# Extrinsic Benefits and Perceived Quality as Determinants of Perceived Satisfaction: An Application to a B2C Repurchase Model

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**Abstract.** This study presents a B2C electronic commerce repurchase model, introducing current purchasing habits and satisfaction as determinants, explained in terms of the extrinsic benefits and perceived quality. To carry out the study, a survey was carried out among 1307 Spanish users from a household panel; the results from the survey have confirmed the proposed predictive model, which gives an explanation of 61.4 percent of the repurchase intention. Data was analysed by the partial least squares (PLS) method for validation and predictive ability assessment. The results confirm all hypotheses, including a significant influence of extrinsic benefits and perceived quality on satisfaction. The most significant conclusion was that B2C electronic commerce managers need to achieve high levels of satisfaction from Internet purchasers by enhancing perceived quality and perceived benefits obtained. On the discussion of results, the authors offer some hints in order to achieve this goal.

## 1    Introduction

Despite the growth experienced in the recent years, the expenditure of individuals on the Internet channel only represents a small percentage of total sales –a bit over 1% of global purchases in Spain. However, companies have begun to realise that in the digital economy competitors are "just a click away". Attracting consumers to make their first purchase is only the first step in the creation and establishment of a competitive and sustainable advantage in the long term, with loyal and profitable customers. In order to characterise the behaviour of these loyal and profitable customers, models of repurchase intention for electronic commerce between businesses and consumers (EC-B2C) have traditionally been used. This article presents a study based on purchasing habits and customer satisfaction as fundamental factors in the process of repurchase. Perceived extrinsic benefits and perceived service and website quality have been used as satisfaction predictors. For this purpose, existing scientific literature on the phenomenon of satisfaction-based repurchase intention based was thoroughly reviewed.

## 2    Literature Review

An important research line in EC-B2C repurchase theory started with models based on the Expectation Confirmation Theory (ECT) [3-4][26-27], which addresses repurchase intention –understood as the intention to continue using EC-B2C systems– based on user satisfaction. Satisfaction occurs when perceived benefits from using a product or service are deemed higher than the expectations held prior to its use. Thus, according to this theory, satisfaction is the result of an ex-post evaluation by consumers of their own service experience, which may be neutral, positive or negative [4], although other authors maintain that satisfaction is itself an emotional response associated with the purchasing experience [14]. On the other hand, some authors [13][17] argue that perceived value is only constituted by benefits –not benefits and sacrifices. In this study, we measure satisfaction in B2C-EC through quality and obtained benefits, as it has been made previously in other fields before (e.g. in the field of scenic arts) [14].

### 2.1    Extrinsic Benefits

Benefits can be classified as extrinsic and intrinsic [15]. Although there are a number of different motivations for purchasing, these two generic classes are usually considered; the first group, known as extrinsic, is instrumental, functional or utilitarian, whilst the second, called intrinsic, is hedonic, emotional or affective. Both dimensions underlie in the majority of consumer phenomena [2].

With intrinsic motivation, the person carries out the consumer activity as a goal in itself [15] and, therefore, a task is performed because it results in certain benefits (pleasure, aesthetics, new experiences, etc.). By contrast, when people are motivated in an extrinsic manner, they perform an action as a means to achieve other goals. Hence, for example, obtaining a discount voucher, or the time saved by using online purchasing does not generate immediate consumption benefits, but can be used to obtain benefits from future actions.

Of these two types of benefits, this study is only concerned about extrinsic benefits since the influence of intrinsic benefits has not yet been considered substantial [32] or has a degree of influence that is "between low and moderate" [10].

Thus, our research focuses on studying the importance of extrinsic benefits and quality –which will be explained below–, as factors that have a direct influence on satisfaction –and, indirectly, on repurchase intention. The literature review on these aspects enable identification of various types of extrinsic benefits [1][7][32]:

- Discounts/promotions on price: reduction of expenditure, presents or free gifts.
- Time savings: reduction in the time spent on a task or increased efficiency in the task.
- Convenience.
- Ease of purchase.

Prospecting theory postulates that price reductions can have an influence on prospecting other product alternatives [19]. This way, if the promotions and discounts

through B2C electronic commerce are higher than those available in physical shops, this may provoke a desire to make a higher number of online purchases [23]. As a consequence of the above:

*H1. Perceived extrinsic benefits have a significant positive effect on satisfaction*

Bhattacherjee [4] proposed that satisfaction with a product or service is the main motivation for consumers to continue making purchases through EC-B2C. Therefore:

*H2. The relation between satisfaction with electronic commerce on the Internet and the intention to repeat the purchase in EC-B2C is significantly positive.*

## 2.2    Customer Loyalty

Customer loyalty is crucial for the success of any business and it is a fundamental pillar for success and growth of "customer–centric" companies, as it drives both revenue and profit growth [28-29]. If there is no customer ready to purchase again in a certain online shop, its business value will be zero, irrespective of the company's commercial and management skills [21]. Customer loyalty is vital because a shop's value is determined mainly by the number of loyal customers [21]. Customer loyalty is defined as "a deeply held commitment to repeat the purchase of a product or service consistently in the future, despite possible changes in circumstances or the marketing of other companies endeavouring to influence a change in behaviour" [28]. Empirical studies [33] confirm the relationship between customer satisfaction and loyalty, as well as the fact that these concepts mutually reinforce each other. This leads to the following hypothesis:

*H3. The relation between satisfaction with electronic commerce on the Internet and customer loyalty is significantly positive.*

## 2.3    Perceived Quality

Perceived quality can be defined as an assessment of a product's excellence or its superiority over other products or services on the market [34]. It is a different concept from objective quality, since it goes beyond the evaluation of the product attributes [30]. Various authors have demonstrated the relation between quality and satisfaction, including a description of existing works related to quality, value and satisfaction [9]. Furthermore, it has been demonstrated that an electronic commerce shop's web page design, purchasing experience and security are very important factors which affect the quality perceived by Internet purchasers [6][20]. According to this, the following hypotheses can be established:

*H4. The quality perceived by the customer has a positive effect on perceived satisfaction.*

*H5. Positive perception of the electronic commerce website has a positive effect on perceived quality.*

## 2.4    Purchasing Habits

A purchasing habit can be defined as the "automatic behavioral tendency shown historically by an individual" [22]. Therefore, it is a present behavioral preference that

is often performed unconsciously, and which affects behaviour beyond social attitudes and norms and generally extends current behaviour into the future [5][31]. This automatic tendency drives the individual towards a preservation of their habits; and thus, an individual who is used to purchasing over the Internet will maintain this behaviour in the future. Therefore:

*H6. The relation between the current purchasing habits and EC-B2C repurchase intention is significantly positive.*

# 3    Research Model

Taking into account the proposed hypotheses, the following model is proposed:
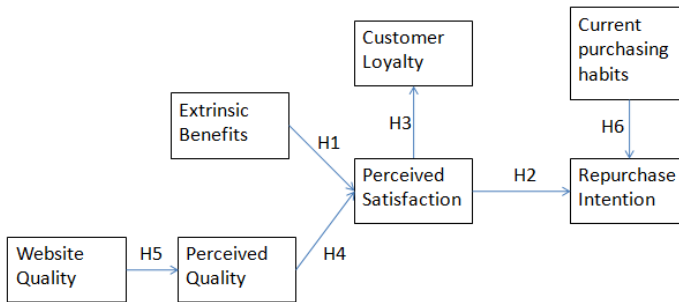


**Fig. 1.** Proposed repurchase model

## 3.1    Data Collection and Survey

The proposed model in figure 1 was validated through a telephone survey to a sample of Spanish population, obtaining 1,307 valid responses from Internet purchasers. The sample used comes from a survey panel, which will enable longitudinal studies to be carried out in the future.

The items for the survey, measured with a Likert-7 scale, have been validated in previous studies. Specifically, the repurchase intention and satisfaction measures were adapted from [4]. Measurement of extrinsic benefits was adapted from [1] and perceived quality and website quality were taken from [20][35], and [6][20], respectively. Items measuring customer loyalty were adapted from [11][16][18]. Finally, measurement of current purchasing habits was adapted from [22].

## 3.2    Statistical Analysis

Data was analysed by the partial least squares method using PLS Graph software, version 3.00 build 1130, for its validation and predictive ability assessment [8]. Firstly, the validity of the measurement instrument was verified and subsequently, the structural model was validated. In order to check for discriminant validity, following the recommendations of [12], SPSS 16.0 was additionally used as a tool for calculating the bivariate correlations.

Individual item reliability offered values close to -or higher than -the recommended 0.80. However, the value of one indicator for purchasing habits was near the threshold, with a value of 0.6984. The relatively low value of this indicator ("I buy on the Internet every week") can be explained because the average number of purchases by product type oscillated between 2.07 and 8.73 per year [24], which implies that purchases are not made with a weekly frequency in general.

Convergent validity was studied by compound reliability and average variance extracted, with values of 0.878 and 0.709, respectively. Discriminant validity was tested and confirmed by comparing the average variance extracted (AVE) of each construct and the bivariate correlation with each other construct.

The evaluation of the structural model was analyzed through three different indicators: path coefficients ($\beta$), explained variance ($R^2$) and t-statisticals. The values of $R^2$ indicate a good explanation of the model based on the proposed constructs, given that the relations enable an explanation of at least 47.9 percent of the variance in all cases. For the dependent variable, the variance explained for repurchase intention is 61.47 percent. A blindfolding procedure [8] was also applied to measure the predictive relevance of the model constructs (parameter $Q^2$ from a Stone-Geisser test) obtaining results that assure the predictive validity of the model ($Q^2 > 0$ in all cases). Path coefficients easily exceed the limit value of 0.2 in all cases. The values of the t-statistics also exceeded the recommended minimums. Statistical significance ($p<0.001$) was obtained for the weights and loading of the model items by bootstrap resampling. The results for the structural model are represented graphically in Fig. 2.
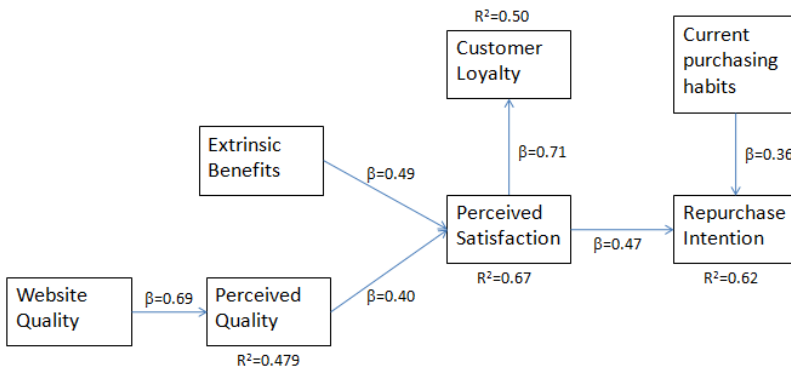


**Fig. 2.** Research results for the structural model

## 4     Conclusions and Discussion of Results

The results confirm the predictive ability of the proposed repurchase model and support all the hypotheses. It has predictive capacity for all the proposed relations (the explained variance was 61.47 percent) in EC-B2C, considering the purchasing habits and perceived satisfaction of an Internet purchaser as explanatory factors. The model

also explains 66.75 percent of the Internet purchaser's satisfaction through extrinsic benefits obtained and perceived quality.

Perceived satisfaction stands out then as a more important factor than purchasing habits in the explanation of the repurchase process. The low average number of purchases made in Spain may explain these findings, and it implies that EC-B2C has still not been generalised as a habit among Spanish Internet purchasers.

In creating satisfaction, extrinsic benefits obtained have a greater weight for the Internet purchaser than perceived quality. Also, satisfaction has a significant influence on customer loyalty, explaining more than 50 percent of loyalty.

Additionally, electronic commerce website quality has a significantly positive effect on perceived quality. Therefore, providing users with purchasing experiences with a design that produces satisfaction, simple navigation and tools providing utility and security are revealed as important elements for increasing perceived quality.

## 4.1    Contribution to Existing Research

Even though perceived satisfaction has been a recurrent research field in consumer behavior theory, this is one of the first models for EC-B2C repurchase based on purchasing habits and perceived satisfaction, involving the concept of benefits obtained –referred to in previous studies as value [13][17]– and perceived quality. The results suggest that the modeling of perceived satisfaction from these constructs offers a better explanation than that which can be found in previous literature.

## 4.2    Implications for Decision Taking

The authors' first indication for decision takers in B2C electronic commerce is that, in the current state of B2C electronic commerce in Spain, they should seek customer satisfaction, offering proposals that focus on increasing perceived quality and benefits obtained.

In order to increase perceived quality, it is necessary to provide transaction security and a design that provides simple and useful navigation and purchasing experience. However, it is still more important that the customer perceives the electronic commerce site as "living up to what it offers", fundamentally in terms of delivery dates and obtaining the requested product in the condition expected by the customer. In order to achieve this, a first measure would be the use of quality seals, since their presence in considered positive and it is taken into account by two out of three purchasers [25].

With respect to promise fulfillment by the e-commerce website, one of the main problems stated by purchasers was that "they did not receive the product they requested". The authors think that more and better information for the consumer is a critical step to help improving the perception that an EC-B2C site delivers what it promises.

The element that most influences perceived satisfaction are the benefits obtained, which consist mainly of providing functionality and utility to the consumer (fundamentally saving time and money in online purchasing, ease in the purchasing

process and delivery and convenience with respect to traditional purchasing). Time-saving in online purchasing compared to the physical purchasing process seems evident. Therefore, managers should constantly monitor their prices compared to traditional "off-line" sites and, taking advantage of their lower disintermediation costs, always offer a better price to the Internet purchaser than the off-line purchase option. These prices should be adapted in real time, informing at the time of payment of any possible price discounts in the product since the time it was selected. The use of tools that make it possible to record consumer preferences is also recommended, offering the best options in the final delivery process (in terms of delivery time and location).

These measures should lead to an increase in benefits perceived by the customers, and in turn reflect a natural increase in online purchasing habits, which as previously mentioned in this study is "an automatic behavioral tendency that is unconscious" and which is therefore difficult to stimulate directly.

# References

[1]  Atchariyachanvanich, K., Okada, H., Sonehara, N.: Exploring Factors Effecting the Continuance of Purchasing Behavior in Internet Shopping: Extrinsic Benefits and Intrinsic Benefits. IPSJ Digital Courier 4, 91–102 (2008)

[2]  Babin, B.J., Darben, W.R., Griffin, M.: Work and/or fun: Measuring hedonic and utilitarian shopping value. Journal of Consumer Research 20(1), 644–656 (1994)

[3]  Bhattacherjee, A.: An Empirical Analysis of the Antecedents of Electronic Commerce Service Continuance. Decision Support Systems 32, 201–214 (2001)

[4]  Bhattacherjee, A.: Understanding information systems continuance: An expectation-confirmation model. MIS Quarterly 25, 351–370 (2001)

[5]  Campbell, J.Y., Cochrane, J.H.: By force of habit: A consumption-based explanation of aggregate stock market behaviour. Journal of Political Economy 107(2), 205–251 (1999)

[6]  Chen, L., Gilleson, M.L., Sherrel, D.L.: Consumer Acceptance of Virtual Stores: A theoretical model and critical success factors for virtual stores. ACM SIGMIS Database 35(2), 8–31 (2004)

[7]  Childers, T.L., Carr, C.L., Peck, J., Carson, S.: Hedonic and utilitarian motivations for online retail shopping behaviour. Journal of Retailing 77(4), 511–535 (2001)

[8]  Chin, W.W.: The Partial Least Squares Approach to Structural Equation Modeling. In: Marcoulides, G.A. (ed.) Modern Methods for Business Research. Lawrence Erlbaum Associates, Mahwah (1998)

[9]  Cronin Jr., J.J., Brady, M.K., Hult, G.T.: Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environment. Journal of Retailing 76(2), 193–218 (2000)

[10]  Éthier, J., Hadaya, P., Talbot, J., Cadieux, J.: B2C Web site quality and emotions during online shopping episodes: an empirical study. Information and Management 43(5) (July 2006)

[11]  Gefen, D.: Customer loyalty in E-commerce. Journal of the Association for Information Systems 3, 27–51 (2002)

[12]  Gefen, D., Straub, D.W.: A Practical Guide to Factorial Validity Using PLS-Graph: Tutorial and Annotated Example. Communications of the Association for Information Systems 16, 91–109 (2005)

[13]  Hamel, G., Prahalad, C.K.: Computing for the Future. Harvard Business School Press, Boston (1994)
[14]  Herrero Crespo, Á., García de los Salmones Sánchez, M.M., Rodríguez del Bosque, I.: Calidad y valor percibido como condicionantes de la satisfacción: una aplicación en el sector de las Artes Escénicas. Revista de Economía y Empresa XXIII(54/55) (2005)
[15]  Holbrook, M.B.: Consumer Value: A Framework for Analysis and Research. Routledge, New York (1999)
[16]  Homburg, C., Giering, A.: Personal characteristics as moderators of the relationship between customer satisfaction and loyalty. Psychology and Marketing 18(1), 43–66 (2001)
[17]  Hunt, S.D., Morgon, R.M.: The competitive advantage theory of competition. Journal of Marketing 59, 1–15 (1995)
[18]  Jones, T.O., Sasser, W.E.: Why satisfied customers defect. Harvard Business Review 73(6), 88–99 (1995)
[19]  Kahneman, D., Tversky, A.: Prospect theory: An analysis of decision under risk. Econometrica 47(2), 263–291 (1979)
[20]  Lee, G., Lin, H.: Customer perceptions of e-service quality in online shopping. International Journal of Retail & Distribution Management 33(2), 161–176 (2005)
[21]  Lee, J., Jinwoo, K., Yun Moon, J.: What makes Internet users visit cyber stores again? key design factors for customer loyalty. In: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, The Hague, The Netherlands, April 01-06, pp. 305–312 (2000)
[22]  Liao, C., Palvia, P., Lin, H.-N.: The roles of habit and web site quality in e-commerce. International Journal of Information Management 26(6), 469–483 (2006)
[23]  Nowak, G.J., Phelps, J.: Direct marketing and the use of individual-level consumer information: Determining how and when 'privacy' matters. J. Direct Market. 11(40), 94–108 (1997)
[24]  Observatorio Red.es: "Comercio Electrónico B2C 2008". Observatorio de las Telecomunicaciones y Sociedad de la Información de Red.es (Ministerio de Industria, Turismo y Comercio) (2008), http://observatorio.red.es/hogares-ciudadanos/articles/id/3051/estudio-b2c-2008.html (Date of retrieval: February 20, 2009)
[25]  Observatorio Red.es: "Comercio Electrónico B2C 2009". Observatorio de las Telecomunicaciones y Sociedad de la Información de Red.es (Ministerio de Industria, Turismo y Comercio) (2009), http://www.ontsi.red.es/hogares-ciudadanos/articles/id/3945/estudio-b2c-2009.html (Date of retrieval: October 24, 2009)
[26]  Oliver, R.L.: Effect of Expectation and Disconfirmation on Postexposure Product Evaluations - an Alternative Interpretation. Journal of Applied Psychology 62(4), 480 (1977)
[27]  Oliver, R.L.: A cognitive model for the antecedents and consequences of satisfaction. Journal of Marketing Research 17(4), 460–469 (1980)
[28]  Oliver, R.L.: Satisfaction: a behavioral perspective on the consumer. Mc Graw Hill, New York (1996)
[29]  Oliver, R.L.: Whence consumer loyalty? Journal of Marketing 63(5), 33–44 (1999)
[30]  Olson, J.C., Reynolds, T.J.: Understanding consumers' cognitive structures: implications for advertising strategy. In: Percy, L., Woodside, A. (eds.) Advertising and Consumer Psychology. Lexington Books, Lexington (1983)

[31] Ouellette, J.A., Wood, W.: Habit and intention in everyday life: The multiple processes by which past behavior predicts future behaviour. Psychological Bulletin 124(1), 54–74 (1998)

[32] Shang, R.-A., Chen, Y.-C., Shen, L.: Extrinsic versus intrinsic motivations for consumers to shop on-line. Information and Management 42(3), 401–413 (2005)

[33] Shankar, V., Smith, A.K., Rangaswamy, A.: Customer satisfaction and loyalty in online and offline environments. International Journal of Research in Marketing 20(2), 153–175 (2003)

[34] Zeithaml, V.A.: Consumer perceptions of price, quality and value: a means-end model and synthesis of evidence. Journal of Marketing 52, 2–22 (1988)

[35] Wolfinbarger, M., Gilly, M.: e-TailQ: "Dimensionalizing, measuring and predicting retail quality". Journal of Retailing 27, 183–198 (2003)