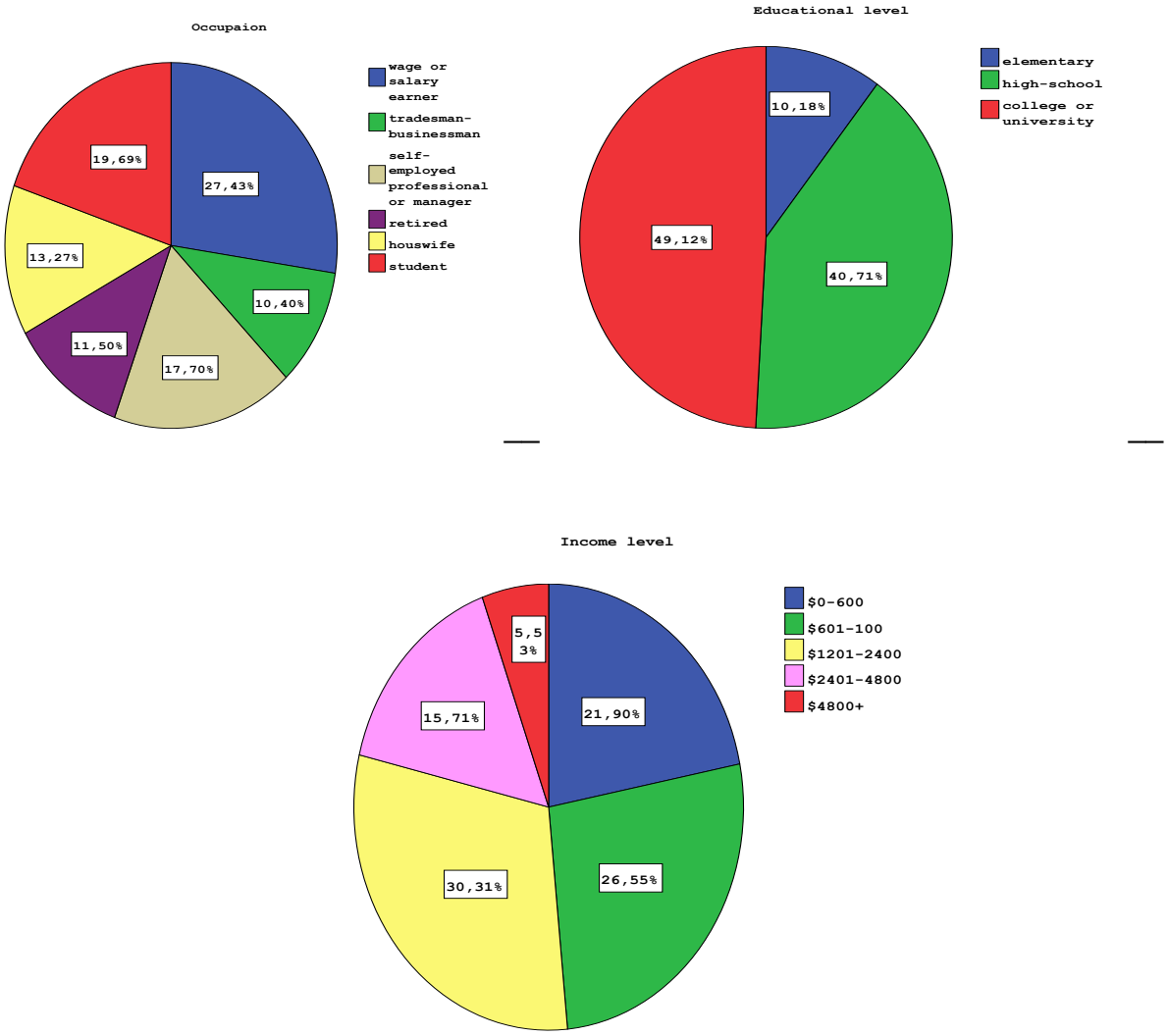
NEVENTRW	I never throw something away that I might use	3.86	1.09
UNNECTEN	The thought of purchasing a sophisticated electronic product causes me to experience unnecessary tension	2.79	1.26
NEWTTECH	Products and services that use the newest technologies are much more convenient to use.	3.50	1.05
USEFULLC	I do not enjoy an electronic product unless I can use it to its fullest capacity.	3.08	1.22
SEEKNEWE	I am continually seeking new electronic product experiences.	2.98	1.20
DIFFEXPL	I like to think about different ways to explain a subject matter.	3.60	1.03
INTNEWFE	In general I can say that I am very interested in new features associated with technologically sophisticated products.	2.88	1.21
LATERUSE	After the useful life of a product, I can often think of ways to use the parts of it for other purposes.	3.03	1.20
ANALYZFE	I often analyze my feelings and reactions.	3.68	1.02
FOLMANWR	I always follow manufacturer's warnings regarding how to use an electronic product.	3.76	1.08
TECHCONT	Technology gives people more control over their daily lives.	3.71	1,06
INEFFUSE	Purchasing an item could lead to an inefficient use of my time	2.65	1.09
MNGOFUNU	I spend much time to find out the meaning of unusual statements.	2.74	1.01
NEWANDIF	I take advantage of the first available opportunity to find out about new and different electronic products.	2.91	1.18
FEELNCAP	I often feel incapable of operating an electronic appliance with complex technology.	2.89	1.30
NEWINTRO	I like to buy new technologically sophisticated products introduced on the market.	2.81	1.24
SHORTDIS	I always know the shortest distance from one place to another.	3.34	1.14
PREFNEWP	When it comes to buying a technologically sophisticated product, I prefer to buy new rather than existing products.	3.04	1.14
ADDEDFEA	Adding features on an existing product does not necessarily mean that it is a new product.	3.71	0.97
UNCOMFRT	I am uncomfortable to purchase products different from types I'm accustomed to .	3.10	1.22
DISCUNID	I like to discuss unusual ideas.	3.79	0.98
ADVTECHN	I prefer to use the most advanced technology available.	3.38	1.20
TECHSOPH	I do not like to find myself in a situation where I have to use a technologically sophisticated electronic product.	3.38	1.18
SEEKINFO	I often seek out information about a new electronic product or brand.	2.86	1.24

AFRTOBUY	I am afraid to buy an electronic product I don't know how to use.	3.08	1.26
USEOLDTH	I enjoy thinking of new ways to use old things around the house.	3.34	1.10
SOPHPROD	I use sophisticated products in more ways than most people.	2.71	1.09
EFFICINT	Technology makes me more efficient in my occupation.	3.63	1.28
UNWANTAN	The thought of purchasing a new electronic product gives me a feeling of unwanted anxiety	2.54	1.18
CHOOSEA	Choose three of the following features of high-tech consumer products in order of importance: a-first b-second c-third	N.A.	N.A.
CHOOSEB		N.A.	N.A.
CHOOSEC		N.A.	N.A.
AGE	age	2.28	0.96
GENDER	gender	1.58	0.49
OCCUPATI	occupation	N.A.	N.A.
EDUCALEV	education level	2.39	0.67
INCOME	monthly household income	2.56	1.16

3.1. Distribution of Consumer Demographics

Consumer demographics play an important role in this study since they act as either as moderating or independent variables in the analyses. So as to give a broader understanding to the subject matter the following charts are included in this study;





3.2.Hypotheses

Several research hypotheses are formulated as follows:

Relationship Between Risk Perception and Information Search Behavior

H1: *High risk perception leads to increased information search behavior. (Original Proposition) (refers to Figure 1.)*

Reversed Proposition and Hypothesis;

H1: *High level of information possession reduces risk perception*

H1a: High level of information possession reduces psychological risk perception (reversed proposition)
H1b: High level of information possession reduces social risk perception (reversed proposition)
H1c: High level of information possession reduces functional risk perception (reversed proposition)

Relationship Between Cognitive Innovativeness and New-Product Adoption Behavior

H2: *New-product adoption behavior is positively related to cognitive innovativeness. (refers to Figure 2 and Figure 3, path2).*

Relationship Between Consumer Demographic Characteristics and New-Product Adoption Behavior

H3: *There are significant differences between demographic traits of consumers in relation with new-product adoption levels (Figure 3, path1).*

Relationship Between Consumer Demographic Characteristics and Innate Consumer Innovativeness

H4: *There are significant differences between demographic traits of consumers in relation with innate consumer innovativeness (Figure 3, path3).*

Relationship Between Consumer Demographic Characteristics and Risk Perceptions Associated to Hi-Tech Consumer Products

H5: *There are significant differences between demographic traits of consumers in relation with social, psychological and functional risk perceptions.*

Relationship Between Technological innovativeness and Creative Re-use

H6: *There is a significant positive relationship between technological innovativeness and creative re-use.*

Relationship Between Hi-Tech product Features and Consumer Demographics

H7: *There are significant differences between demographic traits of consumers in relation with consumer importance attributes to hi-tech product features.*

4 Analyses and Results

Hypotheses Tests Results

4.1 Relationship Between Risk Perception and Information Search Behavior

The set of hypotheses formulated in the preceding part of this study so as to find out degree of relationships between risk perception and information seeking behavior. Figure 1 of this study a positive relationship between product involvement and perceived risks (social, psychological and functional) which finally leads to information seeking behavior. The authors of this study however believe that there is not a positive but an inverse relationship between information seeking level and risk perception. The tests for this set of hypotheses are summarized on the table given below (*):

Table 3. Relationship Between Perceived Psychological Risks and Information Search Behavior

	Information Search Behavior Variables								
	I like to go to places where I'll be exposed to information about electronic products and brands.			I often seek out information about a new electronic product or brand.			I am continually seeking new electronic product experiences.		
Psychological Risk Perception Variables	**ISL %**	**Low %**	**High %**	**ISL %**	**Low %**	**High %**	**ISL %**	**Low %**	**High %**
The thought of purchasing a sophisticated electronic product causes me to experience unnecessary tension	**53.3** **28.3**	**82.6** **10.6**	**29.3** **41.5**	**35.8** **46.1**	**76.7** **22.6**	**19.5** **70.8**	**39.6** **41.4**	**68.0** **21.4**	**19.5** **68.3**
In general I feel uncomfortable with technologically sophisticated electronic products	**53.3** **28.3**	**74.6** **9.4**	**31.9** **57.6**	**35.8** **46.1**	**75.0** **17.2**	**13.9** **76.3**	**39.6** **41.4**	**65.6** **17.2**	**15.3** **70.9**
I am afraid to buy an electronic product I don't know how to use.	**53.3** **28.3**	**75.1** **18.7**	**23.5** **57.8**	**35.8** **46.1**	**75.0** **20.8**	**14.1** **78.1**	**39.6** **41.4**	**75.1** **16.7**	**14.1** **75.0**
I am uncomfortable to purchase products different from types I'm accustomed to .	**53.3** **28.3**	**60.4** **14.6**	**32.2** **49.1**	**35.8** **46.1**	**70.7** **24.4**	**23.8** **66.1**	**39.6** **41.4**	**70.7** **22.0**	**18.7** **64.4**

(*) All tests are made at □<0.01 significance level
ISL. Information Seeking Level (%) High (%), Low (%)
Low: Low Risk Perception Level for Frequent Information Seekers (%)
High: High Risk Perception Level for Frequent Information Seekers (%)

As seen from the above table hypothesis 1a is accepted at all levels of psychological risk perception i.e. high information seeking reduces the perceived risk of this sort.

Not so many robust results obtained from the analysis of social risk perception when tallied against information possession content as in the former case. The results are summarized on the table given below:

Table 4. Relationship Between Perceived Social Risks and Information Seeking Behavior

	Information Seeking Behavior Variables								
	I like to go to places where I'll be exposed to information about electronic products and brands.			I often seek out information about a new electronic product or brand.			I am continually seeking new electronic product experiences.		
Social Risk Perception Variables	**ISL %**	**Low %**	**High %**	**ISL %**	**Low %**	**High %**	**ISL %**	**Low %**	**High %**
If I bought an cheap electronic product, I think I would be held in debase by my circle of friends and acquaintances	**Rejected** 53.3 28.3	**Rejected** 49.2 31.0	**Rejected** 67.5 12.5	35.8 46.1	65.0 22.0	27.0 56.4	39.6 41.4	80.0 12.5	27.9 54.5
Purchasing an expensive electronic product would cause me to be considered foolish by some people whose opinion I value	**Rejected** 53.3 28.3	**Rejected** 74.6 9.4	**Rejected** 31.9 57.6	35.8 46.1	51.5 46.8	31.8 55.6	**Rejected** 39.6 41.4	**Rejected** 65.6 17.2	**Rejected** 15.3 70.9

(*) All tests are made at □<0.01 significance level
ISL. Information Seeking Level (%) High (%), Low (%)
Low: Low Risk Perception Level for Frequent Information Seekers (%)
High : High Risk Perception Level for Frequent Information Seekers (%)

Table 4 reveals that not many clear evidence is obtained from the analysis of finding out the relationship between perceived social risks and information seeking behavior as the former case regarding psychological risks; that is 50 % of these relationships are not sustained at □<0.01or at □<0.05 significant levels.

The results obtained from the perceived functional risks in relation with information seeking behavior are also promising as in the case of psychological risk perception. Values presented in Table 5 below supports this idea:

Table 5. Relationship Between Perceived Functional Risks and Information Seeking Behavior

	Information Seeking Behavior Variables								
	I like to go to places where I'll be exposed to information about electronic products and brands.			I often seek out information about a new electronic product or brand.			I am continually seeking new electronic product experiences.		
Functional Risk Perception Variables	**ISL %**	**Low %**	**High %**	**ISL %**	**Low %**	**High %**	**ISL %**	**Low %**	**High %**
I often feel incapable of operating an electronic appliance with complex technology.	**53.3** **28.3**	**81.9** **9.8**	**18.2** **63.6**	**35.8** **46.1**	**73.6** **16.6**	**7.3** **81.8**	**39.6** **41.4**	**73.6** **19-.4**	**10.9** **72.8**
I do not like to find myself in a situation where I have to use a technologically sophisticated electronic product.	**53.3** **28.3**	**82.7** **6.9**	**31.5** **49.3**	**35.8** **46.1**	**79.3** **13.8**	**16.4** **71.2**	**39.6** **41.4**	**65.6** **10.3**	**16.0** **78.5**
I can say that I frequently experience difficulty in assembling the functions of technologically sophisticated products that I use	**53.3** **28.3**	**75.9** **19.2**	**34.0** **52.0**	**35.8** **46.1**	**61.6** **28.8**	**12.0** **74.0**	**39.6** **41.4**	**67.3** **23.1**	**20.0** **72.0**

(*) All tests are made at □<0.01 significance level
ISL. Information Seeking Level (%) High (%), Low (%)
Low : Low Risk Perception Level for Frequent Information Seekers (%)
High : High Risk Perception Level for Frequent Information Seekers (%)

The inverse relationship between functional risk perception and level of information seeking behavior is accentuated at most in this last relationship pattern.

4.2 *Relationship Between Cognitive Innovativeness and New-Product Adoption Behavior*

Although there is an implied positive relationship between cognitive innovativeness and new product adoption behavior, this study aims to find out the degree of liaison between these two concepts.

Table 6. Relationship Between Cognitive Innovativeness and New-Product Adoption Behavior

	Cognitive Innovativeness Variables								
	I spend much time to find out the meaning of unusual statements.			I like to think about different ways to explain a subject matter.			I like to discuss unusual ideas.		
New-Product Adoption Variables	**CIL %**	**Late %**	**Early %**	**CIL %**	**Late %**	**Early %**	**CIL %**	**Late %**	**Early %**
When I hear about a new high-tech product, I take advantage of the very first occasion to find more about it.	**23.9** **43.6**	**13.6** **61.0**	**24.5** **37.7**	**61.0** **16.6**	**37.3** **30.5**	**82.2** **6.6**	**69.3** **12.2**	**42.3** **28.8**	**75.6** **4.4**
I like to buy new technologically sophisticated products introduced on the market.	**23.9** **43.6**	**21.7** **47.8**	**31.9** **36.2**	**61.0** **16.6**	**35.2** **26.0**	**74.4** **8.5**	**69.3** **12.2**	**52.2** **23.1**	**80.9** **2.1**
In general I can say that I am very interested in new features associated with technologically sophisticated products.	**23.9** **43.6**	**15.4** **61.6**	**31.4** **34.3**	**61.0** **16.6**	**33.8** **27.7**	**85.7** **8.6**	**69.3** **12.2**	**44.6** **27.7**	**85.7** **2.9**
When it comes to buying a technologically sophisticated product, I prefer to buy new rather than existing products.	**Rejected** **23.9** **43.6**	**Rejected** **15.0** **75.9**	**Rejected** **16.2** **48.6**	**61.0** **16.6**	**27.5** **35.0**	**67.5** **13.5**	**69.3** **12.2** **(**)**	**52.5** **15.0** **(**)**	**77.5** **13.5** **(**)**
I take advantage of the first available opportunity to find out about new and different electronic products.	**23.9** **43.6**	**16.4** **19.2**	**41.1** **52.0**	**61.0** **16.6**	**41.8** **30.9**	**84.6** **10.3**	**69.3** **12.2**	**51.0** **29.1**	**74.4** **12.9**

(*) All tests are made at □<0.01 significance level
(**) Accepted at □<0.05 significance level
CIL. Cognitive Innovativeness Level (%) High (%), Low (%)
Late : Innovators at Maturity and Decline Phases (of a hi-tech product) (%)
Early : Innovators at Introduction and Growth Phases (of a hi-tech product) (%)

The above table reveals the fact that there is a significant positive relationship between cognitive innovativeness and new-product adoption behavior at early phases. This relationship is not sustained only partly at one level (variable). The authors of this study believe that this controversy might be due to the manner of the statement offered to the respondents as "*they spend **much** time to find out the meaning of unusual statements"* where they might object the idea that they don't spend much time but find the meaning of such statements easily.

4.3 Relationship Between Consumer Demographic Characteristics and New-Product Adoption Behavior

Table 7. Relationship Between Consumer Demographic Characteristics and New-Product Adoption Behavior

	CONSUMER DEMOGRAPHICS									
	Age		Gender		Occupation		Education		Income	
New-Product Adoption Variables	Average Acceptance and Rejection %	Mod Value % (**)	Average Acceptance and Rejection %	Mod Value % (**)	Average Acceptance and Rejection %	Mod Value % (**)	Average Acceptance and Rejection %	Mod Value % (**)	Average Acceptance and Rejection %	Mod Value % (**)
When I hear about a new high-tech product, I take advantage of the very first occasion to find more about it.	38.8 % 40.5 %	18-25yo 52.9 % +62yo (75.6 %)	38.8 % 40.5 %	Male 46.6 % Female 50.0 %	38.8 % 40.5 %	Student 58.4 % House-wife 70.0 %	38.8 % 40.5 %	College-University 47.7 % Element-ary 44.5 %	38.8 % 40.5 %	$4800 + 60.0 % $601-1200 51.6 %
I like to buy new technologically sophisticated products introduced on the market.	33.0 % 46.9 %	18-25yo 45.4 % +62yo (74.9 %)	33.0 % 46.9 % (***)	Male 38.3 % Female 55.3 % (***)	33.0 % 46.9 %	Self-Employ-ed Profess-ional or Manager 52.6% Retired 78.8 %	33.0 % 46.9 %	College-University 51.4 % Element-ary 73.9 %	33.0 % 46.9 %	$2401-4800 49.3 % $0-600 52.6 %
In general I can say that I am very interested in new features associated with technologically sophisticated products.	37.8 % 42.9 %	18-25yo 57.0 % +62yo 92.7 %	37.8 % 42.9 % (***)	Male 42.4 % Female 48.9 % (***)	37.8 % 42.9 %	Student 62.9 % Retired 82.7 %	37.8 % 42.9 %	College-University 50.4 % Element-ary 78.3 %	37.8 % 42.9 %	$2401-4800 52.1 % $601-1200 59.1 %
When it comes to buying a technologically sophisticated product, I prefer to buy new rather than existing products.	42.0 % 36.9 %	18-25yo 52.9 % +62yo 64.8 %	Rejected	Rejected	42.0 % 36.9 %	Student 60.6 % House-wife 58b4 %	42.0 % 36.9 %	College-University 47.3 % Element-ary 67.4 %	42.0 % 36.9 %	$4800 + 60.0 % $601-1200 44.2 %

I take advantage of the first available opportunity to find out about new and different electronic products.	36.0 % 41.4 %	26-40yo 53.2 % +62yo 73.1 %	36.0 % 41.4 %	Male 42.4 % Female 46.3 % 	36.0 % 41.4 %	Self-Employ-ed Profess-ional or Manage r 58.8% House-wife 68.4 %	36.0 % 41.4 %	College - Univers ity 49.6 % Elemen t-ary 65.2 %	36.0 % 41.4 %	$4800 + 60.0 % $601-1200 59.2 %

(*) All tests are made at □<0.01 significance level
(**) demographic factor which is significantly different than the others.
(***) Accepted at □<0.05 significance level
Average Acceptance or Rejection: Strongly Agree + Agree; Strongly Disagree + Disagree

4.4 Relationship Between Consumer Demographic Characteristics and Innate Consumer Innovativeness

Table 8. Relationship Between Consumer Demographic Characteristics and Innate Consumer Innovativeness

	CONSUMER DEMOGRAPHICS									
	Age		Gender		Occupation		Education		Income	
Cognitive innovative-ness Variables	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)
I spend much time to find out the meaning of unusual statements.	Reject-ed	Reject-ed	Reject-ed	Reject-ed	Reject-ed	Rejected	Reject-ed	Rejected	Reject-ed	Rejected
I like to think about different ways to explain a subject matter.	Reject-ed	Reject-ed	Reject-ed	Reject-ed	61.0 % 16.6 %	Student 62.9 % House-wife 31.6 % (***)	61.0 % 16.6 %	College - Univers ity 62.4 % High-School 20.1 %	61.0 % 16.6 %	$4800 +68.0 % $2401-4800 20.1 %
I like to discuss unusual ideas.	69.3 % 12.2 %	26-40yo 76.2 % +62yo 19.5 %	Reject-ed	Reject-ed	69.3 % 12.2 %	Student 78.7 % Retired 19.2 %	69.3 % 12.2 %	College - Univers ity 75.7 % High-School 14.7 % (***)	Rejected	Rejected
Techno-	Averag	Mod	Averag	Mod	Averag	Mod	Averag	Mod	Average	Mod

logical Innovative -ness Variables	e Accept - Ance and Reject- ion %	Value % (**)	e Accept- Ance and Reject- ion %	Value % (**)	e Accept - Ance and Reject- ion %	Value % (**)	e Accept - Ance and Reject- ion %	Value % (**)	Accept- Ance and Reject- ion %	Value % (**)
I prefer to use the most advanced technology available.	52.4 % 28.4 %	18-25yo 69.4 % +62yo 63.4 %	52.4 % 28.4 %	Male 57.5 % Female 31.4 % (***)	52.4 % 28.4 %	Student 75.3 % Retired 61.6 %	52.4 % 28.4 %	College - University 64.9 % Elementry 45.6 %	52.4 % 28.4 %	$4800 +72.0 % $601-1200 30.9 % % (***)
Technology makes me more efficient in my occupation.	61.8 % 23.0 %	18-25yo 83.5 % +62yo 58.5 %	Rejected	Rejected	61.8 % 23.0 %	Student 85.3 % Retired 53.8%	61.8 % 23.0 %	College - University 75.8 % Elementry 50.0 %	61.8 % 23.0 %	$4800 +72.0 % $601-1200 30.9 % %
I do not enjoy an electronic product unless I can use it to its fullest capacity.	41.0 % 38.8 %	18-25yo 52.9 % +62yo 73.2 %	41.0 % 38.8 %	Male 47.8 % Female 52.5 %	41.0 % 38.8 %	Student 53.9 % Retired 59.3 %	41.0 % 38.8 %	College - University 49.1 % Elementry 56.6 %	Rejected	Rejected
I use sophisticated products in more ways than most people.	27.0 % 48.2 %	26-40yo 38.0 % +62yo 81.9 %	Rejected	Rejected	27.0 % 48.2 %	Self-Employed Professional or Manager 38.8% Retired 80.8 %	27.0 % 48.2 %	College - University 34.7 % Elementry 71.8 %	Rejected	Rejected

(*) All tests are made at □<0.01 significance level
(**) demographic factor which is significantly different than the others.
(***) Accepted at □<0.05 significance level
Average Acceptance or Rejection: Strongly Agree + Agree; Strongly Disagree + Disagree

4.5 Relationship Between Consumer Demographic Characteristics and Risk Perceptions Associated to Hi-Tech Consumer Products

Table 9. Relationship Between Consumer Demographic Characteristics and Risk Perceptions Associated to Hi-Tech Consumer Products

	CONSUMER DEMOGRAPHICS									
	Age		Gender		Occupation		Education		Income	
Perceived Functional Risk Variables	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)
I often feel incapable of operating an electronic appliance with complex technology.	39.2 % 46.2 %	+62yo 58.5 % 18-25yo 83.5 %	39.2 % 46.2 %	Female 46.2 % Male 53.0 %	39.2 % 46.2 %	House-wife 60,0 % Student 84.1 %	39.2 % 46.2 %	Element-ary 78,3 % College - University 57.2 %	Reject-ed	Reject-ed
I do not like to find myself in a situation where I have to use a technologically sophisticated electronic product.	57.1 % 29.2 %	+62yo 65.4 % 26-40yo 39.3 %	57.1 % 29.2 %	Female 66.5 % Male 33.7 %	57.1 % 29.2 %	House-wife 86.7 % Student 40.5 %	57.1 % 29.2 %	Element-ary 82.6 % College - University 36.1 %	57.1 % 29.2 %	$601-1200 71.7 % $2401-4800 46.5 %
I can say that I frequently experience difficulty in assembling the functions of technologically sophisticated products that I use	39.4 % 40.0 %	+62yo 82.9 % 18-25yo 69.4 %	39.4 % 40.0 %	Female 46.3 % Male 46.2 %	39.4 % 40.0 %	House wife 68.3 % Student 70.8 %	39.4 % 40.0 %	Element-ary 78.2 % College - University 44.2 %	Reject-ed	Reject-ed
Perceived Psychological Risk Variables	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)
The thought of purchasing a sophisticated electronic product causes me to experience unnecessary	35.9 % 49.3 %	+62yo 65.9 % 18-25yo 76.9 %	35.9 % 49.3 %	Female 43.1 % Male 53.4 %	35.9 % 49.3 %	Retired 67.3 % Student 68.5 %	35.9 % 49.3 %	Element-ary 64.2 % College - University 59.9 %	Reject-ed	Reject-ed

tension										
In general I feel uncomfortable with technologically sophisticated electronic products	45.5 % 39.4 %	+62yo 75.6 % 18-25yo 57.9 %	45.5 % 39.4 %	Female 54.8 % Male 45.4 %	45.5 % 39.4 %	House-wife 71.7 % Self-Employ-ed Profess-ional or Manager 63.8%	45.5 % 39.4 %	Element-ary 82.6 % College - University 49.6 %	45.5 % 39.4 %	$601-1200 60.9 % % $2401-4800 54.9 %
I am afraid to buy an electronic product I don't know how to use.	45.0 % 40.7 %	+62yo 80.5 % 18-25yo 57.8 %	Reject-ed	Reject-ed	45.0 % 40.7 %	Retired 66.9 % Student 60.7 %	45.0 % 40.7 %	Element-ary 76.1 % College - University 49.6 %	Reject-ed	Reject-ed
I am uncomfortable to purchase products different from types I'm accustomed to .	45.2 % 39.0 %	62yo 83.0 % 26-40yo 50.0 %	Reject-ed	Reject-ed	45.2 % 39.0 %	Retired 70.9 % Self-Employ-ed Profess-ional or Manager 65.0 %	45.2 % 39.0 %	Element-ary 69.5 % College - University 46.9 %	45.2 % 39.0 %	$601-1200 54.1 % 2401-4800 60.6 %
Perceived Social Risk Variables	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)
If I bought an cheap electronic product, I think I would be held in debase by my circle of friends and acquaintances	56.4 % 26.9 %	+62yo 68.3 % 26-40yo 30.9 % (***)	Reject-ed	Reject-ed	56.4 % 26.9 %	House wife 75.0 % Self-Employ-ed Profess-ional or Manager 40.1 %	Reject-ed	Reject-ed	56.4 % 26.9 %	$0-600 65.7 % % $4800 + 60.0 %
Purchasing an expensive electronic product would cause me to be considered foolish by some people whose	Reject-ed	Reject-ed	Reject-ed	Reject-ed	Reject-ed	Reject-ed	Reject-ed	Reject-ed	Reject-ed	Reject-ed

opinion I value										
Perceived Financial Risk Variables	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)	Average Accept-Ance and Reject-ion %	Mod Value % (**)
Purchasing an expensive electronic product could involve important financial losses	**Reject-ed**	**Reject-ed**	**Reject-ed**	**Reject-ed**	**Reject-ed**	**Reject-ed**	**Reject-ed**	**Reject-ed**	**Reject-ed**	**Reject-ed**

(*) All tests are made at □<0.01 significance level
(**) Demographic factor which is significantly different than the others.
(***) accepted at □<0.05 significance level
Average Acceptance or Rejection: Strongly Agree + Agree; Strongly Disagree + Disagree

4.6 Relationship Between Technological innovativeness and Creative Re-use

Table 10. Relationship Between Technological innovativeness and Creative Re-use

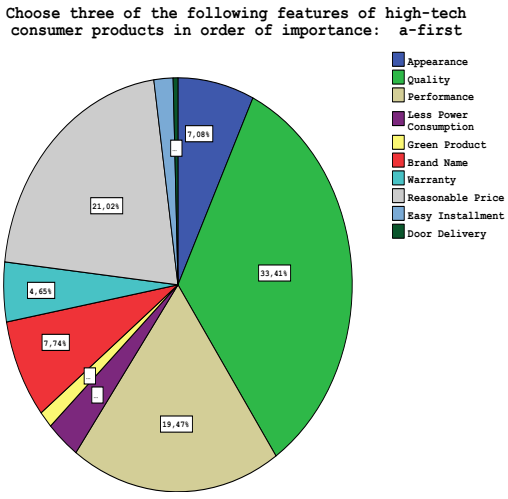
	Creative Re-Use Variables								
	After the useful life of a product, I can often think of ways to use the parts of it for other purposes.			I enjoy thinking of new ways to use old things around the house.			I take great pleasure in adapting products to new uses that the manufacturer never intended.		
Technological innovativeness Variables	**CRL %**	**Low %**	**High %**	**CRL %**	**Low %**	**High %**	**CRL %**	**Low %**	**High %**
When I hear about a new high-tech product, I take advantage of the very first occasion to find more about it.	**40.7** **37.4**	**42.4** **44.0**	**46.7** **24.4** **(***)**	**Reject-ed**	**Reject-ed**	**Reject-ed**	**30.7** **47.8**	**5.2** **79.7**	**71.1** **22.2**
I like to buy new technologically sophisticated products introduced on the market.	**40.7** **37.4**	**46.4** **33.3** **(**)** **(***)**	**40.4** **34.0** **(**)** **(***)**	**Reject-ed**	**Reject-ed**	**Reject-ed**	**30.7** **47.8**	**10.1** **73.9**	**53.2** **21.3**
In general I can say that I am very interested in new features	**40.7** **37.4**	**43.1** **43.1**	**60.0** **17.2**	**49.1** **26.3**	**50,8** **26.2**	**68.5** **11.5**	**30.7** **47.8**	**13.9** **73.8**	**65.6** **28.6**

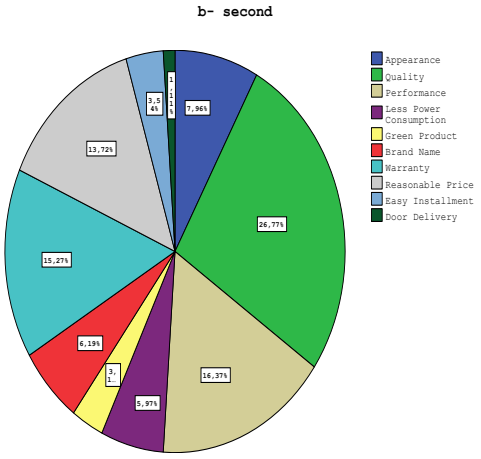
associated with technologically sophisticated products.									
When it comes to buying a technologically sophisticated product, I prefer to buy new rather than existing products.	**40.7** **37.4**	**45.0** **40.0** **(**)** **(***)**	**32.4** **37.8** **(**)** **(***)**	**49.1** **26.3**	**55.0** **25.0** **(**)** **(***)**	**35.0** **43.3** **(**)** **(***)**	**30.7** **47.8**	**20.0** **77.5**	**51.3** **27.0**
I take advantage of the first available opportunity to find out about new and different electronic products.	**40.7** **37.4**	**30.9** **52.8**	**56.4** **20.5**	**49.1** **26.3**	**40.0** **38.2**	**56.4** **20.5**	**30.7** **47.8**	**14.6** **70.9**	**46.2** **23.1**

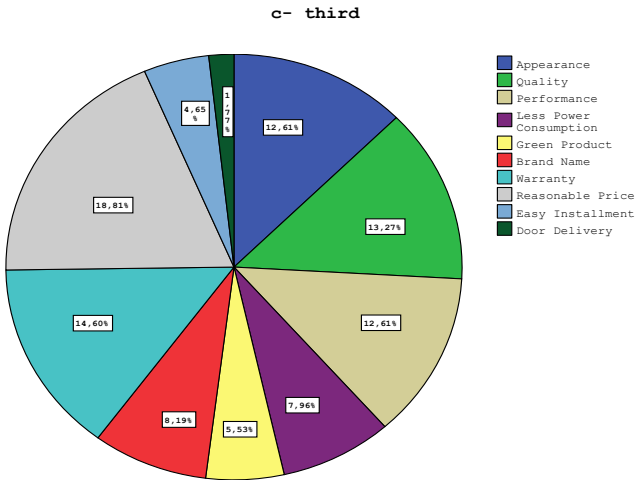
(*) All tests are made at □<0.01 significance level
(**) Reverse Sustained (Negative Relationship)
(***) Accepted at □<0.05 significance level
CRL. Creative Average Re-Use Level (%) High (%), Low (%)
Low : Creative Re-Use AT Low Technological innovativeness Levels(%)
High : Creative Re-Use AT High Technological innovativeness Levels (%)

4.7 The Ranking of Hi-Tech Product Features in Order of Importance

In this study the features of hi-tech products are ordered by he respondents, in terms of their importance as shown in the charts presented below:







The charts above prove that "quality" of a hi-tech product is the most important feature as chosen by the respondents. Consequently "reasonable price" ranks the second and "performance" and "warranty" follows these features. The table presented below depicts the relationships between the features of the high-tech products and the consumer demographics which are most attached to these features:

Table 11. Relationship Between Hi-Tech product Features and Consumer Demographics

Hi-Tech Product Features (Ranked in Terms of Importance)			**Consumer Demographics**				
Rank	**%**	**Feature**	**Age**	**Gender**	**Occupation**	**Education**	**Income**
1	33.4	Quality	18-25 (38.0 %)	Male (35.5 %)	Self-Employed Professional or Manager (45.0 %)	College or University (41.0 %)	$4800+ (36.0 %)
2	20.0	Reasonable Price	+62 (41.5 %)	Female (23.4 %)	Retired (48.1 %)	Elementary (43.5 %)	$601-1200 (34.2 %)
3	19.5	Performance	18-25 (28.9 %)	Male (24.6 %)	Student (30.3 %)	College or University (22.1 %)	$2401-4800 (28.2 %)
4	7.7	Brand Name	26-40 (9.5)	Female (10.1 %)	Self-Employed Professional or Manager (11.3 %)	High-School (8.7 %)	$4800+ (12.0 %)
5	7.1	Appearance	18-25 (10.7 %)	Female (9.0 %)	Tradesman-Businessman (14.9 %)	High-School (10.3 %)	$4800+ (12.0 %)
6	4.6	Warranty	+62 (9.8)	Female (4.8 %)	Retired (7.2 %)	Elementary (6.5 %)	$601-1200 (5.8 %)
7	3.1	Less Power Consumption	18-25 (38.0 %)	Female (5.3 %)	Housewife (8.3 %)	Elementary (6.5 %)	$0-600 (6.1 %)
8	1.8	Easy Installment	+62	Female	Retired	High-	$4800+

			(4.9)	(2.1 %)	(5.8 %)	School (2.2 %)	(4.0 %)
9	1.3	Green Product	41-62 (1.8 %)	Female (1.6 %)	Tradesman-Businessman (4.3 %)	Elementary (2.2 %)	$2401-4800 (5.6 %)
10	0.4	Door Delivery	+62 (2.4)	Female (1.1 %)	Housewife (1.7 %)	Elementary (2.2 %)	$0-600 (1.0 %)

4.8 Factor Analysis

ble 12 Components of the Analysis

Rotated Component Matrix(a)

	Component						
	1	2	3	4	5	6	7
I am continually seeking new electronic product experiences.	,784						
I often seek out information about a new electronic product or brand.	,780						
I frequently look for new electronic products.	,776						
When I hear about a new high-tech product, I take advantage of the very first occasion to find more about it.	,755						
After purchase of a product such as a stereo or camera, I try to keep track of new accessories that come out into the market.	,729						
I like to buy new technologically sophisticated products introduced on the market.	,705						
I take advantage of the first available opportunity to find out about new and different electronic products.	,689						
I prefer to use the most advanced technology available.	,682						
In general I can say that I am very interested in new features associated with technologically sophisticated products.	,654						

I like to go to places where I'll be exposed to information about electronic products and brands.	,648						
Products and services that use the newest technologies are much more convenient to use.	,611						
When it comes to buying a technologically sophisticated product, I prefer to buy new rather than existing products.	,589						
Technology makes me more efficient in my occupation.	,561						
I do not enjoy an electronic product unless I can use it to its fullest capacity.	,556						
I use sophisticated products in more ways than most people.	,517						
Technology gives me more freedom of mobility.	,471						
The thought of purchasing a sophisticated electronic product causes me to experience unnecessary tension		,742					
I often feel incapable of operating an electronic appliance with complex technology.		,692					
The thought of purchasing a new electronic product gives me a feeling of unwanted anxiety		,667					
In general I feel uncomfortable with technologically sophisticated electronic products		,581					
I am afraid to buy an electronic product I don't know how to use.		,578					
I am uncomfortable to purchase products different from types I'm accustomed to .		,570					
I do not like to find myself in a situation where I have to use a technologically sophisticated electronic product.		,527					

I can say that I do not experience difficulty in assembling the functions of technologically sophisticated products that I use		,455					
Purchasing an expensive electronic product could involve important financial losses		,452					
After the useful life of a product, I can often think of ways to use the parts of it for other purposes.			,735				
I enjoy thinking of new ways to use old things around the house.			,604				
I always know the shortest distance from one place to another.			,493				
I take great pleasure in adapting products to new uses that the manufacturer never intended.			,429				
I always follow manufacturer's warnings regarding how to use an electronic product.				,746			
A product's value is directly related to the ways that it can be used.				,526			
I often analyze my feelings and reactions.				,506			
Purchasing an item could lead to an inefficient use of my time				,497			
I spend much time to find out the meaning of unusual statements.					,685		
I like to think about different ways to explain a subject matter.					,670		
I like to discuss unusual ideas.					,565		
I never throw something away that I might use						,648	
If I bought an expensive electronic product, I think I would be held in higher esteem by my circle of friends and acquaintances						,514	
I always prefer assembled sophisticated products even they cost more than unassembled ones.						,377	

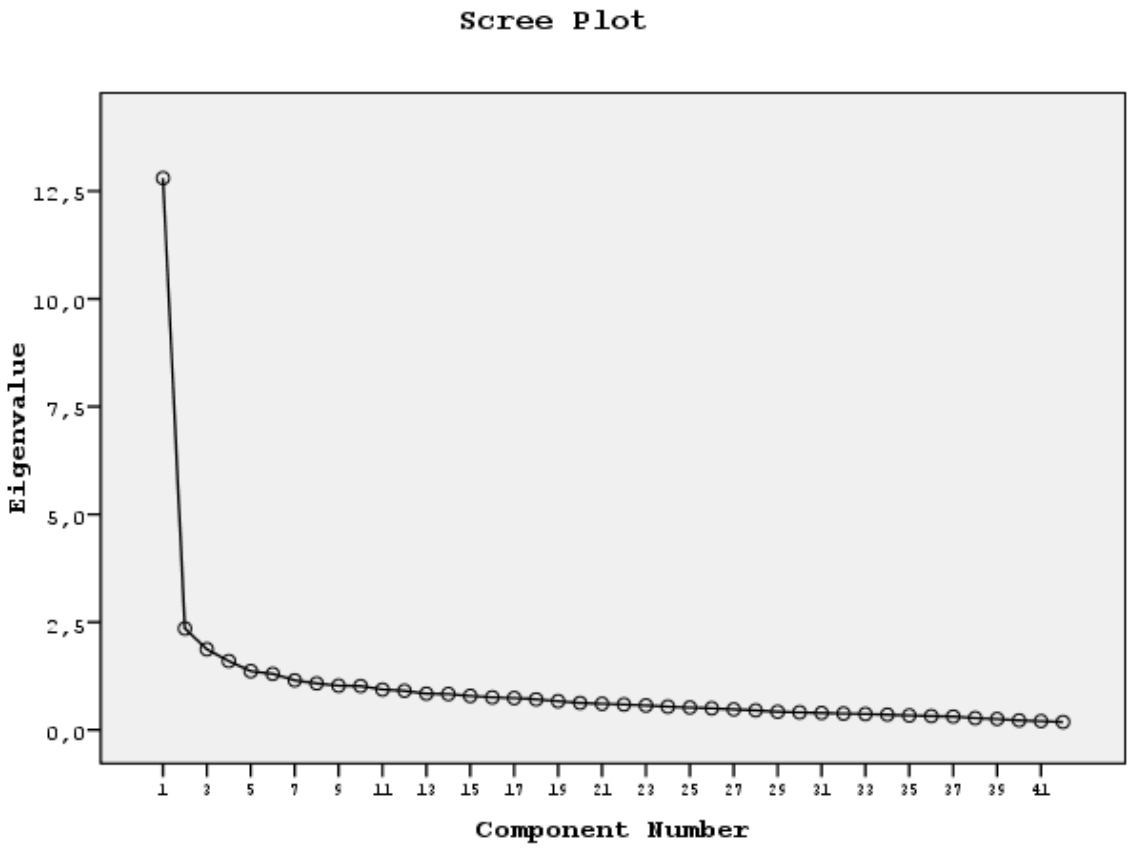
Purchasing an expensive electronic product would cause me to be considered foolish by some people whose opinion I value						,354	
Adding features on an existing product does not necessarily mean that it is a new product.							,667
Technology gives people more control over their daily lives.							,399

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 10 iterations.

Scale Reliability : 0.747

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,938
Bartlett's Test of Sphericity	Approx. Chi-Square	8269,706
	df	861
	Sig.	,000



5. Conclusion

The first relationship discussed in this study was to find out the degree of relationship between consumer risk perception and information search behavior concerning high-tech products which are mainly consumer electronics. The hypothesis formulated in this respect "*High level of information possession reduces risk perception"* is accepted at levels of "psychological", "social" and "functional" risks. From psychological risk point of view the highest score of negative relationship (-82.6 %) is obtained at "The thought of purchasing a sophisticated electronic product causes me to experience unnecessary tension" variable level i.e. 83.6 % of the respondents supported this proposition. On the other hand solid results could not be obtained from "social risk perception" levels; where 50 % of the relationships are rejected. In this category highest score (-80.0 %) is obtained from If I bought a cheap electronic product, I think I would be held in debase by my circle of friends and acquaintances" proposition. Functional risk perception variables when tallied against consumer information search behavior variables produces similar results with psychological risk variables and are accepted unanimously at all nine levels of comparison. Here the highest score (81.9 %) is taken from "I often feel incapable of operating an electronic appliance with complex technology" statement.

Another part of this study aims to find out the relationship between cognitive innovativeness and new-product adoption behavior. Among cognitive innovativeness variables (although accepted at all levels) one produced poorer results than the other two. This variable is "I spend much time to find out the meaning of unusual

statements" and not much evidence is obtained to justify why this variable yields lower results than the others. Moreover highest score (61.6 %) is obtained in rejection (disagreement) of cognitive innovativeness as late majority and laggards category with respect to this very same variable. On the other hand highest score (85.7 %) of approval (agreement) belongs to "I like to think about different ways to explain a subject matter" cognitive innovativeness variable.

Consumer demographics play an important role in this study and several analyses are tied to this concept. First of all, the relationship between consumer demographics and new-product adoption behavior is analyzed. In this analysis, innovators and early adopters are compared with late majority and laggards. It is a bit surprising that on the overall basis, the later group wins out the former at four levels but one of new-product adoption behavior (38.8 % vs. 40.5 % ; 33.0 % vs. 46.9 % ; 37.8 % 43.9 %; **42.0 vs. 36.9** %; and 36.0 % vs.41.4 %). The profiles of innovator and early adopters are as follows: youngsters and young adults, males, students or self-employed professionals or managers, university or college graduates, and highest and high income groups. On the other hand, late majority and laggards are senior citizens, females, housewives or retired people, elementary school graduates, and lowest and low income groups.

Not much evidence is obtained from the analysis so as to find out the relationship between consumer demographics and consumer cognitive innovativeness. The ratio between those respondents who support innovativeness against those who reject it is overwhelmingly high on the part of the supporters (69.3 % vs. 12.2 %). Profile of the supporters, on the other hand is, young adults, students, university or college graduates, and highest income group.

The relationship between consumer demographics and consumer technological innovativeness reveals similar score with cognitive,e innovativeness values. In this analysis, however, more sustaining results are obtained. Three out of four levels of technological innovativeness, supporters win out opponents as follows: 52.4 % vs. 28.4 %; 61.8 % vs. 23.0 %; 41.0 % vs. 38.8 %; and 27.0 % vs. 48.2 %. The profiles of technological innovators are youngsters, males, students or self-employed professionals or managers, university or college graduates, and highest and highest income groups.

Consumer demographics are also related to risk perceptions associated to hi-tech consumer products. From functional risk perception point of view there is almost an even distribution between high and low risk perceivers, but when it comes to drawing the profiles of high and low risk perceivers there is a clear-cut distinction between them. Profiles of high risk perceivers are senior citizens, females, housewives, elementary school graduates, and low income group. On the other hand, youngsters, males, students, college or university graduates, and high income group form low functional risk perceivers. Psychological risk perception has similar distributions of 45 % agreement vs. 40 % disagreement at three levels and 36 % vs. 50 % at one level. Consumer profiles attached to this risk type is similar to the functional risk perception profiles where high risk perceivers are senior citizens, females, retired and housewives, elementary school graduates, and low income group. Youngsters, males, students, or self-employed professionals or managers, college or university graduates, and high income group are low risk perceivers. Not much solid results are obtained from the analysis of social risk perceptions. One out of two levels is completely rejected and only the analysis draws incomplete consumer profiles as high risk perceivers are senior citizens, housewives and low income group. Low risk perceivers on the other hand are young adults, self-employed professionals or managers and highest income group. Finally analysis of financial risk perception reveals no significant differences between consumer demographics.

The sixth hypothesis tests the between technological innovativeness and creative re-use as supposed to be a positive one reveals some surprising results since one out of twelve cases is rejected and three reveals negative results.

Final analysis of this study deals with the ranking of hi-tech product features in order of importance. The respondents are required to rank the first three features of hi-tech products in order of their importance. The primary feature is “quality” and gets 33.4 % of the respondents’ votes. Those who select quality as the most important feature are youngsters, males, self-employed professionals or managers, college or university graduates and highest income group. The second important feature is “reasonable price” and deceives 20.0 % predilection. Senior citizens, females, retired people; elementary school graduates and high-income group favor this feature. “Performance” is another feature ranks third being very close to “reasonable price” feature and receives 19.5 % of the votes. Profiles of consumers who select this feature are youngsters, males, students, college or university graduates and high income group. “Brand name” ranks fourth and receives 7.7 % approval. Young adults, females, self-employed professionals or managers, high school graduates and highest income group draws the profile of this feature. “Appearance” is the fifth favored feature and youngsters, females, tradesmen and businessmen, high school graduates and highest income group are summoned under this group. Its vote is 7.1 %. “Warranty” is supported with a 4.6 % score and senior citizens, females, retired people, elementary school graduates and low income group look for warranty. “Less power consumption” is another feature which ranks seventh and is supported by 3.1 % of the respondents. The profiles of this group are composed of youngsters, females, housewives, elementary school graduates and lowest income group. “Easy installment is the eight factors and selected by 1.8 % of the consumers. The profiles of this group are senior citizens, females, retired people, high-school graduates and highest income group. “Green product” feature is favored by 1.3 % of the consumers. Supporters of this feature is matures, females, tradesmen and businessmen, elementary school graduates and high income group. Tenth and the last feature is “door delivery” with a score of 0.4 % and is favored by senior citizens, females, housewives, elementary school graduates and lowest income group.

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