User Acceptance of Hedonic Information System: A Structural Equation Model to Understand why Some People Prefer Apple Products

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Abstract

Purpose: The work provides an empirical evidence of the factors affecting consumer behavior, highlighting the main reasons why some people prefer Apple products.
Methodology: A quantitative approach is used by means of a Structural Equation Modeling (SEM) to empirically and simultaneously verify the relationships between the variables of the conceptual model known as "User Acceptance of Hedonic Information System".
Findings: The analysis demonstrates that all the considered variables effectively affect the consumers' decision-making process who prefer Apple products. Moreover, an interesting result to the consumer, is that, between them, the variable mostly able to orient the consumers' choice seems to be perceived usefulness, highlighting that, nowadays, the border between hedonic and utilitarian consumption is very labile.
Practical implications: The work provides information about important aspects that consumers take into account in choosing and using hedonic information systems and suggests to marketing managers the variables that could opportunely be leveraged to attract and retain customers.
Originality/value: The paper is the first scientific contribution that uses a SEM to test the User Acceptance of Hedonic Information System regarding Apple products.

Keywords
User Acceptance of Hedonic Information System; Apple; hedonic consumption, Structural Equation Modeling (SEM); perceived ease of use; perceived usefulness; perceived enjoyment; intention to use

1. Introduction

Marketing constantly evolves. Without it, no company has big prospects for growth, configuring itself as a fundamental function of every business process. Its significance has changed radically over time, passing from a set of direct and indirect brand management, advertising, and selling prices of goods and services to a process of customer engagement aimed at co-creating value (Barile et al., 2012; Prahalad and Ramaswamy, 2004). Marketing, therefore, can no longer be considered as a series of linear activities, but rather as a circular process, in which the understanding of the needs and expectations of current and potential customers is the basis for achieving of competitive success (Golinelli et al., 2012). In this regard, always more often companies focus their efforts on the analysis of consumer behavior, obtaining valuable information about the reasons that lead them to make certain choices of purchase and use of products.

This interest is visible not only at company level, but also in scientific literature: numerous studies have been dedicated to the analysis of consumer behavior in various contexts (Ciasullo et al. 2017a, 2017b). However, especially in the past, many scientific articles dealt with the topic only from a purely conceptual point of view, without providing concrete data capable of corroborating the hypotheses formulated theoretically, even whether, for several years now, many empirical studies have been conducted in this regard. Some of them, in particular, focus on the analysis of consumer hedonic behavior, that is, on the process that leads them to purchase hedonic goods (Adomaviciute, 2013; Wu and Holsapple, 2014; Choi et al., 2014; Miao et al., 2014). Others, instead, are dedicated to the understanding of the behavior of users of information systems (Weigel et al., 2014; Ifinedo, 2012; Aswani and Lauer, 2006; Huh et al., 2009).

In addition, it should be highlighted that many questions remain unanswered, particularly with regard to understanding the sources of pleasure, the manner in which consumers seek it, and the ways in which consumers might alter their hedonic consumption decisions to maximize pleasure and happiness (Alba and Williams, 2013).

In this context, the present work is inserted. It follows a quantitative approach by means of a Structural Equation Model (SEM) to empirically and contemporaneously verify the relationships between the variables of the conceptual model known as the "User Acceptance of Hedonic Information System", originally proposed by Van der Heijden (2004). Specifically, the model is tested in order to provide an empirical evidence of the factors affecting consumer behavior, highlighting the main reasons why some people prefer Apple products.

To achieve the research objective, the work is structured in 5 sections. First, it opens with the analysis of the literature related to the behavioral models of the consumer and to the hedonic consumption. Subsequently, the research design is presented, with regard to the methodology used to collect, analyze and represent the data. Afterwards, the results are first shown and then discussed. Subsequently, the theoretical-practical implications are debated. Finally, the work ends with the conclusions, in which the limits of the research and the hints for future research are highlighted.

2. Theoretical background

2.1. Consumer behavior

Behavior is one of the ways by which an individual communicates. Everything that people feel they want to do or avoid significantly affects their behavior. This also happens in the context of purchasing and using behavior, where the individual is perceived as a "consumer" of

a product, good or service. In this sense, consumption is increasingly considered as a language to be understood, an expression to be grasped, an experience to be analyzed (Godey et al., 2016). In this context, the study of consumer behavior is useful for understanding the individuals' needs and desires and the importance of their physical and psychological well-being (Daccò, 2005).

Communication from companies can influence the individuals' behavior in different phases (Zhang, 2015): formations of needs and desires, interpretation and evaluation of stimuli, choice of tools to satisfy expectations, and so on. However, marketing strategies aimed at attracting and retaining consumers by predicting their behavior are defined by considering not only the possible individual's actions, but also and above all the deep interaction that is created between the environment and people, products and experiences, as it is the combination of these factors that conditions the consumers' behavioral intention. Studying behavior means analyzing the mental and attitudinal processes of the individual when the latter has to choose and purchase goods and/or services.

The behavioral processes concern the ways in which consumer acts while the mental processes are related to the logic that pushes him or her to perform a specific action (Solomon et al., 2014). The variables that influence behavior and decisions are numerous and can be linked to different areas: economic, social and experiential. The economic variables are binding in the choices and condition the behavior from the quantitative point of view of consumption; the social variables, on the other hand, refer to the conditioning that comes from the cultural and relational context to which an individual participates; the experiential variables, finally, concern both individual's internal conditions, such as the state of mind, and external, such as the atmosphere.

In the light of what has been described so far, there is a clear interrelationship between marketing and individuals' behavior, also demonstrated by how market operators provide feedback regarding the consumers' needs emerging after marketing actions (Xiang et al., 2015). the use of particular strategies are shaped and subordinated to specific hypotheses on consumers' reactions, compared to a systematic research able to provide an estimate of the possible consequences, including the mechanisms on the basis of which those same consequences occur. Only an adequate analysis of consumer behavior can respond to the need for marketing feedback.

However, it is evident that this discipline often lacks objective data, so that marketing policy makers need to await the results of extensive and comprehensive studies on which to base their decisions. The value of information in this sector depends on the breadth of the scope and, even if proven, it does not always have explanations of the empirical evidence obtained (Cantallops and Salvi, 2014). In this regard, there is no single theory that can fully explain and help predict consumer buying behavior. To achieve greater understanding, it is necessary to split the consumer behavior into new or repeated, important or trivial, free or constrained, individual or group actions.

From this point of view, it is possible to identify four types of consumption: "important purchases", which, carried out for the first time or rarely, can require the consumer to have a high period of time given that the previous experience is null or poor; the "repetitive consumption", due to frequent purchases that require a low involvement and a minimum level of attention; the "involuntary consumption", which includes actions carried out without the possibility of choice or, at most, with the possibility of choosing between a few alternatives (this happens in the case of monopoly or oligopoly); the "group consumption", which is the consequence of more or less strong pressures exerted by the group to which he or she belongs or refers.

The great variety of factors to be considered in order to be able to favorably orient the consumer behavior has determined the development and diffusion of numerous theoretical models, all aimed at identifying the variables mostly considered by individuals in their purchasing or using choices. In this regard, the main behavioral models are described in the next subsections.

2.1.1 Theory of Reasoned Action (TRA)

TRA is a theoretical model used to study the individuals' intentional/conscious behavior; it has a rather general connotation as it does not refer to specific behaviors. For this reason, TRA is applicable to a wide variety of behaviors, to the point of being considered as the best starting point for the study of people's intentions (Gentry and Calantone, 2002). Born on the initiative of Fishbein and Ajzen (1975), this theory describes the factors that determine the individuals' behavior. In particular, according to the authors, two factors influence behavioral intention and the latter, in its own right, affects the actual behavior: "attitude" towards the effect of action, understood as the belief that action will lead to a certain effect, and "subjective norm", that is the individual's moral perception that a given behavior is or is not expected by significant persons for him/her (such as family, friends, partners, etc.). Although there is a strong correlation between these two factors, attitude and subjective norm, with the actual behavior undertaken by people, they sometimes could appear as not sufficient to effectively predict the behavior of human beings in all situations.

2.1.2 Theory of Reasoned Action (TRA)

Originally proposed by Davis et al. (1989), this model was designed to explain the behavior of an individual in the moment of an innovation. Therefore, it presents itself as a theoretical model less general than the TRA as it incorporates the results obtained through a study based on computer systems, although over the years it has been also used in other fields of application. The TAM, in fact, is configured as the first model that specifically analyzes the acceptance of a new technology, in order to guarantee a certain predictive capacity through the study of several variables, including: "perceived usefulness", understood as the degree or level with which a person believes that using that particular technology will obtain better performances in the working field; "Perceived ease of use", indicated as the degree or level with which a person believes that the use of that particular technology can be carried out effortlessly; "Attitude towards using", understood as the attitude towards the use of that particular technology"; and, finally, "behavioral intention", defined as the will to make certain choices related to the use of a technology.

2.1.3 Technology Acceptance Model (TAM 2)

TAM 2 is an extended version of TAM, developed on the proposal of Venkatesh and Davis (2000) through the consideration of further variables with respect to the original model, which outline the perception of use and the intentions of use as related to the process of social influence and to cognitive tools. TAM 2 incorporates social norms, voluntariness and image as three interconnected social forms that help to understand if an individual will adopt a new information system. The model also suggests that the subjective norm positively influences the image, because if an individual's working group considers it important to proceed with a certain activity, the execution of that activity elevates the individual's image into the group. Furthermore, according to the authors, all cognitive instrumental processes positively influence the perceived utility and, ultimately, the intention of an individual to use an information system. Through TAM2 it is shown how the acceptance of technology is also influenced by variables

related to social processes (such as the subjective norm and image), as well as by instrumental cognitive processes (such as job relevance, quality of the result obtained, and the demonstrability of result). With regard to the additional constructs of the model, it is necessary to specify that: "subjective norms" represent the user's perception of what people deemed important think about a given technology; "Image" indicates the degree to which an innovation is able to improve the social status of those who intend to adopt it: if technology promotes a positive image, then the perception of usefulness is high; "Job relevance" measures the degree of perception regarding the usefulness in the person's working context; "Output quality" indicates the degree to which the user believes that the technology improves the result of his/her working performances; "Results demostrability" is the degree with which the measurability of the finding is able to improve the perception of utility of the technology used.

2.1.4 Theory of planned behavior (TPB)

TPB is a model that explains human behavior as a consequence of an intention, in turn, due to the interaction between beliefs, attitude, subjective norm and perceived behavioral control. The TPB was developed by Ajzen (1991) as a conceptual extension of the TRA: the author, to overcome the limits of the TRA, introduces a new element, represented by the "perceived behavioral control", understood as the individual's perception about the possibility to adopt the desired behavior. This control influences both the intention to implement a given behavior and the actual behavior itself. The perceived behavioral control differs from the real control, i.e. from the actual control exerted by the person on the behavior. The perceived behavioral control is, with respect to the real control, a proxy, that is, an indirect measure of it that concerns only the subjective perception, not the individual's concrete control on his/her behavior. The model is very general and does not refer to specific behaviors. This makes it applicable to many fields of study, especially in the scope of social psychology, being able to be adapted from time to time to the different circumstances related to the particular type of behavior being investigated. This feature has made it a very popular and widely used model as a theoretical basis for many researches in many areas.

2.1.5 Unified Theory of Acceptance and Use of Technology (UTAUT)

UTAUT is a theoretical model born thanks to the studies conducted by Venkatesh et al. (2003), based on the integrated combination of different behavioral theories, such as TRA (Fishbein and Ajzen, 1975), SCT (Social Cognitive Theory - Bandura, 1986), TAM (Davis et al., 1989), TPB (Ajzen, 1991) , MPCU (Model of Pc utilization - Thompson et al., 1991), IDT (Innovation Diffusion Theory - Rogers, 1995), C-TAM-TPB (Combined TAM and TPB - Taylor and Todd, 1995), and MM (Motivational Model - Vallerand, 1997). Today this model is used in different fields to analyze the process that leads people to the acceptance of a new technology. UTAUT extends previous theoretical models by enriching them with new constructs based on conceptual and empirical correlations or similarities. In particular, the theory claims that people's behavioral intention is influenced by four fundamental constructs: "expectation about performance", "expectation about the effort to be made to use the new technology", "social influence" and "facilitating conditions". The impact of these constructs on behavioral intention is mediated by the influence exerted by four other variables: "gender", "age", "experience" and "willingness to use". In turn, behavioral intention exerts an influence on the using behavior.

2.1.6 Technology Acceptance Model 3 (TAM 3)

Combining the TAM, the TAM 2 and other models based on the determinants of the perception of ease of use, an integrated model of technological acceptance was born: TAM 3. Born on the stimulus of Venkatesh and Bala (2008), it is proposed as a model able to present a complete network of the determinants of IT adoption and use. TAM 3 postulates further incidence relations between previously ignored variables. In particular, by observing the model backward, it is possible to notice that, according to the authors, the using behavior is influenced by the behavioral intention, as also supported in the previous theoretical models. In turn, behavioral intention is influenced by perceived usefulness and ease of use. The perceived utility is influenced by five further variables: subjective norm, image, job relevance, output quality and result demonstrability. Instead, the model contemplates six variables that can affect the perceived ease of use: self-efficacy, perception of external control, computer anxiety, computer playfulness, perceived enjoyment and objective usability. Finally, the authors identify experience and voluntariness as variables capable of exerting a moderating effect on the incidence that exists between other constructs.

2.2. The hedonic consumption

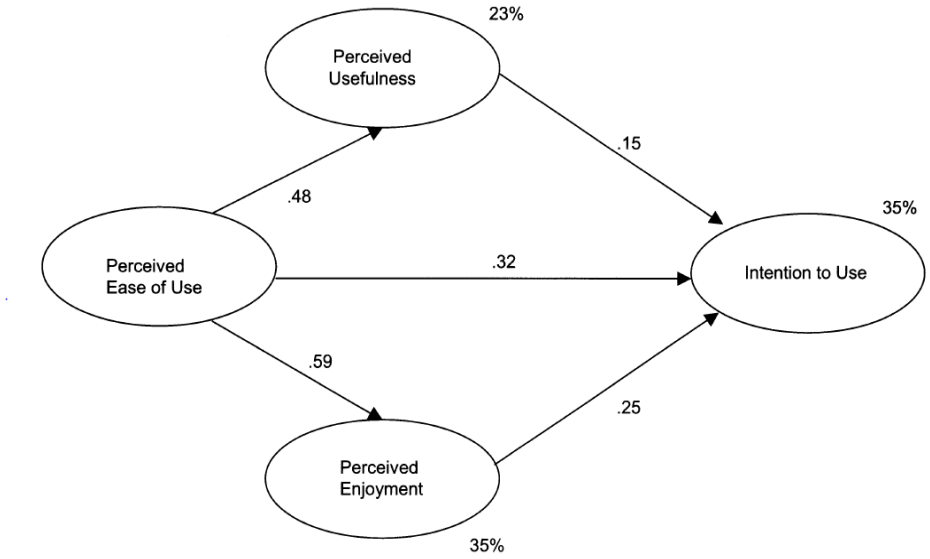
Over the years, a part of scholars, intent on understanding consumer behavior and its determinants, has focused its attention on a particular type of consumption, based on hedonism, understood as a philosophical conception that recognizes pleasure as the end of human actions. In reality, the attention to hedonism linked to the individuals' consumption was very high already between the end of the 50s and the beginning of the 60s of last century (Dichter, 1960), decreasing in the '70s with the growth of interest of the research world in the identification of the deep reasons that push consumers to make a purchase.

Nowadays, however, literature seems to have rediscovered interest in the search for the motivation of hedonistic consumption, understood as the whole of those facets of consumer behavior linked to multisensory, fantastic and emotional aspects of individual experience with products (Hirschman, and Holbrook, 1982, page 92). At the center of hedonic consumption, therefore, there is no reason, but emotion. It is worth pointing out that the emotion around which hedonist consumption is founded should not be understood as irrational or unconscious, but as the result of a process of justifying rationalization of a past or future action or behavior. In this regard, Campbell (1987) states that the hedonic experience is connected to pleasure, to excitement, to spontaneous and intense emotion, to unlimited imagination, to individual dreams.

According to Lacher (1989), hedonic consumption offers a paradigm complementary to that of traditional information processing, focusing on the "experiential" aspects of the consumption process, such as sensations, emotional excitement and fantasy. Many consumer choices are oriented by hedonistic reasons, as well as utilitarian: a single good (for example a smartphone, a computer, a tablet and so on) can simultaneously satisfy a utilitarian and hedonistic need.

In this scenario, one of the theoretical models most widely used to identify the determinants of hedonic consumption is "User Acceptance of Hedonic Information System" (Figure 1), originally proposed by Van der Heijden (2004), which analyzes the differences in consumer behavior with reference to use of the utilitarian and hedonic information systems.

Figure 1. User Acceptance of Hedonic Information System as a starting conceptual model



Source: Van der Heijden (2004)

In particular, the work reports a cross-sectional survey on the usage intentions for one hedonic information system, highlighting that perceived enjoyment and perceived ease of use are stronger determinants of intentions to use than perceived usefulness and underlining that the hedonic nature of an information system is an important boundary condition to the validity of the technology acceptance model. More in detail, the original model shows that the least influential variable in the behavior of those using information systems for hedonism is perceived usefulness, which has an explanatory capacity lower than the others. Instead, perceived enjoyment appears to be able to orient the hedonic consumer, although the variable with greater explanatory power is perceived ease of use, which "plays a pivotal role in the user acceptance of hedonic information systems". Considering the widespread use of the "User Acceptance of Hedonic Information System", for the purposes of this study, it is considered as an appropriate starting point to be extended by considering further variables to understand the determinants of the behavior of the consumers who decide to use the Apple products.

3. Research design

3.1 Methodology

To achieve the previously stated goal, represented by the desire to understand the determinants of the hedonic behavior of consumers of Apple products, a quantitative approach has been employed. In particular, the authors defined and then tested a Structural Equation Model (SEM) in order to simultaneously verify the explanatory power of a set of variables with respect to the behavioral intentions of Apple consumers, starting from the consideration of the determinants originally proposed in the User Acceptance model of Hedonic Information System.

The choice to use the SEMs is due to the consideration that they represent a useful analysis technique widely used in various disciplines of social and behavioral sciences (Bowen & Guo, 2011, Ullman & Bentler, 2003). The SEMs, in fact, are considered among the most adequate multivariate statistical analysis techniques, since they enable the simultaneous verification of several hypotheses regarding the incidence of a set of variables on others (Jais, 2007).

This aspect introduces the advantage offered by SEMs with respect to the traditional techniques typically used to verify the explanatory power of a set of variables: unlike other techniques (including, for example, multiple linear regression) they allow to test together all the variables of a previously defined conceptual model, ensuring a greater accuracy of estimates and a higher parsimony of the model (Gefen et al., 2000).

To be able to test the SEM, the authors conducted a series of preparatory phases, aimed at specifying the model, estimating the parameters considered and evaluating the estimated parameters. The procedure used to conduct the aforesaid phases was iterative, in the sense that it was repeated several times until obtaining values above the minimum thresholds of acceptability for each parameter.

3.2 Sampling and data collection

Data were collected by administering questionnaires to a random sample of people. In particular, the authors went to the Apple stores located in the two major shopping centers in the region: "Centro Commerciale Campania" and "Vulcano Buono". The reason why the questionnaires were administered to a random sample of people is related to the choice not to use any filter capable of conditioning the responses and, therefore, the results.

Respondents were guaranteed the absolute anonymity of the answers provided, highlighting the scientific nature of the objective pursued. Before proceeding to the definitive administration, the questionnaires were previously validated through a process that based on the removal of the statements (items) considered ambiguous or difficult to be understood. To do that, about 45 questionnaires were administered to a group of people who were asked to indicate any anomalies or inaccuracies.

In the period from 8 January 2018 to 30 June 2018, 1215 questionnaires were effectively distributed. Of these, 1003 were used for the analysis. 212 questionnaires were discarded: 159 for problems related to the response set; 53 for reasons due to the incompleteness of the answers provided. Summary information on respondents' personal features is indicated in table 1.

Table 1. Respondents' personal features

Characteristic	Distribution
Gender	51% Male 49% Female
Age	18 ≤ 40% ≤ 29 30 ≤ 28% ≤ 49 50 ≤ 27% ≤ 69 5% ≥ 70
Education	1% Elementary school 13% Middle school 35% High school 24% Bachelor's degree 26% Master's degree 1% Other (Ph.D., Professional course, etc.)
Occupation	21 %Employee 25 % Freelance 5 % Unemployed 44 % Student 5 % Retired
Nationality	98 % Italian 2 % Foreign

The table shows the high homogeneity of the sample, which is almost entirely composed of Italians. With regard to education, the sample appears to be equally distributed, being mainly made up of people with high school, Bachelor's degree or Master's degree. With regard to employment, however, almost half of the sample is made up of students, while the other half is mainly represented by employees and freelances.

3.3 Hypothesizes and modeling

One of the variables most frequently examined in studies dedicated to consumer behavior is the perceived ease of use (Alalwan et al., 2016; Kucukusta et al., 2015; Hess et al., 2014), definable as "the degree to which a a person who would like to be free of effort" (Davis, 1989, p.320). The reason why many scholars have deepened the role of perceived ease of use in the process of shaping consumer behavior is linked to the belief that it is able to influence different variables, in turn involved in exerting a certain impact on the individuals' behavioral intention and actual behavior (Elkaseh et al., 2016).

In this regard, it is worth pointing out that the variable to which perceived ease of use is most often related is the perceived usefulness (Abdullah et al., 2016; Hamid et al., 2016; Joo and Choi, 2015), definable as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis 1989, p. 320). In particular, numerous studies show that perceived ease of use exerts a positive influence on perceived usefulness, suggesting that people tend to perceive as useful everything that seems easy to use. On the contrary, what is perceived as difficult to use is often considered useless.

In addition to perceived usefulness, perceived ease of use is related to many other variables. Among them, perceived enjoyment emerges. It can be defined as "the extent to which the activity of using a system is perceived to be enjoyable in its own right, apart from any performance consequences that may be anticipated" (Davis et al. 1992, p. 1113). Precisely, perceived enjoyment concerns the "extent to which fun can be derived from using the system as such. Therefore, "perceived enjoyment focuses on intrinsic motivation" (Van der Heijden, 2004, p. 697). In particular, several studies emphasize the ability of perceived ease of use to positively influence perceived enjoyment, leading to the belief that people consider funny only what they can easily use. Conversely, anything they find difficult to use is perceived as not enjoyable. Considering what has been written up to now, with reference to the explicative capacity of perceived ease of use, the present analysis wants to verify if, with regard to the Apple products:

H_1: Perceived ease of use affects perceived usefulness.

H_2: Perceived ease of use affects perceived enjoyment.

H_3: Perceived ease of use affects intention to use.

If on the one hand perceived usefulness could be influenced by the perceived ease of use, on the other hand it is in turn considered as potentially able to affect the individuals' behavioral intention. In fact, several scholars (Harks et al., 2014; Yang and Brown, 2015) affirm that individuals tend to adopt a certain behavior only if they consider it useful. In other words, they tend to avoid making choices that could prove useless. This way of thinking seems rather coherent with what typically happens in the different areas of consumer behavior, where people act on the basis of the utility they think they can derive from a situation, buying, for example, only products they consider useful and avoiding buying goods and services deemed useless (Elkaseh et al., 2016). Based on these considerations, the present paper attempts to verify, with regard to the choice and use of Apple products:

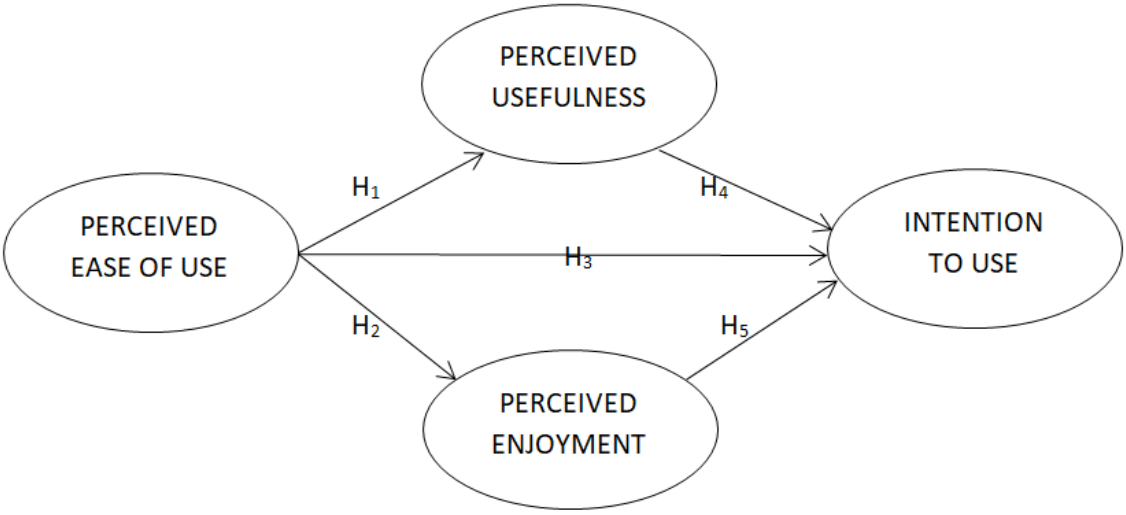
H_4: Perceived usefulness affects intention to use.

Perceived ease of use and perceived usefulness are not the only variables that can influence the consumers' behavioral intentions. In addition to these, in fact, people could be motivated by reasons that go beyond their opinion about the possibility of using a good/service with easily and usefully. In some circumstances, they may be prompted to assume a certain behavior on the basis of perceived enjoyment (Teo and Noyes, 2011; Dickinger et al., 2008), which, as previously indicated, refers to the fun that can be felt in using a product (Sun and Zhang, 2006). Based on what emerges in the literature, the authors considered important to check whether, with reference to Apple products:

H_5: Perceived enjoyment affects intention to use.

Figure 2 shows the hypotheses underlying the tested theoretical model

Figure 2. The hypotheses of the model



Source: Authors' elaboration

3.4 Constructs measurement and questionnaire development

All the variables considered in the theoretical model are based on constructs that have been measured by using multiple indicators, adapted from earlier studies.

In particular, the construct Perceived ease of use was used by adapting the 4-item scale originally proposed by Guo et al. (2015): "I find the Apple's products useful in my daily activities"; "Using the Apple's products enables me to accomplish tasks more quickly"; "Using the Apple's products increases my productivity"; "Using the Apple's products improves my job performance". The scale introduced by Venkatesh and Davis (1996) was used to measure the construct perceived ease of use: "The interaction with the Apple's products is clear and understandable"; "Interacting with the Apple's products does not require a lot of mental effort"; "I find the Apple's products easy to use"; "I find it easy to get the Apple's products to do what I want they to do". Perceived enjoyment was measured by drawing from the study by Van der Heijden (2004) the items appropriately modified according to the objective of the work: "The Apple's products are enjoyable"; "The Apple's products are exciting"; "The Apple's products are pleasant"; "The Apple's products are interesting". Finally, the authors referred to the two-item scale proposed by Nysveen et al. (2005) to measure the behavioral intention of Apple products' consumers: "I intend to use the Apple's products in the next six months"; " The next six months I intend to use Apple's products frequently".

The complete list of constructs, items and relative references is indicated in Appendix A.

The data obtained after the administration of questionnaires were operationalized with LISREL 8.80 for Windows, a statistical software that enables structural equations modeling (SEM) for both latent and manifest variables.

4. Findings

The first operation has been the Principal Components Analysis (PCA) (Abdi and Williams, 2010). After that, as suggested by Tavakol and Dennick (2011), an iterative process has been performed to verify the validity and reliability of each scale of items. Table 2 summarizes the values obtained at the end of the iterative process (KMO Test, the Bartlett sphericity test, the total explained variance of the analyzed phenomenon and Cronbach's Alpha) overcome the minimum thresholds of acceptability:

Table 2. Validity and reliability of the items scales

Variable	Scale validity			Scale reliability
	Kmo Test	**Bartlett sphericity (sign.)**	**Total explained variance**	**Cronbach's alpha**
Perceived usefulness	.796	.000	69.630	.872
Perceived ease of use	.925	.000	77.754	.821
Perceived enjoyment	.859	.000	76.952	.933
Intention to use	.899	.000	78.145	.831

The validity of each measurement scale shows that they adequately and exhaustively represent the investigated phenomenon. More specifically, the value of KMO expresses a positive deviation between the observed and partial correlations (Crane et al., 1991). Even the value of the Bartlett Test is good, since the significance of all scales is less than .005 (Tabachnick and Fidell, 2007). Furthermore, the value of the total expressed variance, higher than .50, suggests that all the measurement scales are valid (Pett et al., 2003). The Cronbach's Alpha value, greater than .70, highlights that the scales, besides being valid, also presents a good reliability (Tavakol & Dennick, 2011).

Having ascertained the reliability and validity of the measurement scales used, the SEM was first defined and then tested to understand the causal links between the several variables. The model was estimated according to the maximum likelihood method. Table 3 highlights the indices used to evaluate its adaptation goodness: ratio between Chi-square and degrees of freedom (X2/df); Incremental Fit Index (IFI); Root Mean Square Error of Approximation (RMSEA); Comparative Fit Index (CFI); and Root Mean Residual (RMR).

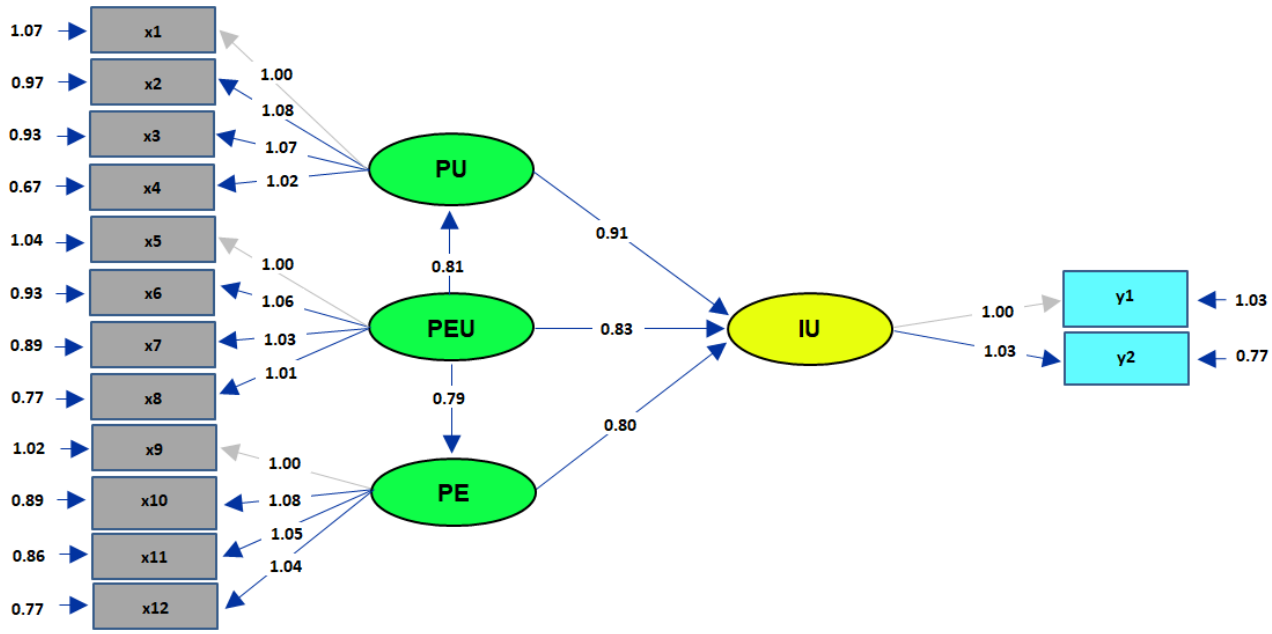
Table 3: Adaptation goodness of the tested SEM

Fit index	Value
X2/df	2.469
IFI	0.988
RMSEA = $\sqrt{\frac{(X^2-df)}{df(N-1)}}$	0.03
CFI = 1 - $\frac{\tau_k}{\tau}$	0.976
StdRMR = [2 Σi ΣJ $[\frac{(Sij-\sigma ij)^2}{k\,(k+1)}]^{1/2}$	0.05

The adaptation goodness of the tested SEM is confirmed, first, by the value of the ratio between hi-square and degrees of freedom, which falls within the acceptability threshold that varies between 1 and 3. Being higher than .06, RMSEA is also satisfied (Brown, 2015), indicating that there are no errors related to the size of the sample in the model. The CFI, higher than .95, also appears positive, refuting any doubt about the possible discrepancy between the data and the hypothesized model (Hu and Bentler, 1999). Likewise, StdRMR, which measures discrepancy between the sample covariance and the model covariance matrix, is acceptable, since its value is lower than .08 (Rhodes et al., 2005).

The solidity of the overall tested path model is observable in figures 3 together with the intensity of each relationship between the different variables:

Figure 3. The estimated SEM path model



Source: Authors' elaboration

5. Discussion

The results of the work provide interesting empirical evidence about the formulated hypotheses.

First, the analysis demonstrates that all the considered variables effectively affect the decision-making process of the consumers who prefer Apple products, as shown in table 4:

Table 4: The results related to the hypotheses of the tested SEM

Hypothesis	Result
H1: Perceived ease of use affects perceived usefulness.	Verified
H2: Perceived ease of use affects perceived enjoyment.	Verified
H3: Perceived ease of use affects intention to use.	Verified
H4: Perceived usefulness affects intention to use.	Verified
H5: Perceived enjoyment affects intention to use.	Verified

With regard to the first hypothesis, the results substantially confirm the prevailing belief in literature, namely that the perceived ease of use is able to exert a positive influence on the perceived usefulness. This means that, indeed, people tend to consider useful only what they perceive as easy to use. With reference to this research, this statement emphasizes that the perceived usefulness of Apple products is partly due to the ability of developers to make available to users a fairly intuitive operating system, easy to be used and learnt. Similarly, the perception of being able to easily use Apple products also fosters their perceived enjoyment. In other words, the second hypothesis is verified too and this means that the ease of use of Apple products helps to make the user experience pleasurable and enjoyable. With regard to the intention to use, however, we need to make some clarifications. First of all, it is worth pointing out that all the other variables considered in the model appear to be able to influence the individuals' choice to use Apple products. In other words, the third, fourth and fifth hypotheses are all verified. In particular, the results of the analysis suggest that among the reasons why people decide to buy and use Apple products there is their ease of use, perceived enjoyment and, above all, perceived usefulness.

In fact, although all the considered variables are capable of exerting an influence on the consumers' behavioral intentions, in reality, the main reason why they prefer to use Apple products is linked to the perception of their usefulness. This result could be considered as unexpected, both because Apple products (smartphones, computers, tablets, etc.) could be considered merely hedonic goods, used not much for their usefulness but rather for their ability to satisfy a set of multisensorial emotions of the individual experience, and because it appears in sharp contrast to the original theoretical model tested by Van der Heijden (2004), who indicated perceived ease of use as the variable with the pivotal role in the user acceptance of hedonic information systems".

However, according to what emerged from the analysis, considering Apple products as merely hedonic goods could be wrong: on the contrary, Apple products take shape as products capable of satisfying a multitude of needs, related not only to sensory emotions but also to the necessity to use electronic devices able to make a concrete contribution to daily circumstances. Among other things, this would also explain why Apple products are also used for reasons of study, work, research, etc.

Ultimately, the fact that the variable that mainly guide consumer choices towards Apple products is the perceived usefulness leads reflecting on the consideration according to which, nowadays, the border between hedonic and utilitarian consumption is very labile.

6. Implications and conclusion

The present work, by following a quantitative approach by means of a Structural Equation Model (SEM), empirically and contemporaneously verifies the relationships between the variables of the conceptual model known as the "User Acceptance of Hedonic Information System", originally proposed by Van der Heijden (2004). Specifically, the model is tested in order to provide an empirical evidence of the factors affecting consumer behavior, highlighting the main reasons why some people prefer Apple products.

To achieve this goal, in the first 6 months of the current year, over 1200 questionnaires were distributed and roughly 1000 were used for the analysis. The size of the sample allows considering the work as a sort of general guide, potentially useful for marketing and management scholars in and for professionals in the sector.

In fact, as regards the implications of a theoretical nature, the paper gives a contribution for enriching the literature about the theme of consumer behavior, since it is the first scientific contribution that uses a SEM to test the User Acceptance of Hedonic Information System regarding Apple products. While, with reference to the implications of a practical nature, the work provides worth information about important aspects that consumers take into account in choosing and using hedonic information systems and suggests to marketing managers the variables that could opportunely be leveraged to attract and retain customers.

Moreover, an aspect that can determine both theoretical and practical consequences is represented by the fact that, according to the analysis carried out, it seems that, among the considered ones, the main factor that pushes consumers to use Apple products is the perceived usefulness, highlighting how people's opinion regarding information systems and electronic devices leads considering them no longer as merely hedonic assets, but as products necessary for the satisfaction of daily needs and expectations.

Therefore, both in scientific and industrial research, what emerges is the need, as well as the opportunity, to deepen the dynamics characterizing consumer behavior, that is the whole process that leads to the choice of purchasing and using information systems and, more generally, new information and communication technologies (ICT), since only in this way it is possible to define and implement strategies capable of intercepting their preferences and anticipating their decisions.

Naturally, beyond its potential contribution, the work has limitations, mainly due to the choice of empirically testing a theoretical model that, although widespread and widely recognized in literature, does not include many additional variables that could contribute significantly to the understanding of the reason thereby people choose to use certain information systems rather than other ones. For this reason, further investigations could be carried out including other constructs equally debated in studies dedicated to consumer behavior, such as price, value for money, prestige related to the possession of certain products, social influence, and so forth. The other limit of the work is related to the choice of testing a SEM by administering questionnaires, which, if on the one hand, offer the possibility of building large samples and managing a big amount of data, on the other, they prevent from going deep in the understanding of the people's real opinions. Therefore, in a next research, it could be opportune using complementary techniques, such as semi-structured interviews, in order to allow for a

comparison of the results obtained with different approaches and to favor a more reliable generalization of the arising considerations.

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APPENDIX A

Construct	Items	Source
Perceived usefulness	1. I find the Apple's products useful in my daily activities 2. Using the Apple's products enables me to accomplish tasks more quickly 3. Using the Apple's products increases my productivity 4. Using the Apple's products improves my job performance	Guo, Y., Barnes, S., & Le-Nguyen, K. (2015). Consumer Acceptance IT Products: An Integrative Expectation-confirmation Model.
Perceived ease of use	1. The interaction with the Apple's products is clear and understandable 2. Interacting with the Apple's products does not require a lot of mental effort 3. I find the Apple's products easy to use 4. I find it easy to get the Apple's products to do what I want they to do	Venkatesh, V., & Davis, F. D. (1996). A model of the antecedents of perceived ease of use: Development and test. Decision sciences, 27(3), 451-481.
Perceived enjoyment	1. The Apple's products are enjoyable 2. The Apple's products are exciting 3. The Apple's products are pleasant 4. The Apple's products are interesting	Van der Heijden, H. (2004). User acceptance of hedonic information systems.MIS quarterly, 695-704.
Intention to use	1. I intend to use the Apple's products in the next six months 2. The next six months I intend to use Apple's products frequently	Nysveen, H., Pedersen, P. E., & Thorbjørnsen, H. (2005). Explaining intention to use mobile chat services: moderating effects of gender. Journal of consumer Marketing, 22(5), 247-256.