

# INDIVIDUAL CULTURAL FACTORS AFFECTING NEW PRODUCT ACCEPTING BEHAVIOR: THE CASE OF ELECTRONIC MARKET IN VIETNAM

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*Today individualized culture plays an important role in promoting acceptance consumer behavior towards new electronic products in Vietnam. The article explores the influence of individual cultural factors on the consumer accepting behavior. 600 questionnaires in total were distributed among the people residing in HCM city, Vietnam. A structural equation model (SEM) is used to analyze their consumer behavior in relation to new electronic products' acceptance. According to the analysis of personal factors, fear of risk, innovation and collectiveness significantly influence the consumer acceptance behavior.*

**Keywords:** new product acceptance, consumer, behavior, individuality, collectivity, compliance, electronic products, Vietnam

## Introduction

New products are a vital part of any company's growth and competitiveness strategy. In fact, a large percentage of revenues is mostly obtained from new products. In contrast, world experience has a lot of examples when new products have failed and thus were not accepted by customers. Consequently, knowledge on the factors leading to consumers' acceptance of new products belongs to the key factors ensuring new electronic products' successful development.



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In the world, there are many researches into new electronic product acceptance behavior. Most of these studies focus on the impact of product characteristics, demographic characteristics, and innovations on new electronic product acceptance behavior, thus often ignoring the importance of individualized culture.

In the past, individualized culture has played an important role in promoting consumer acceptance of electronic products in Vietnam. The evidence for this statement is that individual cultural factors such as uniqueness, difference, personality, style, self-expression, dynamics, freedom of choice are often emphasized in promotional messages (especially when it comes to electronic products for personal use).

Rising incomes lead to the need to improve the quality of life through more spending on household goods. As compared to other types of goods, revenues from electronics and electric devices are growing rapidly at many retail market worldwide. High-quality, competitive imported products have strongly boosted domestic demand. According to the preliminary statistics from the General Department of Customs, in the first quarter of 2017, Vietnam spent \$ 470.9 million importing household electronic appliances, electrical appliances and their components (majority of these products are delivered from Thailand, China, Korea, and Japan).

Other research has focused on the impact of consumer demographic characteristics on new product acceptance behavior. The results of the empirical studies have shown that demographic characteristics significantly influence new product acceptance behavior and show that people who accept new products tend to have better jobs, income and education.

Besides that, there is an ongoing debate on how exactly consumer innovation influences the acceptance behavior regarding new products. In fact, the results of empirical research on the relationship between consumer innovation and product acceptance behaviors provide very different evidence, from a strongly positive correlation (Paswan & Hirunyawipada, 2006; Ho & Wu, 2011) to a very weak one (Chao et al. 2010, 2012).

Summarizing previous studies, it is possible to identify the factors that influence new electronic product acceptance behaviors. These factors can be divided into three groups: demographic parameters, psychological traits (consumer innovation and consumer attitudes) and awareness of the new products' attributes.

### **Literature Review**

According to the simplest view of Yenyurt and Townsend (2003), "Culture is viewed as shared beliefs and values". According to Hofstede (2001), "Culture is a system of values and thinking that help distinguish members of one group of people with another". Common focus in the concept of culture is its spiritual value. It converges in every individual into social awareness and labor capacity. Culture is divided by Yan Luo (2009) into three levels: social culture; community culture; individualized culture.

In 1974, Robertson assumed that accepting new products is a conceived process. Accepting new products is the process of consumer mental and physical activity and can lead to acceptance and continued use of a new product or brand (Robertson, 1974). The two concepts of Robertson (1974) and Rogers (1995, 1983) suggest that accepting new products is a complex process. This process begins when the renovation of business as such. It describes how potential consumers learn about new products, test them, then accept or reject

these new products. Rogers argues that the process of accepting new consumer products includes five stages: known, interested, evaluated, trial, accepted.

### ***Behavior regarding new products' acceptance***

According to Kotler (1994), new products may be new in principle, improved from the existing products or brand new ones (Kotler, 1994). Rogers and Shoemaker (1971) presented a behavioral perspective in this regard: "Product acceptable behavior is the degree to which an individual accepts innovation relatively earlier than other individuals in society".

According to Wikipedia, consumer electronics products stand for the electronic products, including devices with circuit boards that are designed for everyday use. Electronic products include televisions, cameras, digital cameras, telephones, computers, camcorders, recorders, clocks, audio devices, headsets and other products.

Up to now, there are many concepts of behavioral acceptance of new products based on the behavioral views. Rogers and Shoemaker (1971) believe that new product acceptance behavior involves not only product purchase but also some other aspects of new products' accepting. Accepting behavior of consumers can be measured, inter alia, through the intention to purchase new products (Holak & Lehmann, 1990).

In the world, there are two most common perceptions of new products' accepting behavior. The first of them considers the concept of accepting new products as a process. According to the second one, new products' accepting is behavior (Rogers & Shoemaker, 1971; Midley & Dowling, 1978).

### ***Environmental factors of Consumer Behavior***

One of the most important factors for marketers is easy treatment of consumer awareness and environmental concerns (Mostafa, 2007). Some studies show that people are more and more concerned about environmental issues. It is reflected in their behavior such as recycling more waste materials, less purchases of environmentally harmful products and turning off lights when there is no need in it (Chen, 2010). Other special categories of products include commodities and services that are beneficial for safety, health, reputation or are a special symbol of position (Thøgersen & Crompton, 2009). Consequently, consumers are becoming more sensitive in their attitudes, preferences, and purchases (Sarigollu, 2009).

In fact, the results of empirical research in the United States, Europe and Asia concerning the relationship between innovation of consumers and product acceptance behavior provided rather controversial evidences, ranging from a rather strong positive correlation (e.g. Foxall & Bhate, 1991; Goldsmith et al., 1995; Wood & Swait, 2002; Paswan & Hirunyawipada, 2006; Ho & Wu, 2011) to very weak relationship between these parameters (e.g. Chao et al., 2010, 2012).

### ***Compliance with social standards***

Of great significance nowadays is also the influence of colleagues, families and social leaders when it comes to consumer behavior (this also indirectly proves the significant social value of products' consumption) (Goldsmith, et al. 1995). This is especially meaningful in the case of highly engaged products, often viewed as a symbol of a certain social position. Thus, awareness about using certain products tends to have a significant influence on many further consumer purchasing decisions (Hair et al., 2009).

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Hansan, H. & Ditsa, G. (1999) showed that compliance with social norms is the most important factor influencing the behavior of consumers at the market of new electronics. In addition, interpersonal communication is also recommended for consideration as an important factor influencing consumers' green purchasing. In addition, social groups which include people with similar habits, desires, and views should not be neglected in this regard, since social group is capable of cultivating a friendly eco-culture, for example.

Most studies have confirmed that people, who accept new electronic products, often have better jobs, are more likely to be male, have higher incomes and higher education (Dickerson & Gentry, 1983; Wang, 2006; Venkatraman, 1991). In addition, Dickerson and Gentry (1983), Wang (2006) have demonstrated that age negatively affects the adoption of new electronic products, while Venkatraman (1991) confirms the opposite – the positive impact of the age factor on the new electronic products' adoption.

### ***Individuality and Collectivity***

Individuality includes self-direction, freedom, and self-confidence, independence, while collectivity is related to dependency and the like (Triandis et al., 1988). In the context of Vietnam, Singelis's personal, collective scale (1994, 1995) was developed by Hui, C.H. (1984). The same scale of individuality and collectivity will be also used in this study.

Consumers, as individuals, often emphasize personal goals and accomplishments, as well as often compete with others. In addition, they are often interested in expressing themselves and own personality through product and/or purchase. On the contrary, corporate consumers often consider themselves as members of a certain, rather closed community. Thus, they tend to put more emphasis on the opinions of others or the standards inside their group, staying in harmony with others, being submissive to somebody's else wishes or tastes. Members of such groups are mostly maintaining relationships through paying more attention to the needs and desires of the others.

### ***Fear of risk***

According to Hofstede (2001), risk aversion is the degree to which one accepts or fear of risk (situations or environments that are unstable or unstructured). According to Hansan and Ditsa (1999), risk aversion involves the degree to which a person feels uncomfortable within a uncertain environment. For example, when people move to a new country, they often feel uncomfortable in the new environment. According to Hwang et al. (2008), fear of risk is a feature of most individuals.

In recent times, Jung and Kellaris (2004) focus on building the fear of risk scales under an individual angle. Thus, the study used the risk scales of Jung and Kellaris (2004) without using Hofstede's approach, although Hofstede's scales have been widely used in many previous studies. Moreover, the scales of Jung and Kellaris (2004) have been used in Korea, an Asian transitional economy like Vietnam, thus, there are reasons to believe the same scale will be well suited for our study.

### ***Awareness of the attributes of new electronic products***

Awareness of new product attributes influences new electronic products' acceptance behavior (Paswan & Hirunyawipada, 2006; Ho & Wu, 2011). In 2010, Chao and Reid conducted the study titles "Consumer Innovation and New Chinese Product Acceptation". This

study examines the relationship between innovations in different contexts, namely, in specific contexts/situations. In 2011, Ho and Wu conducted a study entitled "The role of innovation in the relationship between awareness of new products and intent to accept".

The Schwartz's (1994) theory of "individualized culture structure" is relatively comprehensive and is often used in quantitative research. In addition, this value structure is also accepted in different cultures.

According to our observations, there is an obvious lack of research describing the acceptance of new electronic products under the angle of individualized culture. While we are of the opinion that this is a really prospective field for future marketing research.

Table 1 - Schwartz's individualized culture structure

(Source: Schwartz, 1994)

<b>Personal culture factor</b>	<b>Target</b>	<b>Value</b>
Individuality	Think and act independently, creatively, discover	Creativity, freedom, personal choice, curiosity, independence
Innovation	Liking everything new and challenges in life.	Diverse, interesting, daring life
Hedonism	Joy and satisfaction with oneself	Joy, enjoying life
Achievements	Success depends on capacity, according to social standards	Ambitious, successful, capable, influential
Powerful	Social status and prestige, control or dominance over others and/or some useful resources	Powers, wealth, social influence
Fear of risk	Safe, harmonious and stable relationships and life	Social order, family stability, national stability
Compliance with social norms	Limiting impulsive behaviors, that may harm others or violate social expectations or norms	Polite, self-disciplined, obedient, respectful of parents and older people in general
Collectivity	Respect, commitment, fully acceptance of customs and ideas belonging to traditional culture and/or religion.	Humility, ethics, acceptance of one's position in society for the sake of harmony.
Selflessness	Protecting and promoting the interests of other people related to oneself (belonging to the same "group").	Help others, be honest, selfless, responsible, loyal, sincere in friendship, seriously in love.
Social responsibility	Empathy, recognition, tolerance, and protection for the benefit of all people and the Nature.	Think further, social justice, equality, environmental protection

### **Research model and research hypotheses**

Based on the individualized cultural structure by Schwartz (1994) and the results of the previous studies we propose here six individualized cultural factors: Individuality, Collectivity, Fear of risk, Innovation, Awareness of attributes of the new electronic products and Compliance with social norms, to be further used in our research model (after testing the demographic factors such as age, income and education level).

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These variables have been all assigned into the control variables' group because these variables have a statistical significant relationship with the dependent variable. To ensure the rigor of the model, three demographic variables were also have been put into the model as the control variables

## ***Research hypothesis***

H1: Individuality influences positively on new electronic products' acceptance behavior of consumers.

H2: Collectivity influences positively on new electronic products' acceptance behavior of consumers.

H3: Fear of Risk influences positively on new electronic products' acceptance behavior of consumers.

H4: Innovation influences positively on new electronic products' acceptance behavior of consumers.

H5: Awareness of the attributes of electronic products influences positively on new electronic products' acceptance behavior of consumers.

H6: Compliance with social norms influences positively on new electronic products' acceptance behavior of consumers.

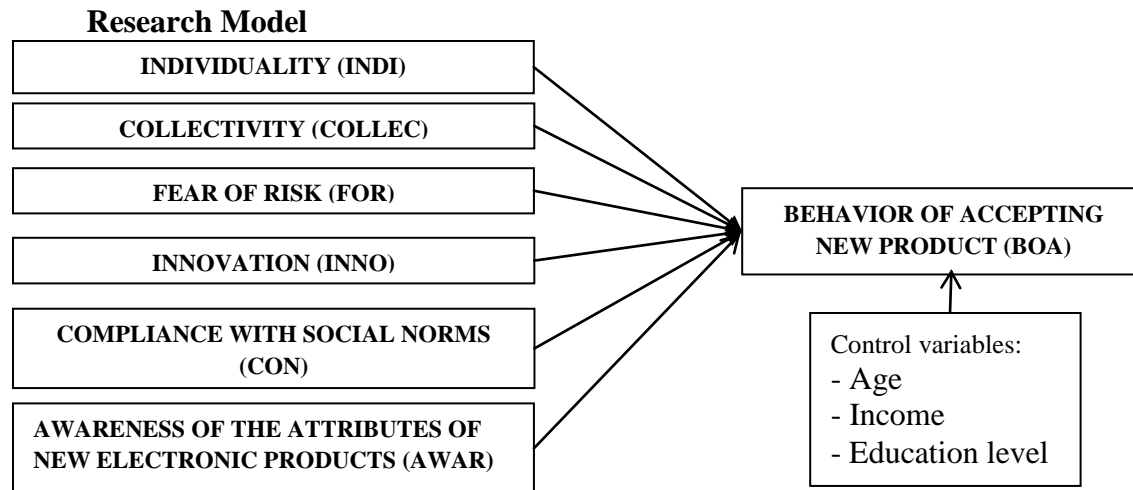


Figure 1: Research Model  
(Source: author's)

The main objective of this study was to measure the accepting behavior regarding new products. Independent variables here include the following ones: (1) individuality, (2) collectivity, (3) fear of risk, (4) innovation of consumers, (5) awareness of attributes of new electronic products; (6) compliance with social norms. Acceptance of new products in this case is the dependent variable.

Before the actual study, the survey was tested on 30 consumers to check the questions and to get feedback from the respondents so that to see the reliability and validity of the questions. The questions were divided into two parts. The first part covered the questions operating the scales of acceptable behavior of new products, including 31 questions measured on the 5-point Likert scale. The second part covered the demographic questions such as gender, age, occupation and monthly income.

Sampling method: A stratified sample has been selected according to the geographical criteria. Sample units were selected by convenient sampling. Data collection took in places such as shopping centers, universities of the seven inner districts of HCM City. After issuing 600 questionnaires, 578 questionnaires were collected back, including including invalid 32 questionnaires. Therefore, 546 questionnaires were qualified for our further analysis.

Table 2- Construct, Factor Loadings, and Reliability (EFA)  
(Source: author's own calculations in SPSS 23.0)

Pattern Matrix						
	Component					
	1	2	3	4	5	6
INDI2	.995					
INDI3	.977					
INDI1	.973					
INDI4	.954					
INDI5	.916					
COLLEC5		.937				
COLLEC4		.916				
COLLEC1		.871				
COLLEC3		.824				
COLLEC2		.768				
FOR2			.880			
FOR5			.876			
FOR1			.874			
FOR3			.832			
FOR4			.663			
INNO4				.844		
INNO1				.802		
INNO3				.762		
INNO2				.656		
AWAR1					.977	
AWAR2					.962	
AWAR3					.771	
CON2						.837
CON1						.814
CON3						.800
CON4						.610
Extraction Method: Principal Component Analysis.						
Rotation Method: Promax with Kaiser Normalization.						
a. Rotation converged in 6 iterations.						

### ***Reliability and validity***

First, we analyze the scale's reliability through the Cronbach alpha coefficient. The reliability of the question is 0.778, which is an acceptable range. The research was then evaluated and tested using EFA, CFA and Alpha Cronbach for each component. Selection criteria are satisfactory when the overall correlation coefficient being  $>0.40$ , coefficient Cronbach alpha  $>0.60$ ; Load factor  $>0.40$ ; Total extraction variance for  $\geq 50\%$  (Hair & Ctg, 1998). Structural equation modelling was then applied to understand the relationship between the structure of purchase behavior and the behavior of new electronic products' acceptance. The steps in AMOS 23.0 structural modelling (SEM) analysis are CFA analysis, complexity

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analysis and direct impact analysis, conformance testing of the hypothetical modeling. Modeling has been modified according to (Sentosa et al., 2012).

### *Description of the survey sample*

The total was 546 respondents, males accounting for 45.9% and females – for 54.1%; more than 4.2% were younger than 20 years old, and 55.0% were between 20 and 35 years old. 30.5% of the group were from 35 to 50 years old, and only 4.0% were over 50 years old.

The results of the EFA, summarized in Table 2, show the 25 observed variables in the 6 components of the behavior of accepting new electronic products scale and retained 6 factors with 25 observed variables. As KMO coefficient = 0.854, EFA matches the data and the statistical test Chi-square Bartlett 7652.078,  $p = 0.000$  significance level. Thus, the observed variables are correlated with each other considering the overall scope. The variance extracted by 77.592 shows that the factors derived from 77.592% explained data variance, eigenvalues in the system by 1.332. Therefore, the scale draw is acceptable. The scales have observed concepts excluded via EFA. Cronbach's Alpha coefficients were recalculated, and the results then achieved the reliability requirements.

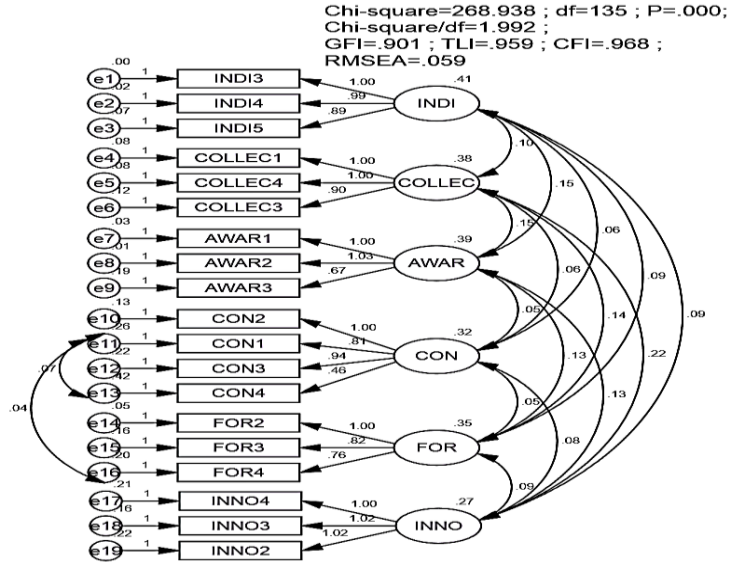
Table 3 – The results of the scale  
(Source: author's own calculations in SPSS 23.0)

Model	Variables	Cronbach's alpha	Variance (%)	Value
INDI	5	0.798	77.592	Satisfactory
AWAR	3	0.757		
COLLEC	5	0.758		
FOR	5	0.775		
INNO	4	0.768		
CON	4	0.817	61.528	
BOA	4	0.712		

### *Confirming factor analysis (CFA)*

The correlation coefficient between the components with accompanying standard deviation (Table 3) shows us these coefficients got less than 0.05 (with statistical significance). Therefore, the component variables (1) Individuality, (2) Collectivity, (3) Fear of risk and (4) Innovation of consumers, (5) Awareness of attributes of new electronic products; (6) Compliance with social norms are all worth distinguishing.





(Source: author’s own calculations in SPSS 23.0)

Regarding the relevance, general linear structural analysis shows this model’s chi-squared statistics is 268.938 with 135 degrees of freedom and the value of  $p = 0.000$ . Chi-squared relative degrees of freedom according  $Cmin/df$  was 1.992 (that is,  $<2$ ). Other indicators such as  $GFI = 0.901$  ( $> 0.9$ ),  $TLI = 0.959$  ( $> 0.9$ ),  $CFI = 0.968$  ( $> 0.9$ ) and  $RMSEA = 0.059$  (that is,  $<0.08$ ). Therefore, this model fits the data collected. The standardized weights of the scales are  $> 0.5$ , with the statistical significance  $p < 0.05$ , so the scale achieved the needed convergence value.

Table 4 - Testing the value of distinguishing between the components of the scale

(Source: author’s own calculations in SPSS 23.0)

Components of the scale		Estimate	S.E.	C.R.	P	Label
INDI	<--> COLLEC	.097	.025	3.817	***	
INDI	<--> AWAR	.148	.026	5.690	***	
INDI	<--> CON	.062	.024	2.545	.011	
INDI	<--> FOR	.094	.024	3.842	***	
INDI	<--> INNO	.085	.023	3.672	***	
COLLEC	<--> AWAR	.148	.026	5.638	***	
COLLEC	<--> CON	.058	.024	2.396	.017	
COLLEC	<--> FOR	.138	.025	5.429	***	
COLLEC	<--> INNO	.216	.029	7.554	***	
AWAR	<--> CON	.052	.024	2.198	.028	
AWAR	<--> FOR	.127	.025	5.151	***	
AWAR	<--> INNO	.129	.024	5.318	***	

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The results show that the final chi-squared standard model was 162.767 with 91 degrees of freedom ( $p = 0.000$ ). Chi-squared relative degree of freedom according Cmin/df was 1.789 ( $< 2$ ). Other indicators were: GFI = 0.936 ( $> 0.9$ ), TLI = 0.971 ( $> 0.9$ ), CFI = 0.978 ( $> 0.9$ ) and RMSEA = 0.053 ( $< 0.08$ ). Therefore, this model achieved compatibility with the data already collected.

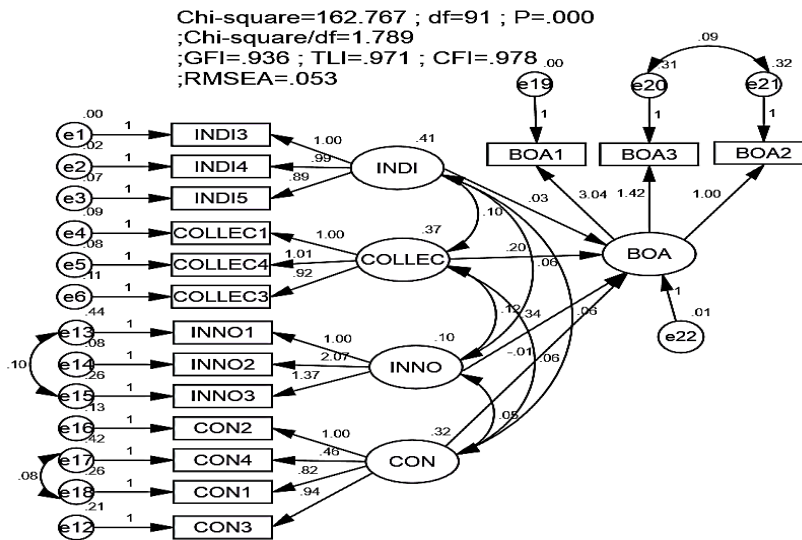


Figure 4 - Results of the model structure, after final calibration in SEM  
 (Source: author's own calculations in SPSS 23.0)

Table 4 - Results of estimating causal relationships between the elements  
 of the accepting new electronic products behavior  
 (Source: Author's own calculations in SPSS 23.0)

Relationships of Components of the scale	Estimate	S.E.	C.R.	P	Label
BOA <--- INDI	0.028	0.011	2.570	0.010	Yes
BOA <--- COLLEC	0.199	0.035	5.631	***	Yes
BOA <--- INNO	0.345	0.078	4.422	***	Yes
BOA <--- FOR	-0.011	0.013	-0.851	0.035	Yes

### *Testing the reliability of estimates by Bootstrap*

Bootstrap method is often used to test the model estimates in the last model with the pattern repeat being  $N = 1000$ . The estimation results from 1000 samples are averaged together with the deviations and are presented in Table 5. CR very small, therefore, it can be said that the deviation is very small; while not statistically significant at the 95% confidence level. Thus, we can conclude that the model estimates can be trusted.

As a result of testing all our hypotheses, we can thus state that: (1) Individuality, (2) Collectivity (3) Fear of risk and (4) Innovation are in the same direction relationship with the behavior of accepting new electronic products. Thus, these hypotheses are accepted.

## Conclusions

### *Results and Discussion*

Over the past half century, research has identified many factors that potentially may influence the accepting behavior regarding new electronic products in different contexts. These factors can be divided into two groups – demographic features (including age, gender, income, education level, occupation) and psychological characteristics (consumer innovation and consumers' attitudes).

Table 6 - Results estimated via bootstrap with N = 1000  
(Source: Author's own calculations in SPSS 23.0)

Estimated Normal				Estimate Bootstrap N=1000			
Parameter	Estimate	SE	SE-SE	Mean	Bias	SE-Bias	CR
BOA <--- INDI	0.028	0.013	0.001	0.028	-0.001	0.001	-1.00
BOA <--- COLLEC	0.199	0.041	0.001	0.201	-0.005	0.002	-2.50
BOA <--- INNO	0.345	0.090	0.002	0.348	-0.006	0.002	-3.00
BOA <--- FOR	0.011	0.012	0.003	-0.011	-0.001	0.001	-1.00

Meanwhile, the results of our own observations show that the behavior of accepting new electronic products may be affected by the cultural values of an individual. Thus, here we have been trying to fill in the theoretical gaps so that to explain the new electronic products' acceptance behavior through the optics of individualized cultural factors (Schwartz, 1994). Our research results show that individuality, fear of risk, collectivity and any innovation on the side of consumers influence new products' acceptance behavior manifested through the frequency of new electronic products' purchases. In particular, innovation has the strongest impact ( $\beta = 0.345$ ), while fear of risk has the lowest impact ( $\beta = 0.011$ ).

The relationship between individuality, fear of risk and new electronic products accepting behavior was identified in this study. In contrast, the study did not find any meaningful relationship between individual cultural factors and the intention to purchase new electronic products, as well as the relationship between collectivity and frequency of purchasing new electronic products.

Fear of risk positively influences the behavior regarding new electronic products accepting. This finding perfectly fits into the general framework of cultural features of Vietnamese consumers. According to the survey's findings, Vietnamese consumers are considered at relatively high level when it comes to the fear of risk. However, innovation also has a positive effect on new electronic products' accepting behavior. According to Manning et al. (1995), innovative consumers are the ones who appreciate novelty, like seeking information on new products etc. They tend to actively accept new products as soonest and tend to be fascinated by the benefits, better features, new style, unique colors and other novelties of electronic products.

Consumers in HCM City area buy new mobile phones with the highest frequency (on average, 2.23 times / 2 years). This product category is followed by new laptops (on average, 1.64 times / 3 years) and a new tablet (on average, 1.18 times / 2 years).

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Based on the results of the study, the author proposes a number of measures such as more personalization and exploitation of individualized cultural factors in the promotion of personal electronic products. Also helpful would be limiting the risk of new products by means of moving consumers to the center of innovation, using a variety of media (social media especially) to provide more information on the differences between old and new products. In some cases changing the pricing strategies for new products might be also helpful. Accordingly, businesses should innovate more, at the same time they should also try to make complex technology more easy and user-friendly for all “ordinary” users. This would enhance better understanding of new technologies overall and thus – contribute to overcoming many barriers in product acceptance.

### ***Suggestions for Further Research***

Although the presented above results have proved our hypotheses are valid, the study still contains certain restrictions, thus requiring further studies in the same direction. For example, ten individual cultural factors may be used in the future to explain the accepting behavior of consumers regarding new electronic products (Schwartz, 1994). Also, indirect effects from some individualized cultural factors on the behavior of new electronic products’ accepting and consumer attitudes in general should be taken into account. Although our research has taken into account the impact of demographic variables (such as age, income and education levels) on the acceptance and attitudes, additional, more detailed study may be carried out in this direction as well.

### **References**

- Chao (2012). Consumer innovativeness influence on really new product adoption. *Australasian Marketing Journal*, 20. Pp. 211–217.
- Dickerson, M.D. & Gentry, J.W. (1983). Characteristics of adopters and non-adopters of home computers. *Journal of Consumer Research*, 10. Pp. 225-35.
- Foxall, G.R., & Goldsmith, R. (1988). Personality and consumer research: Another Look. *Journal of the Market Research Society*, 30 (2). Pp. 111-125.
- Hofacker, C. (1991). Measuring Consumer Innovativeness. *Journal of the Academy of Marketing Science*, 19. Pp. 1004-1116.
- Hansan, H. & Ditsa, G., (1999). The impact of culture on the adoption of IT: an interpretive study. *Journal of Global Information Management*, 7 (1). Pp. 5–15.
- Ho, W. (2011). Role of innovativeness, of consumers in relation between perceived attributes of new products and intend to adopt. *International Journal of Electronic Business Management*, 9. Pp. 258-266.
- Hofstede (2001). *Culture’s Consequences*, 2nd edition, Sage Publications, Thousand Oaks, CA.
- Holak, S.L. & Lehmann, D.R. (1990). Intention and the dimensions of innovation: an exploratory model. *Journal of Product Innovation Management*, 7. Pp. 59-73.
- Hui, C.H. (1984). *Individualism-Collectivism and Collectivism: Theory, Measurement, and Its Relations to Reward Allocation*. Doctoral dissertation, Department of Psychology, University of Illinois, Urbana-Champaign.

- Jung, J.M. & Kellaris, J.J. (2004). Cross-national differences in proneness to scarcity affects: the moderating roles of familiarity, uncertainty avoidance and need for cognitive closure. *Psychology and Marketing*, 21 (9). Pp. 739–753.
- McClelland, D.C. (1991). *The personal value questionnaire*, McBer & Company, Boston.
- Midgley, D.F. & Dowling, G.R. (1978). Innovativeness: the concept and its measurement. *Journal of Consumer Research*, 4. Pp. 229-42.
- Nguyen, T.T., Mai, Siok Kuan Tambyah (2011). Antecedents and consequences of status consumption among urban Vietnamese consumers. *Organizations and markets in emerging economies*, 1 (3).
- Paswan & Hirunyawipada (2006). Consumer innovativeness and perceived risk: implications for high technology product adoption. *Journal of Consumer Marketing*, 23/4. Pp. 182–198.
- Rogers, E.M. (1983). *Diffusion of Innovation*. 3rd edition. New York: The Free Press.
- Rogers, E.M. & Shoemaker, F.F. (1971). *Communication of Innovations*. The Free Press, New York, NY.
- Schwartz, S. H. (1994). Are There Universal Aspects in the Structure and of Human Values?. *Journal of Social Issues*, 50. Pp. 19-45
- Sentosa, I. et al. (2012). A Structural Equation Modeling of Internet Banking Usage in Malaysia. *Journal of Arts, Science and Commerce*, 3 (1). Pp. 75-86.
- Venkatraman, M. P. (1991). The impact of innovativeness and innovation type of adoption. *Journal of Retailing*, 67. Pp. 51-67.
- Wang, Wenyu Dou & Nan Zhou (2006). Consumption attitudes and adoption of new consumer products: a contingency approach. *European Journal of Marketing*, 42, Pp. 238-254.
- Wood & Swait (2002). Psychological Indicators of Innovation Adoption: Cross-Classification Based on Need for Cognition and Need for Change. *Journal of consumer psychology*, 12 (1). Pp. 1-13.
- Yan Luo (2009). *Analysis of Culture and Buyer Behavior in Chinese Market*. CCSE, 1.
- Yeniyurt & Townsend (2003). *Does the culture explain acceptance of new products in a country?* International Marketing Review. Emerad Group Limited.

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