Customer e-Loyalty in Online Retailing: Testing a Measurement Scale

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Abstract

Research aim: In recent years, the interest for the activities aimed to nurture a strong relationship among retailers and their customers have increasingly intensified, especially in digital environments. Recently those activities have seen their relevance increased by the growing positive impact of COVID-19 pandemic on online retailing. Working on existing customers rather than capturing new ones is the new imperative for retailers, even if we refer to online platforms, obviously without underestimating the acquisition attempts of new customers. The aim of this study is to test a conceptual model of measurement for Customers e-Loyalty (CeL) in digital context in order to evaluate its impacts on digital retailers (e-commerce retailers, e-banking retailers, e-service providers).

Methodology: it has been adopted a component-based Structural Equation Modelling (SEM) on a sample of Italian digital users, who makes online purchases prevalently on Amazon in order to test the CeL scale of measurement as a conceptual (meta) model. A structured questionnaire has been administered online to the consumers through Google Forms.

Findings: The study has permitted to get some counterintuitive evidence related to the process of formation of customer loyalty in digital context. The trust isn't a determinant of CeL and the affective loyalty doesn't impact any of the elementary dimension of CeL, nor impacts on conative loyalty. Finally, the model has been able to better capture the impact of the individual dimensions of CeL on its outcomes (price sensitiveness, intentional SOW, e-WOM).

Theoretical implication and originality:

Propose a reliable customer e-loyalty measurement scale in grocery retailing. The statistical assessment of this conceptual model will permit, in the middle term, also to measure the CeL in several other retailing industries. Furthermore, in a next step, this investigation, could be extended to other geographical settings.

Managerial Implication: the better understanding of the relationships among the latent variables and outcomes in the model might encourage the online retailers to figure out appropriate course of actions to win customers' commitment and satisfaction and to provide better services in order to create a loyal customer base in a digital context.

Key words: *Customer e-Loyalty (CeL), e-satisfaction, scale of measurement, customer relationship, e-commerce, Structural Equation Modelling (SEM)*

1. Introduction and objectives

Today's consumers have not only changed their consumption habits but have also changed their way to making purchases. Nowadays, the customers of online retailers have multiple sources of information (e.g., social networks, comparative sites, User Generated Content and blogs), so they can compare prices and choose the best offer. The online retailer aims to maintain a continuous relationship with consumers (for example by loyalty cards, social media,

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and text BOT messaging) to provide better services and a wide products assortment[4]. In addition, the emerging role of technology, and in particular the internet and the facilities of industry 4.0, provided to access information, have made customer bargaining power stronger than ever before. The information era has given customers the opportunity to become more increasingly knowledgeable about products/services and aware of other competitive offers from alternative retailers in the digital marketplace. Technology has become a source of pressure to firms, which gives the customer access to a wide range of alternatives and forces online retailers to intensify their customer retention efforts. The wide range of promotions based on technologically-advanced solutions facilitates the increasing of the customer knowledge-based about what can be offered to them by online retailer in the marketplace (e.g., Amazon, eBay, Alibaba, PayPay Mall, Mercado Libre, etc). Actually, the main research question of this paper is: *"Are the determinants, output and outcomes variables of customer loyalty, isolated mainly in traditional offline context, still valid in a digital context?"* and *"What about the relationship among those variables, always in digital context?"* Managerially speaking, the research will be useful to understand what makes the online retailers intensify the relationships with their customers. Finally, the research could be also useful to understand how the customers attitudes, in terms of purchase and other forms of intentional behaviour (price sensitive and e-Wom), can be influenced positively toward the retailer offering system. Customers become more knowledgeable and experienced over time and more sensitive to price, eventually becoming better negotiators (Butscher, 2002; Reinartz and Kumar, 2002). Furthermore, the online retailers, with the facilities offered by technology and in particular the constant development and recruitment of databases and information systems have become more able to permit the retailers to tailor more effectively and efficiently their offers. Thus, relying on a better customisation, that take into consideration the customers' idiosyncratic characteristics, allows online retailers to continue to strengthen the relationship with the customer and to strengthen their position in comparison to other competitors in the digital marketplace. The impact of customer commitment on loyalty is expected very strong. Investigating the mechanism of customers' commitment toward their online retailer is a goal of the study as the commitment is a determinant to Customer e-Loyalty (CeL). Customers' ever-increasing bargaining power makes particularly important that practitioners and researchers (Morgan and Hunt, 1994; Sheth and Parvatiyar, 1995; Peterson, 1995; Pritchard et al., 1999) consider investigating the nature of customer commitment. In this context, the CeL measurement supports and facilitates the relationship with consumers by detecting important insight in consumer trends and customer behavior (Applebaum, 1951). Moreover, the consumers have more choices, competition is increasing, and convergence across industries has changed business ecosystem (Kandiah and Gossain, 1998). To remain profitable, many firms, firstly in the online retailing, has shifted investment strategies to innovation and are looking for new business model to create and capture value. The digital customer experience and Business Model Innovation (BMI) are becoming topics of high interest and importance to both managers and researchers (Keiningham et al., 2020). Therefore, the growth of the web and advances in database technology have made the services more personalized and payable by e-retailers. It's more obvious than ever before that success lies not only in attracting customers, but in retaining them. Although many of the strategies for building loyalty remain unchanged, many firms have failed to learn how to adapt these techniques to the web.

2. Conceptual framework

The concept of Customer e-Loyalty (CeL) is very recent and not extensively discussed in

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[4] The top 20 worldwide online marketplaces overwhelmingly sell general merchandise, with only four specializing in a specific product category (source: www.webretailer.com).

marketing literature. In the table 1 (see appendix) was collected a literature review on customer e-loyalty, its antecedents and outcomes. Brand related goals in the online environment are consistent with those of the retail environment: providing products and services that ultimately convert customers into brand loyal customers. Investigating the components of e-loyalty may be a way to improve it (Rodríguez et al., 2020). However, it must be said that CeL conceptual framework is based on the several studies on the loyalty (Reichheld, 1993; Reichheld et al., 2000; Bowen and Shoemaker, 2003) and its outcomes: brand loyalty (Day, 1976; Jacoby and Chestnut, 1978; Chaudhuri and Holbrook, 2001; Yi, 2003) and customer loyalty (Dick and Basu, 1994; Andreassen and Lindestad, 1998; Reinartz et al., 2002; Uncles, 2003). Oliver (1997) has proposed a classification of the loyalty based on the following phases: cognitive, affective, conative (behavioural intent), and action (repeat purchase behaviour) dimensions. Cognitive, affective and conative stages of loyalty, defined by Oliver (1999) all together considered attitudinal loyalty, are essentially related to consumer internal mental process, making it implicit, while behavioural loyalty is more externally displayed actions of loyalty, making it explicit. A definition integrating this multidimensional construct has been given (Oliver, 1999) as: *"a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour."* The model postulates that consumers first become cognitively loyal, proceed to become affectively loyal, then they become conatively loyal, and finally they exhibit loyalty behaviour described as action or behavioural loyalty. Oliver (1999) argues that consumer loyalty is formed in a progressive manner and in identifiable sequential stages in the order of cognitive loyalty, affective loyalty, conative loyalty, and action (behavioural) loyalty. To date scholars (Ajzen and Fishbein, 2000; Back and Parks, 2003; Allen et al., 1992; Mano and Oliver, 1993; Westbrook, 1987), have examined the simultaneous influence of cognitive and affective loyalty on consumer behaviour intentions and action loyalty, though there is evidence from the psychology and marketing literature that, affect and cognition could influence conative loyalty (behavioural intentions) and the latter can act on behavioural loyalty simultaneously (Hinson et al., 2016). The concept of CeL extends the traditional loyalty concept to online consumer behaviour. Although the underlying theoretical foundations of traditional loyalty and the newly defined concept of CeL are generally similar, there are unique aspects of it in the area of internet-based marketing and buyer behaviour (Gommans et al., 2001). Schultz (2000) describes customer/brand loyalty in cyberspace as an evolution from the traditional product driven, marketer-controlled concept towards a distribution driven, consumer controlled, and technology-facilitated concept. Moreover, CeL is conceptually associated to the concepts of store loyalty (Corstjens and Lal, 2000) and store satisfaction (Bloemer and De Ruyter, 1998) and the relative outcomes variables: share of visit and share of purchases that represents the total store's share of wallet (Mägi, 2003; Testa et al., 2016). In addition, as extensively discussed in Schefter and Reichheld (2000), the e-Loyalty regards the quality of customer support, on-time delivery, compelling product presentations, convenient and reasonably priced shipping and handling, and clear and trustworthy privacy policies. Recent research has identified commitment as a powerful determinant of loyalty-related outcomes, such as retention, willingness to pay more, and referrals (Brown et al., 2005; Fulerton, 2003; Hennig-Thurau et al., 2002). Some researchers (Palmatier et al., 2006; Venetis and Ghauri, 2004) define commitment as a pledge of continuity between exchange partners based on beliefs in the effectiveness of long-term mutual benefits, and portray it as an advanced phase of the relationship (Dwyer et al., 1987). Commitment is a psychological state regarded in the literature of marketing as a key concept in business relationships (Fullerton, 2005, Morgan and Hunt, 1994). In marketing, literature commitment is often regarded as comprising affective, calculative and normative components. Rylander (1997) Anderson and Weitz (1992) and Martín (2008) suggest mutual interaction between these components, which means that a single actor may have elements of all these components at the time of a single commitment.

This perspective on commitment implies that variations of commitment will influence the relationships in different ways (Roxenhall and Andrésen, 2012). Within this context, commitment has often been defined simply as the desire to maintain a relationship (Moorman et al., 1992; Morgan and Hunt, 1994) and viewed as a unidimensional concept (e.g. Garbarino and Johnson, 1999; Lacy et al., 2007; Morgan and Hunt, 1994). Starting from some theoretical and empirical works (Allen and Meyer, 1990; Meyer and Allen, 1991; Meyer and Herscovitch, 2001), a three-dimensional customer commitment model was proposed, including affective commitment (desire-based), calculative or continuance (cost-based), and normative commitment (obligation-based). The model investigates relations among commitment dimensions and impacts on customer intentions to buy (intentional share of wallet), positive word of mouth (WOM), and willingness to pay more (price sensitivity) mediated by one of the four types of CeL.

Tab. 1: see appendix

3. Methodology

In order to test the conceptual model of Customer e-Loyalty (CeL) measurement it was adopted the following research design. First, the conceptual model of CeL measurement and its expected relationships (table 3 below) was developed by identifying, selecting and analysing the main literature on the topic (conference papers, working papers and management reviews' articles). Later it was adopted a structured questionnaire as a main research tool in order to test the CeL measurement scale (table 2 in appendix). The questionnaire used to measure the CeL collects information on consumers habits such as online purchases, profitability, amount of interactions with retailers and so on. The questionnaire used to collect the data was administered online[5] through the Google Form application on Italian consumers who makes online purchases prevalently on Amazon. The Google Module includes profiling questions, closed-ended questions and other questions based on psychometric scale (Likert, 1932), with values from 1 (minimum evaluation) to 7 (maximum evaluation). The data collected from the questionnaire were analysed using the statistical add-in software of Microsoft Excel (XLSTAT). The first step, to realize a measurement model, was the development of a Path Model (Dijkstra and Henseler, 2015), which is a graph able to represent the links between the latent variables. The methodology was implemented by a component-based Structural Equation Modelling (SEM)[6] that is considered highly relevant for many marketing researches, in consumer research as well as in strategic marketing ones (Albers, 2010) to deal with latent variables and analyses cause-effect relationships (Völckner et al., 2010). Moreover, component-based SEM is mainly used for score computation and can be operationalized on very small samples (Tenenhaus, 2008). The component-based SEM measurement has two-step method: (1) latent variables scores are computed using the Partial Least Squares (PLS) algorithm and (2) Ordinary Least Squares (OLS) regressions are carried out on the latent variables scores for estimating the structural relationships. On the basis of the literature analysis, it was possible to identify the items (manifest variables) that Scholars adopt for the measurement of each latent variables that we considered in our model (fig. 1 below).

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[5] To collect the data, the structured questionnaire was sent by email and distributed on leading social media platform (e.g. Facebook and Instagram).
[6] This methodology is known also the under the name "PLS" (Partial Least Squares) introduced by Wold (1982).

Tab. 3: conceptual model of Customer e-Loyalty* measurement

Hypothesis	Relationships**	Findings
H1	CeS impacts positively on Trust	supported
H2	CeS Impacts positively on Commitment***	not supported
H3	CeS impacts positively on Cognitive Loyalty	supported
H4	CeS Impacts positively on Affective Loyalty	not supported
H5	CeS Impacts positively on Conative Loyalty	supported
H6	CeS impacts positively on Behavioural Loyalty	not supported
H7	Normative Commitment impacts positively on Commitment	supported
H8	Affective Commitment impacts positively on Commitment	supported
H9	Calculative Commitment impacts positively on Commitment	supported
H10	COMM impacts positively on Cognitive Loyalty	supported
H11	COMM Impacts positively on Affective Loyalty	supported
H12	COMM Impacts positively on Conative Loyalty	supported
H13	COMM impacts positively on Behavioural Loyalty	supported
H14	TRUST impacts positively on Cognitive Loyalty	not supported
H15	TRUST Impacts positively on Affective Loyalty	not supported
H16	TRUST Impacts positively on Conative Loyalty	not supported
H17	TRUST impacts positively on Behavioural Loyalty	not supported
H18	CeS impacts positively on Price SENS	not supported
H19	CeS Impacts positively on e-Wom	not supported
H20	Cognitive Loyalty impacts positively on Affective Loyalty	supported
H21	Affective loyalty impacts positively on Conative Loyalty	not supported
H22	Conative Loyalty impacts positively on behavioural loyalty	supported
H23	Cognitive loyalty impacts positively on e-Wom	not supported
H24	Cognitive loyalty impacts positively on INT-SOW	not supported
H25	Cognitive loyalty impacts positively on Price-Sens	supported
H26	Affective loyalty impacts positively on e-Wom	not supported
H27	Affective loyalty impacts positively on INT-SOW	not supported
H28	Affective loyalty impacts positively on Price-Sens	not supported
H29	Conative loyalty impacts positively on e-Wom	supported
H30	Conative loyalty impacts positively on INT-SOW	not supported
H31	Conative loyalty impacts positively on Price-Sens	not supported
H32	Behavioural loyalty impacts positively on e-Wom	supported
H33	Behavioural loyalty impacts positively on INT-SOW	supported
H34	Behavioural loyalty impacts positively on Price-Sens	not supported

* Customer e-Loyalty involving four sub-dimensions that are: cognitive, affective and conative and behavioural loyalty.
** These outcomes (e-WOM, Share of Wallet and Price Sensitivity) are intended in terms of expected values.
*** Commitment construct gathering three sub-dimensions that are: normative, affective and calculative commitment.

Source: our elaboration.

According to table 2 in appendix, e-Trust was measured using a 5-items scale of measure adapted from Garbarino and Johnson (1999) study. Customer e-Satisfaction (CeS) was measured using a 4- items scale adapted from Hennig-Thurau (2004) and Pedersen and Nysveen (2004). Commitment was measured using a 9-items scale of measure adapted from Anderson and Weitz (1989); Morgan and Hunt (1994); Kumar et al. (1995); Lush and Bwown (1996); Garbarino and Johnson (1999) and Mattila (2004). Commitment has been operationalized as a second order latent construct with 3 items each first order variables (normative, affective and calculative commitment).

Customer e-Loyalty (CeL) was measured as four individual latent constructs (cognitive, affective, conative and behavioural loyalty) using a 4-items scale of measure each adapted, respectively, from Oliver (1999); Pedersen and Nysveen (2004) and Hinson et al. (2016). Share of wallet (SOW) was measured using a 4-items scale adapted from Mägi (2003); Cooil et al. (2007) and Keiningham (2007). E-WOM was measured using a 4-item scale adapted from Goyette et al. (2010); Gupta and Harris (2010) and Yoo et al. (2013). Finally, price sensitivity (PS) was measured using a 4-items scale adapted from Lewis and Shoemaker (1997) and Raab et al. (2009). To validate and better define the questions of the 7 dimensions of CeL measurement scale, the most common opinion statements (e.g. survey items) used in questionnaires' databases and in other research tools were analysed and compared. The research has been carried out using online databases (e.g., Web of Science, Scopus and Google Scholar) and Google Search.

Tab. 2: see appendix

4. Findings and discussion

The SEM has tested 34 relationships among the latent (endogenous or exogenous) variables operationalised in the conceptual model. Of them only 16 have resulted supported. The customers interviewed have been 67 (32 females; 35 male) of which 26 not-yet employed, 38 employed, and 3 unemployed. First, the Goodness of Fit (GOF) of the component-based SEM has resulted very high (0.8481) and the relative GOF (0.9734) the same, confirming the attitude of the overall model to shape optimistically the data set. For each latent variable, a reflexive model has been assumed for the relationship with its group of manifest variables (Mod. A). All the latent variables have showed a strong internal consistency or a strong uni-dimensionality presenting a value higher of 0.80 both on Alpha di Cronbach and Rho di Dillon Goldstein. The factorial mono-validity is also confirmed in so much each group of manifest variables considered in the model shows the greater correlation with the latent variable it is expected to impact on rather than on the others. The statistical commonality is consistently higher than 0.5 for each latent variable considered in the model. The same is for statistical redundancy. The first counter-intuitive evidence is that Customer e-Satisfaction (CeS) has not an impact on commitment, price sensitive and e-Wom, while it has on trust (contribution= 100, pr>|t|<0.001). But what it is relevant, respect the customer loyalty in offline context, is the role of Trust (Ball et al., 2004). Trust has not confirmed a determinant of loyalty as the impact of this latent variable (trust) has not found statistically significant for any CeL component. Instead CeS has been confirmed to be a determinant of cognitive (contribution=36.33; pr>|t|<0.001) and conative loyalty (contribution=35.61; pr>|t|<0.001) but not statistically significant on affective and behavioural loyalty. Furthermore, in according to Anderson and Srinivasan (2003) the impact of e-satisfaction on e-loyalty can be significantly moderated by individual level variables (inertia, convenience motivation, and purchase size) and firm level variables (trust and perceived value). It has also demonstrated that commitment has three individual dimensions: normative (contribution=33.32; pr>|t|<0.001), affective (contribution=34.61; pr>|t|<0.001) and calculative (contribution= 32.07; pr>|t|<0.001) commitment as supposed also by Gustafsson et al. (2005). The commitment, in overall, impacts on every individual component of customer e-loyalty: on cognitive loyalty (contribution= 63.67; pr>|t|<0.001), on affective loyalty (contribution=45.95; pr>|t|<0.001), on conative loyalty (contribution=64.39; pr>|t|<0.001), on behavioural loyalty (contribution= 45.77; pr>|t|<0.001). It has only partially demonstrated that the CeL is a process. Kim et al. (2009) states that the results indicate that the e-loyalty development process is influenced by both e-satisfaction and e-trust.

In fact, while has been demonstrated that the positive impact of cognitive loyalty on affective loyalty (contribution=54.05) is statistically significant (pr>|t|<0.001) not the same is for the positive relationship of affective loyalty on conative loyalty that has been found not statistically supported by the SEM. Finally, the SEM has supported (pr>|t|<0.001) the positive relationship existing between conative loyalty and behavioural one (contribution=54.23). Back and Parks (2003) suggested that customer satisfaction had a significant indirect effect on behavioural brand loyalty when mediated by attitudinal brand loyalty, including cognitive-affective-conative brand loyalty stages. Ultimately, cognitive loyalty has demonstrated to have a positive impact on price sensitive (contribution= 100; pr>|t|<0.001) but not on the other CeL outcomes (e-Wom and intentional SOW). In a research work, Backman and Crompton (1991), argue that participants who exhibited higher levels of loyalty would be intrinsically motivated, perceive personal competency and mastery as important, report high levels of involvement, be less price sensitive. E-Wom is positively impacted by conative (contribution=40.75) and behavioural loyalty (contribution=59.25) and the positive relationships are both statistically significant (pr>|t|<0.001). The intentional SOW has been demonstrated been impacted only by behavioural loyalty (contribution= 100) and the relative relationship is statistically significant (pr>|t|<0.001).

Fig. 1: the findings of the SEM applied to Amazon
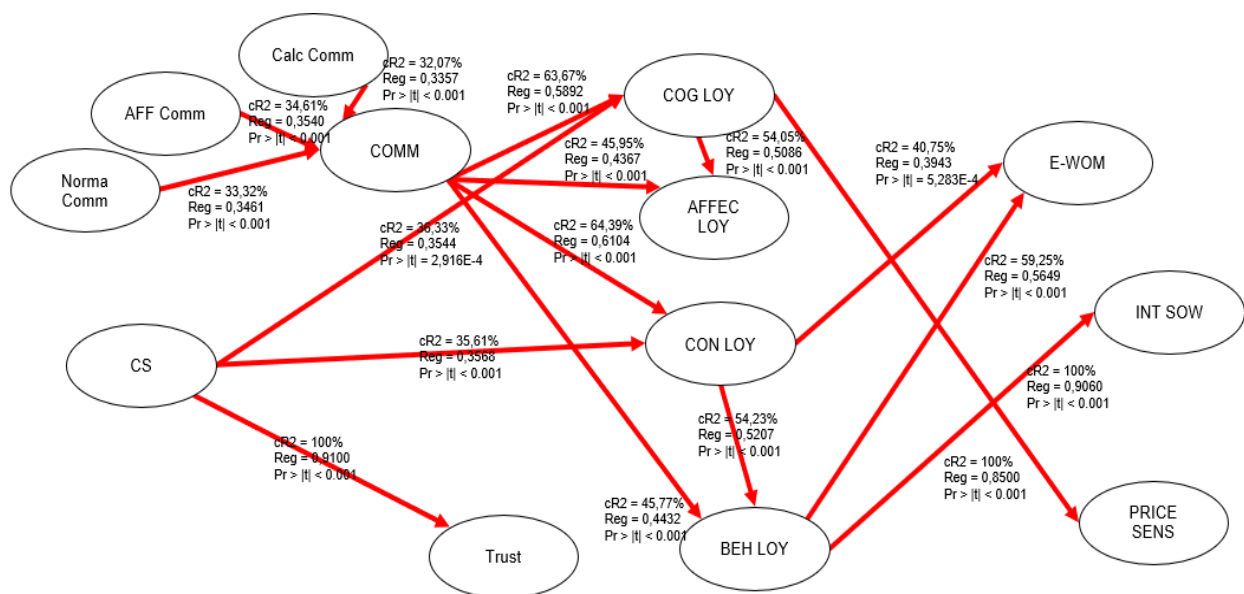
Source: our elaboration based on Basile et al. (2020) conceptual model.

Baumann et al. (2005) had discussed on this topic with two perspective: behavioural intentions (i.e., word of mouth), short- and long-term intentions and behavioural loyalty, where the prediction of actual behaviour or share of wallet. Oher scholars (Wong et al., 2009) investigated the relationship between technology trust (security and privacy), trustworthiness, and customer e-loyalty and determine the mediating effect of trustworthiness on the relationship between technology trust and e-loyalty.

5. Conclusion and limitations

The application of the conceptual model for customer e-loyalty measurement in the case of Amazon retailer has allowed us to obtain some important counter intuitive evidences that will have to be confirmed in subsequent studies. First, loyalty in digital contexts is not determined by the Trust. In essence, the relationship between the retailer and the customer follows a logic of greater opportunism and rationality. Accordingly, the commitment appears to be the major determinant, together with the CeS, of customer loyalty in digital contexts. It is evident that the Commitment has a positive impact on all four dimensions of loyalty. However, loyalty does not have a sequential nature, i.e. it does not form itself as it happens in offline contexts in a progressive way. The cognitive and evaluative dimension of loyalty impacts on the affective dimension. But the latter does not represent a determinant of the conative loyalty and does not impact on anyone of the outcomes of customer e-loyalty (price sensitivity, e-Wom intentional SOW). Therefore, in digital contexts the formation of loyalty follows a logic that is mainly rational rather than emotional or affective. This probably even because lacks in digital context any kind of high touch relationship with human beings, except from the delivery phase. Thus, probably it is physiological that two constructs (trust and affective loyalty) based on human relationships are not impacting on the findings. Therefore, also the E-Wom is a consequence of attitudes (conative loyalty) and/or predisposition to continue to purchase at the point of sales (conative). The intentional SOW is only influenced by behavioural loyalty, or by a strong impulse of the client to overcome any barrier and obstacle to purchasing from the retailer. Finally, price sensitive is also reduced only for rational or cognitive evaluations. The model here proposed has three originalities. Distinguishing loyalty in its individual components can allow, both in online and offline contexts, to discover spurious relationships that the single sub-dimensions highlight with the individual outcomes, expanding the predictive value of the model and managerial implications. Furthermore, this has also permitted to appreciate how the process of loyalty formation is different in digital rather than in offline context. Thirdly, the model investigates the impact of each individual component of loyalty on its main outcomes (price sensitivity, e-Wom and intentional SOW).

6. Managerial implications and further research

Internet-based companies need to remain competitive. One way of improving competitive advantage is to attract more customers and increase customer retention. For example, by developing long-term, secure relationships between the label and their consumers, even in digital environment. The literature review of the measurement models should be useful from both managerial perspective (for practical reasons) and scientific one (providing a theoretical framework for potential future research). Once the model will be further tested in other on-line retailing industries, the clear understanding of the postulated relationships among the stated variables might encourage the online retailers to figure out appropriate course of actions to win customers' trust, by providing better services in order to create a loyal customer base in digital context. Therefore, in the next future, by the testing of the model, the aim is to expand in the scientific community and in managerial practice the existing debate on the dimensionality and generalizability of customer loyalty measurement scale. Recent studies suggest (Al-Adwan and Al-Horani, 2019) that the customer trust, satisfaction and loyalty with regard to the provision of e-commerce services is expected to be critical factors for the assessment of the success of online businesses. Service quality and high-quality product settings are closely linked to these factors.

The wide spreading of technology in present day living is reflected by the increasing number of savvy consumers worldwide, who can now shop online from the convenience of their homes every 24 hours. Wong et al. (2009) highlighted the critical role of trustworthiness as mediator of the relationships. The findings of their study revealed that security, privacy, and trustworthiness are positively related to customers' e-loyalty.

Bibliography

ANDERSON, R. E., & SRINIVASAN, S. S. (2003). E‐satisfaction and e‐loyalty: A contingency framework. *Psychology & marketing*, 20(2), 123-138.

ANDREASSEN, T. W., & LINDESTAD, B. (1998). Customer loyalty and complex services. *International Journal of service Industry management.*

APPLEBAUM, W. (1951). Studying customer behavior in retail stores. *Journal of marketing*, *16*(2), 172-178.

BACK, K. J., & PARKS, S. C. (2003). A brand loyalty model involving cognitive, affective, and conative brand loyalty and customer satisfaction. *Journal of Hospitality & Tourism Research*, *27*(4), 419-435.

BACKMAN, S. J., & CROMPTON, J. L. (1991). The usefulness of selected variables for predicting activity loyalty. *Leisure sciences*, *13*(3), 205-220.

BASILE, V., TESTA, P. & CANTONE, L. (2020). The Customer E-Loyalty in Online Retailing: A Proposal of a Measurement Scale. *Proceedings 19th International Marketing Trends Conference (IMTC) Paris. January 16-18, 2020.*

BALL, D., COELHO, P. S., & MACHÁS, A. (2004). The role of communication and trust in explaining customer loyalty. *European journal of marketing*.

BAUMANN, C., BURTON, S., & ELLIOTT, G. (2005). Determinants of customer loyalty and share of wallet in retail banking. *Journal of financial services marketing*, *9*(3), 231-248.

BENNETT, P. D. (1995). AMA dictionary of marketing terms. Lincolnwood, IL: NTC Publishing Group.

BERRY, L. L. & PARASURAMAN, A., (1991). *Marketing services*: competing through quality. New York.

BLOEMER, J., & DE RUYTER, K. (1998). On the relationship between store image, store satisfaction and store loyalty. *European Journal of marketing*.

BOWEN, J. T., & SHOEMAKER, S. (2003). Loyalty: A strategic commitment. *The Cornell Hotel and Restaurant Administration Quarterly*, *44*(5-6), 31-46.

BOWEN, J. T., & CHEN, S. L. (2001). The relationship between customer loyalty and customer satisfaction. *International journal of contemporary hospitality management*, 13(5), 213-217.

BRODIE, R. J., WHITTOME, J. R., & BRUSH, G. J. (2009). Investigating the service brand: A customer value perspective. *Journal of business research*, 62(3), 345-355.

BROWN, T. J., CHURCHILL JR, G. A., & PETER, J. P. (1993). Research note: improving the measurement of service quality. *Journal of retailing*, 69(1), 127.

BUTTLE, F. (1996). SERVQUAL: review, critique, research agenda. *European Journal of marketing*, 30(1), 8-32.

CHAUDHURI, A., & HOLBROOK, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty. *Journal of marketing*, *65*(2), 81-93.

CHANG, H. H., & CHEN, S. W. (2008). The impact of customer interface quality, satisfaction and switching costs on e-loyalty: Internet experience as a moderator. *Computers in Human Behavior*, 24(6), 2927-2944.

CHEN, S. C. (2012). The customer satisfaction–loyalty relation in an interactive e-service setting: The mediators. *Journal of Retailing and Consumer Services*, 19(2), 202-210.

CHURCHILL JR, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of marketing research*, 16(1), 64-73.

COOIL, B., KEININGHAM, T. L., AKSOY, L., & HSU, M. (2007). A longitudinal analysis of customer satisfaction and share of wallet: investigating the moderating effect of customer characteristics. *Journal of marketing*, 71(1), 67-83.

CORSTJENS, M., & LAL, R. (2000). Building store loyalty through store brands. *Journal of marketing research*, *37*(3), 281-291.

CRONIN JR, J. J., BRADY, M. K., & HULT, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of retailing*, 76(2), 193-218.

CZICHOS, H., & SAITO, T. (2006). Springer handbook of materials measurement methods (Vol. 978). L. Smith (Ed.). Berlin: Springer.

DAY, G. S. (1976). A two-dimensional concept of brand loyalty. In *Mathematical models in marketing* (pp. 89-89). Springer, Berlin, Heidelberg.

DICK, A. S., & BASU, K. (1994). Customer loyalty: toward an integrated conceptual framework. *Journal of the academy of marketing science*, *22*(2), 99-113.

DONEY, P. M., & CANNON, J. P. (1997). An examination of the nature of trust in buyer–seller relationships. *Journal of marketing*, 61(2), 35-51.

DONIO', J., MASSARI, P., & PASSIANTE, G. (2006). Customer satisfaction and loyalty in a digital environment: an empirical test. *Journal of Consumer Marketing*, 23(7), 445-457.

DUFFY, J. A., DUFFY, M., & KILBOURNE, W. (1997). Cross national study of perceived service quality in long-term care facilities. *Journal of Aging Studies*, 11(4), 327-336.

FREDERICKS, J. O., & SALTER, J. M. (1995). Beyond customer satisfaction. *Management Review*, 84(5), 29-33.

FULLERTON, G. (2005). How commitment both enables and undermines marketing relationships. *European journal of marketing*, 39(11/12), 1372-1388.

GARBARINO, E., & JOHNSON, M. S. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. *Journal of marketing*, 63(2), 70-87.

GHANE, S. O. H. E. I. L. A., FATHIAN, M., & GHOLAMIAN, M. R. (2011). Full relationship among e-satisfaction, e-trust, e-service quality, and e-loyalty: The case of Iran e-banking. *Journal of Theoretical and Applied Information Technology*, 2011, 33.1: 1-6.

GOYETTE, I., RICARD, L., BERGERON, J., & MARTICOTTE, F. (2010). e‑WOM Scale: word‑of‑mouth measurement scale for e‑services context. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 27(1), 5-23.

GOMMANS, M., KRISHMAN, K. S., & SCHEFFOLD, K. B. (2001). From brand loyalty to e-loyalty: A conceptual framework. *Journal of Economic & Social Research*, 3(1).

GRÖNROOS, C. (2004). The relationship marketing process: communication, interaction, dialogue, value. *Journal of business & industrial marketing*, 19(2), 99-113.

GUPTA, P., & HARRIS, J. (2010). How e-WOM recommendations influence product consideration and quality of choice: *A motivation to process information perspective. Journal of Business Research*, 63(9-10), 1041-1049.

GUSTAFSSON, A., JOHNSON, M. D., & ROOS, I. (2005). The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. *Journal of marketing*, *69*(4), 210-218.

HEADLEY, D. E., & CHOI, B. (1992). Achieving service quality through gap analysis and a basic statistical approach. *Journal of Services Marketing*, 6(1), 5-14.

HE, X., & SIMPSON, D. G. (1993). Lower bounds for contamination bias: Globally minimax versus locally linear estimation. *The Annals of Statistics*, 314-337.

HENNIG-THURAU, T. (2004). Customer orientation of service employees: Its impact on customer satisfaction, commitment, and retention. *International Journal of Service Industry Management*, 15(5), 460-478.

HINSON, E., VANZYL, H., NIMAKO, S. G., CHINJE, N., & ASIAMAH, E. (2016). Extending the four-stage brand loyalty framework in African Telecoms. *African Journal of Business and Economic Research*, *11*(2-3), 53-82.

HSU, L. C., WANG, K. Y., & CHIH, W. H. (2013). Effects of web site characteristics on customer loyalty in B2B e-commerce: evidence from Taiwan. *The Service Industries Journal*, 33(11), 1026-1050.

HUR, Y., KO, Y. J., & VALACICH, J. (2011). A structural model of the relationships between sport website quality, e-satisfaction, and e-loyalty. Journal of sport management, 25(5), 458-473.

JACOBY, J., & CHESTNUT, R. W. (1978). Brand loyalty: Measurement and management.

LAMB, C. W., HAIR, J. F., & MCDANIEL, C. (2011). *Essentials of marketing*. Cengage Learning.

LAU, G. T., & LEE, S. H. (1999). Consumers' trust in a brand and the link to brand loyalty. *Journal of Market-Focused Management*, 4(4), 341-370.

LEE, Y. L., & HING, N. (1995). Measuring quality in restaurant operations: an application of the SERVQUAL instrument. *International Journal of Hospitality Management*, 14(3-4), 293-310.

LEWIS, R. C., & SHOEMAKER, S. (1997). Price-sensitivity measurement: A tool for the hospitality industry. *Cornell Hotel and Restaurant Administration Quarterly*, 38(2), 44-54.

LIKERT, R. (1932). A technique for the measurement of attitudes. *Archives of psychology*.

LUDIN, I. H. B. H., & CHENG, B. L. (2014). Factors influencing customer satisfaction and e-loyalty: Online shopping environment among the young adults. *Management Dynamics in the Knowledge Economy*, 2(3), 462.

KANDIAH, G., & GOSSAIN, S. (1998). Reinventing value: The new business ecosystem. *Strategy & Leadership*.

KEININGHAM, T. L., COOIL, B., AKSOY, L., ANDREASSEN, T. W., & WEINER, J. (2007). The value of different customer satisfaction and loyalty metrics in predicting customer retention, recommendation, and share-of-wallet. *Managing service quality: An international Journal,* 17(4), 361-384.

KEININGHAM, T., AKSOY, L., BRUCE, H. L., CADET, F., CLENNELL, N., HODGKINSON, I. R., & KEARNEY, T. (2020). Customer experience driven business model innovation. *Journal of Business Research*, 116, 431-440.

KETTINGER, W. J., & LEE, C. C. (1999). Replication of measures in information systems research: the case of IS SERVQUAL. *Decision Sciences*, 30(3), 893-899.

KOTLER, P. ARMSTRONG, G. (1996): *Principles of Marketing.* KOTLER, P. (2003). Il marketing dalla A alla Z (Vol. 24). Il sole.

MÄGI, A. W. (2003). Share of wallet in retailing: the effects of customer satisfaction, loyalty cards and shopper characteristics. *Journal of retailing*, 79(2), 97-106.

MOISESCU, O. I., & VU, D. A. (2011). A conceptual review on building, managing and accessing brand loyalty. *Review of Economic Studies and Research Virgil Madgearu*, 4(1), 67.

MOLINARI, L. K., ABRATT, R., & DION, P. (2008). Satisfaction, quality and value and effects on repurchase and positive word-of-mouth behavioral intentions in a B2B services context. *Journal of Services Marketing*, 22(5), 363-373.

MOLINER, M. A., SÁNCHEZ, J., RODRÍGUEZ, R. M., & CALLARISA, L. (2007). Perceived relationship quality and post-purchase perceived value: An integrative framework. *European Journal of Marketing*, 41(11/12), 1392-1422.

MORGAN, R. M., & HUNT, S. D. (1994). The commitment-trust theory of relationship marketing. Journal of marketing, 58(3), 20-38.

MORGAN, N. A., & REGO, L. L. (2006). The value of different customer satisfaction and loyalty metrics in predicting business performance. *Marketing Science*, 25(5), 426-439.

MOORMAN, C., & RUST, R. T. (1999). The role of marketing. *Journal of marketing*, 63(4_suppl1), 180-197.

MOORMAN, C., ZALTMAN, G., & DESHPANDE, R. (1992). Relationships between providers and users of market research: the dynamics of trust within and between organizations. *Journal of marketing research*, 29(3), 314-328.

OLIVER, R. L. (1999). Whence consumer loyalty? *Journal of marketing*, 63(4_suppl1), 33-44.

PALMATIER, R. W., & STEINHOFF, L. (2019). *Relationship marketing in the digital age*. Routledge.

PARAWANSA, D. A. S. (2012). The Mediating Effect of Trust, Satisfaction, and Commitment on The Relationship Between Service Quality and Customer Loyalty in Islamic Banking of Indonesia dalam Transformation of Research in Islamic Studies. *Universitas Hasanuddin, Makassar*.

PARASURAMAN, A., BERRY, L. L., & ZEITHAML, V. A. (1991). Understanding customer expectations of service. *Sloan management review*, 32(3), 39-48.

RAAB, C., MAYER, K., KIM, Y. S., & SHOEMAKER, S. (2009). Price-sensitivity measurement: a tool for restaurant menu pricing. *Journal of Hospitality & Tourism Research*, 33(1), 93-105.

REICHHELD, F. F. (2003). The one number you need to grow. *Harvard business review*, 81(12), 46-55.

REICHHELD, F. F., & SCHEFTER, P. (2000). E-loyalty: your secret weapon on the web. *Harvard business review*, 78(4), 105-113.

REICHHELD, F. F. (1993). Loyalty-based management. *Harvard business review*, 71(2), 64-73.

REICHHELD, F. F., ROBERT JR, G., & HOPTON, C. (2000). The loyalty effect--the relationship between loyalty and profits. *European business journal*, *12*(3), 134-134.

REINARTZ, W., & KUMAR, V. I. S. W. A. N. A. T. H. A. N. (2002). The mismanagement of customer loyalty. *Harvard business review*, *80*(7), 86-94.

RODRÍGUEZ, P. G., VILLARREAL, R., VALIÑO, P. C., & BLOZIS, S. (2020). A PLS-SEM approach to understanding E-SQ, E-Satisfaction and E-Loyalty for fashion E-Retailers in Spain. *Journal of Retailing and Consumer Services*, *57*, 102201.

ROXENHALL, T., & ANDRÉSEN, E. (2012). Affective, calculative and normative commitment: An assessment of relationship. *World Review of Business Research*, *2*(5), 86-96.

ROUSSEAU, D. M., SITKIN, S. B., BURT, R. S., & CAMERER, C. (1998). Not so different after all: A cross-discipline view of trust. Academy of management review, 23(3), 393-404.

RUST, R. T., DANAHER, P. J., & VARKI, S. (2000). Using service quality data for competitive marketing decisions. *International Journal of Service Industry Management*, 11(5), 438-469.

SADEH, E., MOUSAVI, L., GARKAZ, M., & SADEH, S. (2011). The structural model of e-service quality, e-customer satisfaction, trust, customer perceived value and e-loyalty. *Australian Journal of Basic and Applied Sciences*, 5(3), 532-538.

SALMEN, S. M., & MUIR, A. (2003). Electronic customer care: The innovative path to e-loyalty. *Journal of Financial Services Marketing*, 8(2), 133-144.

SETÓ-PAMIES, D. (2012). Customer loyalty to service providers: examining the role of service quality, customer satisfaction and trust. *Total Quality Management & Business Excellence*, 23(11-12), 1257-1271.

SINGH, J., & SIRDESHMUKH, D. (2000). Agency and trust mechanisms in consumer satisfaction and loyalty judgments. *Journal of the Academy of marketing Science*, 28(1), 150-167.

SLATER, S. F., & NARVER, J. C. (1994). Does competitive environment moderate the market orientation-performance relationship? *Journal of marketing*, 58(1), 46-55.

SRINIVASAN, S. S., ANDERSON, R., & PONNAVOLU, K. (2002). Customer loyalty in e-commerce: an exploration of its antecedents and consequences. *Journal of retailing*, 78(1), 41-50.

SRIVASTAVA, R. K., SHERVANI, T. A., & FAHEY, L. (1999). Marketing, business processes, and shareholder value: an organizationally embedded view of marketing activities and the discipline of marketing. *Journal of marketing*, 63(4_suppl1), 168-179.

STEINHOFF, L., ARLI, D., WEAVEN, S., & KOZLENKOVA, I. V. (2019). Online relationship marketing. *Journal of the Academy of Marketing Science*, 47(3), 369-393.

TENENHAUS, M. (2008). Component-based structural equation modelling. *Total quality management*, 19(7-8), 871-886.

TESTA, P., BASILE, V. & CANTONE, L. *(2016).* Marketing Performance Measurement in Fmcg Proposing and Testing A Conceptual Model. *Proceedings International Marketing Trends Conference (January 2016), ISBN 978-2-9532811-0-2.*

TRASORRAS, R., WEINSTEIN, A., & ABRATT, R. (2009). Value, satisfaction, loyalty and retention in professional services. *Marketing Intelligence & Planning*, 27(5), 615-632.

UNCLES, M. D., DOWLING, G. R., & HAMMOND, K. (2003). Customer loyalty and customer loyalty programs. *Journal of consumer marketing*.

WETZELS, M., DE RUYTER, K., & VAN BIRGELEN, M. (1998). Marketing service relationships: the role of commitment. *Journal of business & industrial marketing*, 13(4/5), 406-423.

WOLD H. (1982): "Soft Modeling: The Basic Design and Some Extensions", in *Systems under indirect observation*, Part 2, K.G. Jöreskog & H. Wold (Eds), North-Holland, Amsterdam, pp. 1-54.

WOODRUFF, R. B. (1997). Customer value: the next source for competitive advantage. *Journal of the academy of marketing science*, 25(2), 139.

VALVI, A. C., & FRAGKOS, K. C. (2012). Critical review of the e-loyalty literature: a purchase-centred framework. *Electronic Commerce Research*, 12(3), 331-378.

VENETIS, K. A., & GHAURI, P. N. (2004). Service quality and customer retention: building long-term relationships. *European Journal of marketing*, 38(11/12), 1577-1598.

VERMA, V., SHARMA, D., & SHETH, J. (2016). Does relationship marketing matter in online retailing? A meta-analytic approach. *Journal of the Academy of Marketing Science*, 44(2), 206-217.

YI, Y., & JEON, H. (2003). Effects of loyalty programs on value perception, program loyalty, and brand loyalty. *Journal of the academy of marketing science*, *31*(3), 229-240.

YOO, C. W., SANDERS, G. L., & MOON, J. (2013). Exploring the effect of e-WOM participation on e-Loyalty in e-commerce. *Decision Support Systems*, 55(3), 669-678.

ZINELDIN, M., & JONSSON, P. (2000). An examination of the main factors affecting trust/commitment in supplier-dealer relationships: an empirical study of the Swedish wood industry. *The TQM magazine,* 12(4), 245-266.

Appendix

Tab.1: a literature review on CUSTOMER E-LOYALTY, its ANTECEDENTS and OUTCOMES

AUTHORS	OBJECTIVE	TYPE OF STUDY	OUTCOMES
Lewis and Shoemaker (1997)	PRICE-SENSITIVITY Measurement: A Tool for the Hospitality Industry	Empirical and statistical	*The statistical technique of price- sensitivity measurement (PSM) works by asking consumers questions that allow them to indicate when a product is "too expensive" or "too cheap."*
Gommans et al. (2001)	Present a conceptual framework of "E-LOYALTY" and its underlying drivers	Conceptual	*"E-loyalty with the underlying drivers consisting of (1) Value Propositions (2) Brand Building (3) Trust and Security (4) Website & Technology and (5) Customer Service."*
Srinivasan et al. (2002)	CUSTOMER LOYALTY in e-commerce: an exploration of its antecedents and consequences	Empirical and statistical	*"The scholars identify eight factors (the 8 Cs customization, contact interactivity, care, community, convenience, cultivation, choice, and character) that potentially impact e-loyalty and develop scales to measure these factors."*
Anderson and Srinivasan (2003)	Investigate the impact of SATISFACTION on LOYALTY in the context of electronic commerce	Empirical, quantitative research	*"This research indicates that although e-satisfaction has an impact on e-loyalty, this relationship is moderated by (a) consumers' individual level factors and (b) firms' business level factors."*
Salmen and Muir (2003)	Illustrate how electronic customer care tools can be used to create customer e-loyalty in the field of private internet banking	Empirical, quantitative research	*"Both within the scope of customer satisfaction and locking in strategies, the personalization of the website represents a substantial, online specific advantage for the user, and thus is considered to be a central element in the achievement of e- loyalty for private internet banking and brokerage."*
Back and Parks (2003)	A brand loyalty model involving cognitive, affective, and conative brand loyalty and customer satisfaction.	Empirical, quantitative research	*"The results of this investigation suggested that customer satisfaction had a significant indirect effect on behavioral brand loyalty when mediated by attitudinal brand loyalty, including cognitive-affective-conative brand loyalty stages. Thus, practitioners should consider customers 'perceptions of their brand and not rely solely on purchasing frequencies when measuring brand loyalty levels."*
Lee-Kelley (2003)	Provides evidence of how to improve planning for customer management by presenting and testing a conceptual model of the process by which the implementation of electronic relationship marketing (e-CRM), can enhance LOYALTY	Empirical, quantitative research	*"E-retail companies (with CD, DVD, video and book products) should consider customers' perceptions of relationship marketing efforts, as they are fundamental to enhancing customer loyalty and that an enhancement of customer loyalty reduces PRICE SENSITIVITY."*
Mägi, (2003)	SHARE OF WALLET in retailing: the effects of customer satisfaction, loyalty cards and shopper characteristics	Empirical, quantitative research	*"CUSTOMER SATISFACTION has a positive, albeit modest, effect on share while consumer economic shopping orientation has a negative direct effect on share."*

Floh and Treiblmaier (2006)	Importance of antecedents of online LOYALTY such as TRUST, quality of the Web site, quality of the service and overall SATISFACTION	Empirical, quantitative research	*"Satisfaction and trust were identified as important antecedents of loyalty. Additionally, the moderating role of consumer characteristics (gender, age, involvement, perceived risk and technophobia) was supported by the data."*
Cooil, (2007)	Provide the first longitudinal examination of the impact of changes in customer SATISFACTION on changes in SHARE OF WALLET	Empirical, quantitative research	*"The initial SATISFACTION level and the conditional percentile of change in satisfaction significantly correspond to changes in SHARE OF WALLET."*
Keiningham et al. (2007)	Examine different customer SATISFACTION and loyalty metrics and test their relationship to customer retention, recommendation and SHARE OF WALLET using micro (customer) level data	Empirical, quantitative research	*"Recommend intention alone will not suffice as a single predictor of customers' future loyalty behavior. Use of a multiple indicator instead of a single predictor model performs better in predicting customer recommendations and retention."*
Chang and Chen (2008)	Testing the relationships among customer interface quality, SATISFACTION, switching costs, and E-LOYALTY	Empirical, quantitative research	*"Customer interface quality, including customization, interaction, convenience and character, contributes to generating e-loyalty."*
Raab et al. (2009)	How restaurant managers can use PRICE-SENSITIVITY measurement to assess their guests' price sensitivity	Empirical, quantitative research	*"The results reveal price ranges that represent real value for dinner buffet patrons."*
Kim et al. (2009)	The role of etail quality, e-satisfaction and e-trust in online loyalty development process	Empirical, quantitative research	*"The results indicate that the e-loyalty development process is influenced by both e-satisfaction and e-trust. The relationship between e-trust and e-satisfaction is found to be significant as well. Components of etail quality have differing effects on e-satisfaction and e-trust. Evaluation of fulfillment/reliability influences e-satisfaction as well as e-trust. Website design positively influences e-satisfaction while security/privacy has a positive effect on e-trust."*
Goyette et al. (2010)	Propose a measurement scale for word of mouth (E-WOM scale) in the context of electronic service	Empirical, quantitative research	*"WOM construct encompasses four dimensions: WOM intensity, positive valence WOM, negative valence WOM, and WOM content."*
Gupta and Harris (2010)	The effects of electronic WORD-OF-MOUTH (e-WOM) on consumer consideration and choice of an experience product	Empirical, quantitative research	*"E-WOM is likely to result in more time considering the recommended product."*
Ghane et al. (2011)	Impacts of E-SATISFACTION, E-TRUST and e-service quality on E-LOYALTY, in e-banking as an aspect of B2C e-commerce context	Empirical, quantitative research	*"Service quality, e-satisfaction, and e-trust have strong direct effect on e-loyalty, impacts of indirect effects (with e-satisfaction and e-trust playing mediating roles) are more significant."*

Sadeh et al. (2011)	Evaluate causal linkages among e-service quality, E-CUSTOMER SATISFACTION, TRUST, customer perceived value and E-LOYALTY and present a structural model	Empirical and statistical	*"E-loyalty is the most significant variable in online retailing which receives the most influences from other variables."*
Eid (2011)	Determinants of e-commerce customer SATISFACTION, TRUST, and LOYALTY in Saudi Arabia	Empirical, quantitative research	*"B2C e-commerce customer loyalty in Saudi Arabia is strongly influenced by customer satisfaction but weakly influenced by customer trust."*
Hur et al. (2011)	Examine theoretical relationships between key variables of online sport consumption behavior such as sport consumers' perceptions of sport website quality, satisfaction, and behavioral loyalty to the websites	Empirical, quantitative research	*"Loyalty to a sport team's website was more likely to occur as sport fans developed positive perceptions and satisfaction with the website… …consumer e-satisfaction is an important mediating variable between sport website quality and e-loyalty."*
Parawansa (2012)	Mediating effect of TRUST, SATISFACTION, and COMMITMENT on the relationship between service quality and CUSTOMER LOYALTY in Islamic banking of Indonesia	Empirical, quantitative research	*"Trust and commitment as key variables in relationship marketing and as mediating variables between service quality and customers loyalty."*
Chen (2012)	Examine the relation between CUSTOMER SATISFACTION and loyalty through the introduction of COMMITMENT, TRUST, involvement and perceived value as mediators in the e-service context	Empirical, quantitative research	*"The findings suggest that customer satisfaction is an essential ingredient for service loyalty, but that mediators exist between satisfaction and loyalty. Commitment, trust and involvement are each proven to be partial mediators between satisfaction and loyalty, while perceived value is proven to be a complete mediator."*
Valvi and Fragkos (2012)	Attempt to critically synthesize results from multiple empirical studies on E-LOYALTY.	Conceptual, quantitative research	*"E-loyalty dividing antecedents into prepurchase, during-purchase and after-purchase factors, based on the act of purchase."*
Hsu et al. (2013)	Explain how web site characteristics influence customer E-LOYALTY and positive word-of-mouth (WOM) via relationship quality (trust, SATISFACTION, and COMMITMENT) in business-to-business e-commerce	Empirical, quantitative research	*"Web site characteristics positively influence relationship quality."*

Ludin and Cheng (2014)	Examine the factors influencing CUSTOMER SATISFACTION, and how customer satisfaction subsequently affects E-LOYALTY towards online shopping among young adults	Empirical, quantitative research	*"E-service quality and information quality have effects on customers satisfaction...and it positively impact e-loyalty."*
Amin (2016)	Internet banking service quality and its implication on E-CUSTOMER SATISFACTION and E-CUSTOMER LOYALTY	Empirical, quantitative research	*"The efficiency of banking website is the important aspect of internet banking service quality. The finding found that the relationship between internet banking service quality, e-customer satisfaction and e-customer loyalty are significant."*
Al-Adwan and Al-Horani (2019)	Boosting Customer E-Loyalty: An Extended Scale of Online Service Quality	Empirical, quantitative research	*"This scale has been under criticism as it was developed before the emergence of Web 2.0 technologies. Consequently, this paper aims to fill this gap by offering empirically-tested and conceptually-derived measurement model specifications for an extended online etail quality (eTailQ) scale. In addition, it investigates the potential effects of the extended scale on e-trust and e-satisfaction, and subsequently e-loyalty. The practical and theoretical implications are highlighted to help businesses to design effective business strategies based on quality in order to achieve enhanced customer loyalty, and to direct future research in the field of e-commerce."*
Wong et al. (2019)	The effect of technology trust on customer e-loyalty in online shopping and the mediating effect of trustworthiness	Empirical, quantitative research	*"This study, therefore, endeavoured to: (1) investigate the relationship between technology trust (security and privacy), trustworthiness, and customer e-loyalty in the context of Malaysia, as a leading developing country, and (2) determine the mediating effect of trustworthiness on the relationship between technology trust and e-loyalty. Findings revealed that security, privacy, and trustworthiness are positively related to customers' e-loyalty. This study also highlighted the critical role of trustworthiness as mediator of the relationships."*
Rodríguez et al. (2020)	A PLS-SEM approach to understanding E-SQ, E-Satisfaction and E-Loyalty for fashion E-Retailers in Spain	Empirical, quantitative research	*"...this study investigates a nine-dimension, latent variable model to understand the relationship between electronic service quality (e-SQ) and e-satisfaction, as well as that between e-satisfaction and e-loyalty within Spanish fashion brand e-retailers. Results suggest that for fashion e-retailers in Spain, e-service quality is positively related to e-satisfaction and e-satisfaction is positively related to e-loyalty."*

Source: our elaboration.

Tab. 2: Customer e-Loyalty measurement scale

(The questionnaire due to space limitations, will be sent only on request)