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Full Research Paper

# Strategizing the E-Commerce Business: The Role of Service Quality and Hedonic Value.

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**Abstract:** Today, the digital international business environment opens new opportunities and challenges for businesses creating important effects on their global distribution strategies. In line with this, the present study makes a theoretical contribution developing a research model in the e-commerce field to analyze the relationship among e-service quality factors and the overall e-service quality, and, in turn, the latter with the hedonic value dimension. Data were gathered from a survey of 152 online consumers. Confirmatory factor analysis was conducted to analyze the reliability and validity of the measurement model and regression technique was used to test the research model. The analytical results showed that, as predicted, the dimensions of fulfillment/reliability, web site design, customer service and security privacy affect overall online service quality. In addition, the e-service quality shows to have an impact on the hedonic value.

Keywords: international business, e-commerce, e-service quality, hedonic value

## 1. INTRODUCTION

In the Industry 4.0 era, the international business is changing identifying many challenges and opportunities given the digital transformation. Today, information and communication technologies (ICT) accelerates the speed at which businesses have to make decisions in all the steps of their value chain deleting obsolete approaches toward a more consumer-oriented culture. Indeed, today consumers create new demands, as for instance self-service solution, fast deliveries and attractive online sales platforms <sup>[1]</sup>. This implies an overall business models rethinking. In other words, this new ecosystem requires companies, especially in the international context, to review their strategies to survive in an increasingly competitive environment.

The result of the current digital revolution is a new and digitalize supply chain to provide the right product at the right time to better satisfy the customer's need. In fact, the key in some sectors, as the fashion retail one, is to leverage new distribution approaches to create a differentiated value for the final consumers. The exponential growth of e-commerce has a deep impact on the supply, as well as, on the demand side. The e-commerce influences how, where, and when consumers buy, and, indirectly, the way they live. Therefore, both online and offline features (such as delivery) will affect consumers' e-shopping behavior. At the same time, the overall performance of a business is influenced by reaching a sufficient strategical number of customers in the most efficient way especially in sectors such as the fashion which is strongly customer oriented. In the fashion sector, the e-commerce gained an increasingly attention in the last years and, in some cases, it becomes the main purchase channel deleting traditional approaches such as the retail distribution.

The role of the e-commerce as a strategical element of a global business is much clearer and fundamental with the COVID-19 pandemic. In fact, the widespread of the COVID-19 destroyed many businesses, especially those that were not ready to reach directly their customers; while, those that present an efficient e-commerce channel could respond quickly to the pandemic situation showing often even a better performance than the pre-COVID-19 period. This happened because the majority of the consumer is also a computer user which implies that the e-commerce represents a new ground for several sectors and industries that cannot be avoided.

However, e-commerce should be implemented as a winning strategy in our today's digital, competitive and globalized environment. Given this, various businesses are investing in the e-commerce and its implementation should take into consideration different dimensions as well as the hedonic value to make the customer shopping experience unique and valuable in the long term. Therefore, the customer behavior in the e-commerce setting is a strategic element to study as it is a direct impact on the final performance of a company in terms of sales and turnover as well as in terms of survival. In line with this, a bunch of researches have investigated the e-shopping behavior. However, understanding it is difficult due to the strong changes on the main entities involved: businesses and consumers. In other terms, the main determinants of success or failure are not merely web site presence and lower price but mainly the electronic service quality [2]-[3].

Therefore, the goal of this paper is to examine the role of online service quality providing more granular insights toward consumer online shopping enjoyment experience, considering also the impact of the shopping time available. This paper wants to study the relation between e-service quality and the potential enjoyment value to analyze deeper the shopping activity in the virtual setting to explore it as a strategic feature for an international business. Consequently, the main research questions are: Which dimensions impact the overall service quality in the e-commerce strategy? Which is the role of the hedonic value in the making the purchase experience valuable from a business perspective? In other words, this paper contributes to the theoretical sphere covering the gap in the literature referring to the eTail framework incorporating the hedonic value which is an element to consider in strategizing the e-commerce business. In addition, the findings provide some practical implications for those businesses interested in the e-commerce to better win the international competition.

This study is focused on the fashion sector where the service quality is critical. This research relies on quantitative evidence gathered through a survey. The article is structured as follows. Section 2 presents the theoretical background of the paper. Section 3 introduces the methodology and the research model used. Then, Section 4 discusses the main findings. Finally, Section 5 concludes analysing the limitations and presenting inputs for further researches.

## 2. LITERATURE REVIEW

E-commerce provides new international opportunities for several companies such as in the retail field since they can reach easily a higher number of customers at national and international level while reducing some costs [4]-[5]. A growing number of retailers face an interesting growth in foreigners' markets using e-commerce platforms [6]-[7]. Therefore, digital technologies promote a rapid improvement for several businesses especially in terms of the possibility to have an international reach. However, as the literature suggested, a number of key drivers should be considered that contribute to a more satisfying customer e-commerce experiences [8]-[9]. The majority of the scientific contributions in this field cover three crucial features: characteristics of e-shopping, consumer characteristics and product characteristics.

Among these, the first two have been extensively debated among scholars, confirming their critical role in understanding consumer behavior toward the e-commerce channel which give numerous hints to better understand this revolutionary distribution strategy for several industries and contexts. For example, some researches dealt with the advantages of this channel in a general way, such as relative advantage [10]. Others showed specific measurements as quickness [11], time saving and ease of ordering [12]. In other words, a business that have to implement an e-commerce channel should consider the so-called e-service quality. The latter is defined as the overall customer evaluations and judgments regarding the excellence and quality of e-service delivery in the virtual marketplace [13].

Still today in a technologic driven culture, there is a need to investigate such complex shopping process which have an important impact on the performance results of a sector, in general, and of a specific business in

particular. This becomes much more evident in the international context ruled by a high level of competitions and by the need to speed the customers' requests during their purchase experience. In fact, in this scenario, customers online can easily compare products and prices than through the traditional channel.

As bunch of studies highlight service quality has an impact on consumption decisions in the e-commerce field <sup>[14]</sup>. For example, <sup>[15]</sup> presented a classification of service features based on the technical/functional quality framework to examine the e-quality <sup>[16]</sup>. Moreover, a well-known scale-model is the SERVQUAL that defined service quality using perceived service quality, namely, the degree and direction of discrepancy between a consumer's perceptions and expectations <sup>[17]</sup>. Several researchers argued that the SERVQUAL must be reviewed before it can be applied in the online shopping context <sup>[13]-[15]</sup>. In addition, other scholars proposed constructs that involve the service quality delivered by websites <sup>[18]</sup>. Thus, the Electronic Service Quality (E-S-QUAL) used four quality dimensions: efficiency, fulfillment, system availability and privacy. Another important contribution develops and validates the eTail Quality (eTailQ) scale <sup>[19]</sup> examining customer judgments of the online shopping experience that are crucial predictors of overall service quality, customer satisfaction and attitude toward the website.

Using an interactive procedure, both considering the exploratory and the confirmatory factor analysis, four quality dimensions emerged: fulfillment/reliability, web site design, customer service and security/privacy. Hence, the eTail Quality is given by 14 items and explains 70 percent of the variance of a total e-tail quality judgment. Despite the high reliability and validity of the models mentioned, the elimination of quality items linked to hedonic features of the Internet shopping has been often savaged. For example, as stated: "other experiential aspects such as fun or pleasure do not fall within the conceptual domain of service quality because such hedonic aspects are distinct benefits that may not be relevant in all contexts or to all customers." <sup>[18]</sup>

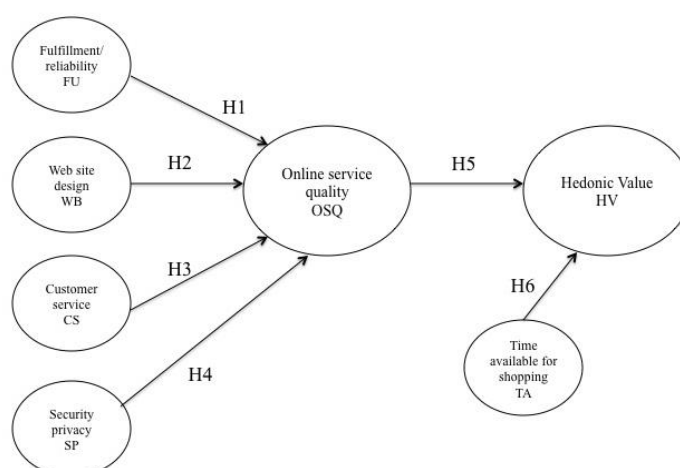
Specifically as in <sup>[20]</sup> the utilitarian and hedonic shopping value is investigated. The former is based on the premise that shopping is viewed as functional. While, the hedonic is more playful. It reflects the entertainment value and emotional worth derived from shopping as an enjoyable experience: an escape or an adventure <sup>[20]</sup>. The latter offered estimates of dimensionality, internal consistency and validity. Therefore, the hedonic issue requires still today further investigation. The hedonic side is taken from that environmental psychology literature and which identified the emotional side highly relevant in a retail setting. Following the flow theory, such feelings are disclosed also during the e-shopping <sup>[21]-[22]-[23]</sup>. In the e-commerce experience, another element to take into consideration is the product. Thus, the characteristics of the product greatly determine the degree to which they are suitable for the online channel <sup>[24]</sup>. In line with this, different classifications have been debated in literature. For instance, two types of qualities of a product: search qualities and experience qualities <sup>[25]</sup>. Search qualities look at the aspects that consumers can completely determine prior to use and experience qualities define those that cannot be known until using the product. While, consumers are more likely to buy products and services on the Internet that have greater differentiation <sup>[26]</sup>. Moreover, a product's tangibility had a significant effect on consumers' intentions toward online shopping <sup>[27]</sup>. Therefore, in the implementation of an e-commerce channel, the business should consider the features of its products. This means that to better capture consumers' e-shopping behavior, each product has its own peculiarities.

This implies that mixing product categories in the same research tends to yield inconsistent findings. Thus, the specification decreases the heterogeneity due to different product types. Consequently, it avoids confusion in the overall results. E-shopping is convenient compared to the traditional channel since it has not temporal and spatial limits. Further, as it increases search and transaction efficiency, time-conscious consumers are more prone to buy online <sup>[28]</sup>.

### 3. RESEARCH METHODOLOGY

#### 3.3 Research model and hypotheses

The relevant literature has identified various determinants of consumers' e-shopping behavior. These mainly cover three crucial features: characteristics of e-shopping, consumer characteristics and product characteristics. Among these characteristics, the first two have been examined extensively, confirming their important role in this specific context. Given that, this research objective is to analyze the dimensions of this channel to give a better understanding on how to implement this strategical features to improve the e-commerce context which can increase the number of customers and, thus, it has an impact on the sales specifically, and to the overall business activity, in general. Following the scientific contributions in the literature, to capture service quality this paper examined the four-eTail dimensions. In addition, it wants to study the relation between the e-service quality and the hedonic shopping value to provide a wider strategic view on the implementation of this channel. Moreover, to understand deeper customers toward online shopping, it considered the consumer time availability for shopping and some socio-demographics variables (gender, age, education and Internet mainly used at). The relationship among the four e-service quality factors and the overall service quality, as well as, the relation between the latter and the enjoyment scale are hypothesized and discussed below. Based on the literature review, the model proposed that e-service quality dimensions are casually linked to the performance measure of overall online service quality. This study proposed the eTailQ dimensions to assess to the overall online service quality. It includes the 14-items scale (7-point Likert- type scales) to establish the following four factors (see Fig.1).



**Fig 1. Research model**

Fulfillment/reliability (FU) is (a) the accurate display and description of a product so that what customers receive is what they thought they ordered and (b) delivery of the right product within the time frame promised<sup>[19]</sup>. In this phase the users' quality perception depends on how efficiently (easy and quick) he is able to place an order into the online subscription system<sup>[18]-[19]</sup>. Therefore, the following hypothesis is proposed:

H1: Fulfillment in an online store positively influences overall service quality.

Web site design (WS) includes all elements of the consumer's experience at the website (expect for customer service), including navigation, information search, order processing, appropriate personalization, and product selection<sup>[19]</sup>. Nowadays, managers and academics are increasingly focused on the cognitive computing issue to make sites more competitive. Cognitive computing is a new notion that is based on principles from the behavioral, cognitive and computer to understand the insights of consumer shopping behaviors<sup>[29]</sup>. It is a consumer-oriented perspective to site design: web site design is becoming crucial for online stores<sup>[30]</sup>. Hence, the following hypothesis:

H2: Web site design in an online store positively influences overall service quality.

Customer service (CS) is responsive, helpful, willing service that responds to customer inquiries quickly<sup>[19]</sup>. In this step, relevant criteria refer for instance to the ability to promptly respond to customer problems occurring after the purchase. Below, the hypothesis:

H3: Customer service in an online store positively influences overall service quality.

Security/privacy (SP) is defined as security of credit card payments and privacy of information<sup>[19]</sup>. Online stores must provide mistake-free service and secure online transactions to make individuals more comfortable. Thus, this last dimension evaluates the capability to increase the security issue against the risk often perceived toward the online channel. Hence, the hypothesis:

H4: Security/privacy in an online store positively influences overall service quality.

The scales as in<sup>[20]</sup> show the degree to which consumers derived the hedonic and the utilitarian dimension from a shopping trip. For the former, these authors presented 11 items. This paper is going to use this hedonic scale structure fitted for the online setting. Therefore, only 10 over 11 items could be presented in the questionnaire on a 7-point Likert-type scales. The following hypothesis emerged to deal with the impact of online service quality (OSQ) on the hedonic value (HV).

H5: Overall online service quality positively influences the hedonic value for shopping. As the literature states the importance of the time available (TA) for shopping, a hypothesis is presented below and tested.

H6: Time available for shopping online positively influence the hedonic value for shopping.

### 3.4 Data collection and analysis

The construct definitions of the instruments and the related literature were discussed above. This paper used the measures analyzed to operationalize the constructs from relevant studies and it tailored these measures to the online shopping context for fashion products. The eTailQ model of 14 items is applied to measure fulfillment/reliability (3 items, question 14 to 16); web site design (5 items, question 20 to 24); customer service (3 items, question 17 to 19) and security/privacy (3 items, question 25-27)<sup>[19]-[31]</sup>. The Hedonic construct by is provided and fitted for the online setting<sup>[20]</sup>. Therefore, only 10 of the 11 the original items are presented in the questionnaire (question 1 to 10). In addition to the quality items, the questionnaire included statements on time available for the shopping activity (3 items, question 11 to 13). All items were measured using a seven-point Likert-type scale (ranging from 1 strongly disagree to 7 strongly agree). The final questionnaire is presented in the Appendix section. The empirical validation of the eTail scale and Hedonic scale were performed by confirmatory factor analysis<sup>[32]</sup>. Cronbach's alpha was employed to evaluate each dimension. The research model (Figure 1) was analyzed using the SPSS software. The corresponding measures suggest a good fit of the extracted four quality dimensions of the eTail, as well as, of the Hedonic construct. The paper takes into account some demographic variables: gender, Internet mainly used at, education and age. The quantitative data used to extract the dimensionality of a process-based e-service quality (eTail) scale was gathered by means of a structured questionnaire.

The study was conducted in this way. First, it was asked to the participants to recall a recently used online shopping provider for fashion goods. Then, it considered respondents that completed a product purchase to assure that subjects had sufficient online shopping experience. Finally, irrelevant questionnaires were identified and were not considered. This resulted in 152 fully usable questionnaires.

## 4. RESULTS

### 4.1 Descriptive statistics

The first issue to study in the data analysis is to look at the descriptive statistics to report all the measures of the items that are going to delineate each construct (Table 1). In this research, the completed instrument

consisted of 27 questions that measured the four factors of overall e-service quality (OSQ), time available for shopping (TA) and the hedonic value (HV). The descriptive statistics of the metric scales are shown in Table 1. This examination confirms that there are not missing value (N=152).

To check if respondents are reading the questionnaire two of the three items for TA were negatively presented and, thus, have been reversed (TA1 changed and TA2 changed). The last four questions are, respectively, for classificatory variables: gender (*coded: 1=female, 2=male*); Internet mainly used (*coded: 1=home, 2=others, 3=work*); education (*coded: 1=graduated, 2=others, 3= post graduated, 4= post-secondary, 5= secondary*) and age. As Table 2 shows below, the sample (N=152) is balanced between female and male (73 versus 79); the respondents are mostly well-educated people (Post-graduate 52 and Graduate 55 subjects) and they use Internet mainly at home (108 over 41 at work). The age variable (mean= 39.15, std. deviation=13.23) has been coded into three categories and the number of respondents in this pool is well widespread among the groups identified.

**Table 1. Descriptive statistics and Table 2. Sample profile**

	Mean	Std. Deviation
HV1	4.88	1.707
HV2	5.57	1.602
HV3	3.56	2.061
HV4	3.95	2.071
HV5	4.35	2.123
HV6	3.32	2.170
HV7	3.27	2.165
HV8	3.13	2.272
HV9	2.81	2.106
HV10	3.02	2.155
TA3	2.91	2.063
FU1	6.41	1.407
FU2	6.28	1.430
FU3	5.30	1.973
CS1	6.13	1.220
CS2	6.18	1.224
CS3	6.07	1.326
WS1	5.70	1.500
WS2	6.01	1.250
WS3	6.27	1.055
WS4	5.18	1.640
WS5	5.98	1.237
SP1	6.16	1.101
SP2	6.20	1.044
SP3	6.13	1.216
TA1changed	4.25	2.135
TA2changed	2.63	1.876
Valid N (listwise)		

Variable	Frequency	Percent	
Gender	Female	73	48.0
	Male	79	52.0
Internet used	Home	108	71.1
	Other	3	2.0
	Work	41	27.0
Education	Graduate	55	36.2
	Others	9	5.9
	Post Graduated	52	34.2
	Post Secondary	17	11.2
	Secondary	19	12.5
Age	16-35	68	44.7
	36-57	63	41.4
	58-70	21	13.8

## 4.2 Validity

Following a quantitative approach, the second step is to test for validity. Due to the imperfect nature of validity, Factor analysis provides support to convergent and discriminant validity. Therefore, in this large enough instrument investigated, Factor analysis was performed to check the construct validity of items. The sample size (>120 responses) is large enough and it has metric variables, so Factor analysis can be used. Then, the multicollinearity issue is considered; so, the KMO and Bartlett's test of Sphericity were checked. KMO measure of sampling adequacy is .857. This means that it is in the meritorious range. In addition, the Bartlett's test results significant. This implies that the data gathered are good and Factor analysis can be run.

Following a confirmatory approach, the analysis continued with the extraction to confirm that the data collected are reasonable. Firstly, six components have been extracted (FU, CS, WS, SP, TA and HV). The cumulative

variance explained is 69.39.

Using Varimax method and looking at the rotative matrix, there is a clear loading of the questionnaire for this sample of 152 respondents using individuals as the unit of analysis (see Table 3a, below). Secondly, for the aim of this study and also due to a literature-based theoretical reason, three factors (OSQ, TA and HV) can be justified and extracted. Even now, there is a neat loading (see Table 3b, below). These results indicate that the scales were reliable and also valid for the factors under investigation. The items that are supposed to load together are actually loading together. They are distinct from items making up different constructs. They loaded as expected. This determines that the convergent validity and the discriminant validity of the measures are supported. Thanks to the above information, the fit of the data to the model is confirmed.

**Table 3a and 3b. Rotative Component Matrix**

Rotated Component Matrix <sup>a</sup>						
	Component					
	1	2	3	4	5	6
FU1					.795	
FU2					.742	
FU3					.654	
CS1	.600					
CS2	.834					
CS3	.835					
WS1	.619					
WS2				.592		
WS3				.689		
WS4				.663		
WS5			.516	.571		
SP1			.820			
SP2			.787			
SP3			.768			
ta1changed						.810
ta2changed				.518		
TA3						.813
HV1	.729					
HV2	.607					
HV3	.755					
HV4	.849					
HV5	.822					
HV6	.807					
HV7	.832					
HV8	.846					
HV9	.758					
HV10	.830					

Extraction Method: Principal Component Analysis.  
Rotation Method: Varimax with Kaiser Normalization.  
a. Rotation converged in 25 iterations.

Rotated Component Matrix <sup>a</sup>			
	Component		
	1	2	3
FU1	.616		
FU2	.699		
FU3	.558		
CS1	.738		
CS2	.705		
CS3	.727		
WS1	.742		
WS2	.709		
WS3	.592		
WS4	.645		
WS5	.595		
SP1	.700		
SP2	.600		
SP3	.697		
ta1changed			.604
ta2changed			
TA3			.618
HV1	.709		
HV2	.592		
HV3	.756		
HV4	.836		
HV5	.817		
HV6	.802		
HV7	.837		
HV8	.859		
HV9	.777		
HV10	.849		

Extraction Method: Principal Component Analysis.  
Rotation Method: Varimax with Kaiser Normalization.  
a. Rotation converged in 4 iterations.

### 4.3 Reliability

The approach adopted is an analysis at the construct level. All the items representing each factor were selected. Cronbach's alpha was used to test the reliability of each factor. As defined in [33], a factor loading exceeding 0.7 as evidence of convergent validity. The following table displays Cronbach's alpha for each component of the model. All of the measures employed demonstrated excellent internal consistency, ranging from 0.764 to 0.934, thereby the factor loadings for all constructs exceed the recommended level of 0.7, indicating acceptable item convergence on the intended constructs. Only Time available for shopping (TA) presented a low Cronbach's alpha, even after scale item deleted check; so, it is not acceptable and should be eliminated. Online service quality is tested (14 items together) to directly investigate the relationship of this construct with the hedonic dimension (see the hypothesis section).

Now, since reliability and validity are supported, the items loaded together can be summed up and grouped to create the constructs. This allows the research to “measure” the concept and to have a common acceptable base to make a comparison with other studies. Following the aim of this paper. Firstly, in the next outcomes (Table 5a), correlations among the four factors of the e-Tail model and OSQ are pointed out. Secondly, Table 5b shows the correlation between overall e-service quality and the hedonic value. The results of the Pearson correlation turned out to be all significant.



**Table 4. Reliability statistic**

RELIABILITY STATISTIC		
	Cronbach's alpha	N of items
Fulfillment/ reliability (FU)	.764	3
Web site design (WS)	.884	3
Customer service (CS)	.821	5
Security/privacy (SP)	.890	3
Time available (TA)	.512	3
Hedonic Value (HV)	.934	10
Online service quality	.901	14

**Table 5a. and 5b Correlations**

		Correlations				
		FU	CS	WS	SP	OSQ
FU	Pearson Correlation	1	.495**	.480**	.495**	.774**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	152	152	152	152	152
CS	Pearson Correlation	.495**	1	.564**	.444**	.772**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	152	152	152	152	152
WS	Pearson Correlation	.480**	.564**	1	.578**	.861**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	152	152	152	152	152
SP	Pearson Correlation	.495**	.444**	.578**	1	.762**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	152	152	152	152	152
OSQ	Pearson Correlation	.774**	.772**	.861**	.762**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	152	152	152	152	152

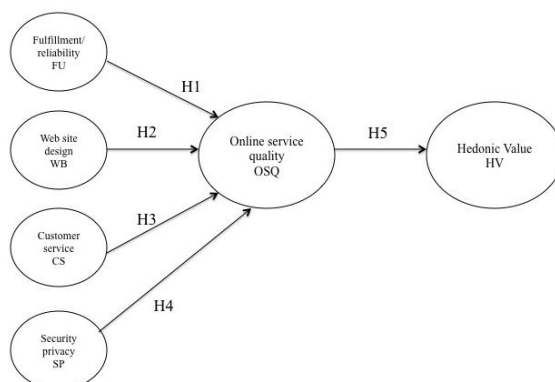
		Correlations	
		OSQ	HV
OSQ	Pearson Correlation	1	.219
	Sig. (2-tailed)		.007
	N	152	152
HV	Pearson Correlation	.219	1
	Sig. (2-tailed)	.007	
	N	152	152

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**4.4 Hypothesis testing**

The next step is to test the hypotheses in the model under investigation (Fig.2). This study presented output metrics. The regression analysis is used to test the expected relationships. Firstly, H1, H2, H3 and H4 have been tested. These have as dependent variable Online Service Quality (OSQ) and respectively, as independent variables: Fulfillment/reliability (FU), Web site design (WS), Customer service (CS) and Security/privacy (SP). As predicted by the eTail model, these scales have a posit impact on the online service quality. The coefficients outcome (Table 6) points out that FU, WB, CS and SP are all significant (Sign. <0.05). This entails that H1, H2, H3 and H4 are supported. Looking at the standardized beta, WS and FU have the higher value (0.413, 0.321). This connotes that it has a stronger impact in the regression. The remaining service quality dimensions contribute rather equally to overall service quality. This support what is argued in the relevant literature. Finally, the multicollinearity diagnostic was computed. The collinearity statistics reports a Variance Inflation Factor (VIF) smaller than the maximum acceptable level (=10), highlighting no problem with multicollinearity.



**Fig.2 Research' model after the reliability analysis**

**Table 6. Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	6.395E-014	.000		.000	1.000
	FU	1.000	.000	.321	95147265.6	.000
	CS	1.000	.000	.272	78301799.6	.000
	WS	1.000	.000	.413	111428565	.000
	SP	1.000	.000	.244	69553699.4	.000

a. Dependent Variable: OSQ

Finally, theory and the previous results confirm OSQ to be influenced by the four factors of the eTail model. Thus, H5 presented as dependent variable the Hedonic value (HV) and as independent variable Online Service Quality (OSQ). While, H6 was deleted as Time available for shopping (TA) emerged to be not reliable. In H5, the coefficients outcome (Table 7) proves that OSQ is significant. This leads to support H5. This finding confirms that the service quality issues represent a critical factor for assessing the hedonic dimension with online shopping activity.

**Table 7. Coefficients**

Coefficients <sup>a</sup>						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	13.922	8.804		1.581	.116
	OSQ	.285	.104	.219	2.748	.007

a. Dependent Variable: HV

Lastly, the collinearity statistics reveals a Tolerance value of 1, as well as, a VIF of 1. A VIF measure of 1 means that there are some association between predictor variables, but not enough to cause problems. So, even in this case, collinearity effect has not significance.

#### 4.5 Cross tabulations of the constructs with classificatory variables

In the case of gender, independent sample t-test should be applied, since there are only two groups (coded 1 for female and 2 for male). Gender appears to have no influence on the e-service quality and on the hedonic construct. Thus, men and females are not different in their responses. Here, a difference in gender has no effect on how the respondents visualize the quality and the enjoyment during the online shopping process. The second demographic is Internet mainly used at. It presents three categories: Work, Home and Others. The latter has few observations (see descriptive statistics section). In this case, leaving out this group leads to the use of an independent sample t-test (code: group 1 and 3), instead of an ANOVA.

Results show that being at home or at work have no influences on the service quality and enjoyment due to the e-shopping for fashion goods. This highlights the advantage of this channel due to the no spatial constraints. The third classificatory variable collected is Age that was recoded. To group it, after the check to see how the data are split (mean 39.24), three groups were created, and their frequencies were computed (see descriptive statistics section). On the grounds that the obtained frequencies are reasonable, it can be said that the age-clusters go well. Then, one-way ANOVA was examined. The findings display no significant level both for OSQ and HV. This means that age does not tend to provide a higher mean to the overall service quality and to the hedonic value in the online context. In the case of education, there are five groups: Graduate, Others, Post-graduate, Postsecondary and Secondary. Thus, ANOVA is used. Even if the literature review showed that males with higher education are more prone to shop via Internet. Here, the findings point out that no one has a significant value less than 0.05, meaning that the level of education has no impact. For sure, this result can be

determined by the specificities of the product category under investigation.

## 5 DISCUSSION AND CONCLUSION

E-shopping behavior appears to be a complex decision process that needs to be considered in the overall strategy of a business with an international perspective. Many businesses are focusing an increasing attention on it to gain a performance which is in line with their strategies in such a competitive scenario. The globalization and the internationalization require several sectors, as the fashion one, to rethink about their business models and value chains to better answer to consumer needs and interests. The importance of being present with an e-commerce channel as well as of creating an enjoyable experience to consumers during their online purchases are both fundamental in the current environment. The crucial role of the e-commerce is clear and evident in a winning strategy of a business that should reach a huge sample of consumers worldwide. The latter becomes much more evident with the COVID-19 emergency that represents an important and compulsory test for several companies which pushes the discussion about the role of the digital transformation also in terms of e-distribution.

As the results suggest, the eTail model scales have a positive impact on the online service quality. Thus, we can answer to the first RQ showing that there are dimensions that should be considered in the implementation of an e-commerce strategy, such as: Fulfillment/reliability (FU), Web site design (WS), Customer service (CS) and Security/privacy (SP) impact the Online Service Quality (OSQ). Moreover, even if a shopping decision is based on family needs, budget limitations, and other constraints, the e-shopping behavior has a social influence, especially for fashion goods, and it can have an impact on the hedonic value. The latter as the findings highlight has an influence on the purchase experience and, consequently, it is valuable from a business perspective which provides the answer to the second RQ. In other words, the Internet wide spreads the possibilities for customers to efficiently compare offers. At this point, the quality assessment refers mainly to the extent to which the site provides value to the user. This confirms what the literature suggests being important quality criteria, for example, the perceived fun of using the Web site and the personalization of content and features [3].

In order to support the importance of establishing a comprehensive and e-service quality for the businesses in the international context, this article applied the eTail framework incorporating it with the hedonic element. Conceptual support for this approach came from an extensive literature review, taking also into account environmental psychology and flow theory. In other words, this article confirms that a holistic perspective is crucial to analyze the overall online shopping activity. Accordingly, to avoid a lack of observations and to not limit the statistical robustness of the findings, a choice-based sampling is more appropriate in this field. Obviously, online consumers must be computer and Internet users, and usually are also email users. The advantages of the above-mentioned approach are many. First, compared to the general population, these users are more prone to be aware of e-shopping as an alternative. Therefore, they can represent potential future buyers. Second, Internet users are essentially the only ones who have the choice to do shopping online. But, including current non-users can leave stronger clues on the intentions side.

Future researches can use different methodologies, such as longitudinal studies, focus groups and interviews, to understand the relationship between service quality and the hedonic value in online shopping setting. Utilitarian value should be also considered. In addition, consumers' relevant social and psychological features can be analyzed. The latter mainly come from psychological theories such as Theory of Planned Behavior (TPB) and Technology Acceptance Model (TAM). In previous papers, favorable attitudes toward e-shopping result positively associated with consumers' e-shopping intention. In conclusion, scholars, as well as, companies should devote valuable resources to study the challenging e-shopping consumer behavior which impacts the annual results of many businesses worldwide.

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