

# Measuring the Brand Equity of Online Brands: *A Validation of the ORS Brand Equity Scale*

Dr. Subhadip Roy\*  
Dr. Varsha Jain\*\*

## Abstract

The need for a scale to measure the brand equity of online retail services (ORS) was addressed by [7] when they developed a reliable and valid scale to measure ORS brand equity. However, in one of the limitations of their study, they had mentioned about the sample respondents being a part of an online reward scheme, which led to "higher involvement with online shopping than the average online consumer." The present study tries to validate the scale developed by [7] and tries to contribute to marketing literature in two ways. It has used general online consumer to test the dimensions of the ORS scale. Since the sample was collected from a developing nation where online shopping was less frequent, it also tried to identify the presence of differences that occurred in consumer perceptions.

**Keywords:** Online Shopping, ORS Scale, India, Measurement.

## 1. Introduction

The concept of brand equity emerged in academic literature in the early 1990s and tried to bridge the gap between short and long-term marketing success by defining a non-financial, intangible asset which was more market-based and could act as a storehouse of future profits [1]. A decade afterwards, brand equity became an integral part of marketing performance measurement [2] [1] [3]. According to [4], brand equity is an important source of competitive advantage, more so in services marketing where the main product is intangible and consumers have a high level of perceived risk. In this regard, the investigation of internet brands also becomes important. The importance of trust factor towards the equity of online brands was further supported by a large-scale study involving 12000 internet consumers spread across eight European countries [5]. A study by [6] corroborated brand equity building as a key determinant of competitive success for internet firms. According to Interbrand Best Global Brands 2007 report, pure internet firms such as Google (rank 20), E-Bay (rank 48) and Yahoo (rank 55) have shown that they can also generate considerable amount of equity.

Given the increasingly important role of branding in e-marketing, [7] developed a instrument to measure the equity of

\*Asst. Professor, ICFAI Institute for Management Teachers, ICFAI Business School, Hyderabad, India

\*\*Research Fellow, Head Division of Integrated Marketing communication, Mudra Institute of Communications Research, Shela, Ahmedabad, India

online retail/service (ORS) brands, which was assessed using the standard procedures to check the psychometric properties of a good scale.

Given the increasing rise of internet usage in India coupled with the rising levels of middle class income, the relevance of such a study in the Indian context becomes important. Thus, the present study begins with a review of the literature on brand equity. It then describes 12-item online brand equity scale developed by [7]. It moves on to describe the design of the study, the data collection procedure and the methodology used. The next section discusses the findings. The last section highlights on the inferences that could be drawn from the study.

## 2. Literature Review

Brand equity has been the subject of increasing interest and scholarly investigation since the early 1990's. Researchers have found out positive effect of brand equity, on various aspects of marketing such as consumer preference and purchase intentions [8]; consumer evaluations of brand extensions [9] [10]; market share [11]; price inelasticity [12]; consumer perceptions of quality [13]; shareholder value [14]; etc. Although researchers have agreed on the advantages of building strong brand equity, there has been very little agreement how to conceptualize it, giving rise to a host of diverse methodologies for its measurement. [1] (p.41) noted that "brand equity is such a big concept that people have difficulty describing it" and went on to suggest that the multiplicity of voices in brand equity research results from researchers looking at different aspects of the same concept. Similarly, [15] proposed for looking at brand equity as a continuum where at one end is the psychological value of a brand; while at the other end is the financial value of the brand, i.e. the amount the brand is worth to the owner. [16] (p.12.) defined brand equity as "a set of assets and liabilities linked to a brand, its name and symbol, that adds to or subtracts from the value provided by its product or service to a firm and/or to that firm's customers" and the definition also supports the psychological-financial distinction. This implies that brand equity could be analyzed on two levels, depending on the final recipient of the value a brand produces (consumer or firm). Marketing research has concentrated more on the consumer-based brand equity (CBBE) rather than the firm-based brand equity. The consumer-based approach offered insights into consumer behaviour and in turn could be converted into actionable brand strategies [17]. Thus the major contributions in brand equity research were in the areas of consumer-based brand equity's conceptualization [12] [17], measurement [18] [19] [20] [21] [22], and validation of instruments to measure CBBE [23] [24] [11].

The stream of brand equity research dealing with information economics takes into account the fundamental nature of information which is imperfect and asymmetrical in most markets. According to the economists' view, the marketers act as economic agents who transmit information by means of signals and thus brand names may act as one of the signals to the consumers [12]. Thus the brand in this case is a signal which is composed of all the past and present marketing activities related to the brand. This implies that imperfect and asymmetrical information would create a feeling of uncertainty in consumers' minds about available brands. In such a case [12] suggested that a

credible brand signal would generate customer value by: (i) reducing perceived risk; (ii) reducing information search costs, and (iii) creating favourable attribute perceptions towards the brand. Going by this view, consumer-based brand equity could be defined as the "value of a brand signal to consumers" [12] (p.140).

Significant research has not been directed towards understanding and measuring brand equity in an e-business context. A conceptual study by [25] drew on [17]'s framework of consumer-based brand equity and identified four categories of factors or indicators, which drive "web equity". The four categories identified by them were marketer and non-marketer communications, site design, vendor characteristics and product/service characteristics. In a similar study, [26] also used [17]'s framework to propose strategies for building brand equity online. However, both the studies were literature-based and the conceptual models suggested were not empirically examined. To address the lack of empirical studies in measuring CBBE of online brands, [7] did a survey based study to develop a scale to measure the brand equity of online retail services (ORS). They used an initial pool of 59 items which were subjected to a series of test including assessment of reliability and validity to come up with a 12-item online brand equity scale. The 12 item scale boiled down to the following five dimensions; emotional connection, online experience, responsive service nature, trust, and fulfillment.

The current study has used the same 12 item scale proposed by [7]. The rationale for such a study is threefold. In one of the limitations, [7] had mentioned about the study being conducted for more general audience rather than members of a particular online shopping website. Thus the study was conducted for general online shoppers. The second issue originates from the increasing number of online shopping websites and online shoppers in India at present. The third logic is to test the validity of the scale in a different cultural set up.

## 3. Design of the Study and Sample

The study design used was a survey using a structured questionnaire. The same 12 item scale described by [7] was used in the study (Table 1). There were additional questions on frequency of online shopping, websites used and nature of products purchased. The sample consisted of working executives of three Multi National Corporations situated in North, West and Central India. The questionnaires were sent via mail to 500 respondents from which a total number of 389 usable questionnaires were obtained.

**Table 1 : The 12 Item Scale Used in The Study**

Serial No.	Item
1	I feel related to the type of people who are [X]'s customers
2	I feel like [X] actually cares about me
3	I feel as though [X] really understands me
4	[X]'s website provides easy-to-follow search paths
5	I never feel lost when navigating through [X]'s website
6	I was able to obtain the information I wanted without any delay
7	[X] is willing and ready to respond to customer needs
8	[X]'s website gives visitors the opportunity to 'talk back' to [X]
9	I trust [X] to keep my personal information safe
10	I feel safe in my transactions with
11	I got what I ordered from [X]'s web site
12	The product was delivered by the time promised by [X]

**4. Methodology and Results**

Majority of the respondents were found out to be frequent online shoppers (63.6% of the respondents said that they shop at least online once a week). Among the websites used for online shopping, Indiatimes Shopping was the most preferred (263 respondents ranked it as the most preferred website to shop) followed by Rediff Shopping (92). In case of the products purchased, it was found out that majority of the purchases took place in Books and CDs (78.3), followed by Fashion Accessories and Health and Fitness Products.

The data on the ORS scale was collected using a five point bipolar Likert Scale ranging from Strongly Agree to Strongly Disagree. The collected data was factor analyzed using the Factor Analysis module in SPSS 13. The extraction method used was Principal Component Analysis along with Varimax Rotation.

The findings were mixed. Unlike the five dimension solution obtained by [7], the authors found a Four factor solution. The KMO value was 0.764 and Bartlett's test was significant. Reasonable levels of communality were obtained for each variable and the four factor solution explained 62.06 % of the variance. All the four factors displayed reasonable levels of reliability (measured using coefficient alpha). (Table 2)

**Table 2 : Factor Analysis Result**

Sl. No.	Item	Factor Loadings			
		Factor 1	Factor 2	Factor 3	Factor 4
1	Relation	.868			
2	Care	.789			
3	Understand		.622		
4	Search		.792		
5	Lost			.697	
6	Information			.630	
7	Respond			.792	
8	Safe			.674	
9	Talkback				.568
10	Trust				.721
11	Order				.679
12	Time				.660
<b>Coefficient Alpha<sup>2</sup></b>		.568	.626	.743	.780

**5. Discussion**

As noted earlier, the factor solution obtained was different from that of [7]. The factors and the items in each of them have been given in Table 3.

**Table 3 : Factor Solution**

Sl. No.	Item	Variable Name Used by Christodoulides et al. (2006)	Variable Name Used in the Present Study	Suggested Factor Name
1	I feel related to the type of people who are [X]'s customers	Affiliation	Relation	Emotional Connection
2	I feel like [X] actually cares about me	Care	Care	
3	I feel as though [X] really understands me	Empathy	Understand	Guidance
4	[X]'s website provides easy-to-follow search paths	Ease of Use	Search	
5	I never feel lost when navigating through [X]'s website	Navigation	Lost	Online Experience
6	I was able to obtain the information I wanted without any delay	Speed	Information	
7	[X] is willing and ready to respond to customer needs	Responsiveness	Respond	
8	I feel safe in my transactions with [X]	Privacy	Safe	

9	[X]'s website gives visitors the opportunity to 'talk back' to [X]	Interaction	Talkback	Reliability
10	I trust [X] to keep my personal information safe	Security	Trust	
11	I got what I ordered from [X]'s web site	Accuracy	Order	
12	The product was delivered by the time promised by [X]	Delivery	Time	

The first factor was named Emotional Connection and it contained two out of the three items mentioned in the ORS scale by [7]. The item empathy was clubbed with ease of use to form the factor Guidance. This is because in India consumers still prefer human touch [27]. Thus not only would the consumer expect the seller to be empathetic but also to help him/her look for what he/she needs. The third factor consisted of items Navigation, Speed, Responsiveness and Privacy. This factor had items from Online Experience as well as Responsive Service Nature from the ORS Scale by [7]. This factor was named Online Experience. One of the reasons why Responsiveness was a part of this factor was the nature of Indian online shopping scenario. Because of the nascent stage of online shopping in India, the consumers are not ready to accept anything offered by an online marketer but would like to have a say in their terms. Thus the marketers have to come up with options such as Cash on Delivery (COD). In this case the consumer is safe since he/she only has to pay when he/she receives the final product. Similarly, the issue of safety enhances online experience. Most of the online shops have certificates from different authorities certifying that their online store is safe to shop in. This would enhance the consumer experience. The fourth factor was a combination of Trust and Fulfilment from the ORS Scale by [7]. The reason behind this is again the online market being not developed. Since the market is still in a growing stage and still far from being called a mature market, the trust generated in the consumers is through the timeliness and the ordered product-received product match. This is coupled with the facility to provide the consumers an opportunity to interact with the seller to share his/her experiences and thoughts. Thus they combine to form Reliability.

## 6. Conclusion

This study has a few limitations which could be addressed as future research directions. First of all, the [7] study as well as this one did not link the scale dimensions with any antecedents or consequences. Relationships with global satisfaction measures or repeat purchase behaviour should be looked into, as the ultimate goal of brand equity is to make the sale. As it was found out the study that majority of the respondents were frequent shoppers. A sample consisting of less frequent shoppers may give a different insight. Overall the study brought in some new findings and further strengthened some old ones. First and foremost, the [7] scale was found out to be partially valid even in a market where online shopping is in a growth phase. The importance of brand equity measures was relevant even in this case since none of the items were excluded from the analysis.

Lastly, the study found out that there were differences in perception about the same brand equity identifiers across different markets since the factor structures were different from those of the ORS Scale developed by [7].

## 7. References

1. Ambler, T. (2003), *Marketing and the Bottom Line: Creating the Measures of Success*, 2nd Edition. London, Financial Times/Prentice Hall.
2. Ambler, T., Kokkinaki, F. and Puntoni, S. (2004) 'Assessing Marketing Performance: Reasons for Metrics Selection', *Journal of Marketing Management*, 20(3/4), pp.475-498
3. Clark, B.H. (1999) 'Marketing Performance Measures: History and Interrelationships', *Journal of Marketing Management* 15(8), pp.711-732.
4. Bharadwaj, S.G., Varadarajan, P.R. and Fahy, J. (1993) 'Sustainable Competitive Advantage in Service Industries: A Conceptual Model and Research Propositions', *Journal of Marketing*, 57(4), pp.83-99.
5. Steenkamp, J.B. and Geyskens, I. (2001) *Building Consumer Value through the Internet*, Brussels, AIM.
6. Kotha, S., Rajgopal, S. and Rindova, V. (2001) 'Reputation Building and Performance: An Empirical Analysis of the Top 50 Pure Internet Firms', *European Management Journal*, 19(6):571-586.
7. Christodoulides, G., de Chernatony, L., Furrer, O., Shiu, E. and Abimbola, T. (2006) 'Conceptualising and Measuring the Equity of Online Brands', *Journal of Marketing Management*, 22(7/8), pp.799-825.
8. Cobb-Walgren, C.J., Ruble, C.A. and Donthu, N. (1995) 'Brand Equity, Brand Preference, and Purchase Intent', *Journal of Advertising* 24(3), pp.25-40.
9. Aaker, D.A. and Keller, K.L. (1990) 'Consumer Evaluations of Brand Extensions', *Journal of Marketing*, 54(1), pp.27-41.
10. Bottomley, P.A. and Doyle, J.R. (1996) 'The Formation of Attitudes Towards Brand Extensions: Testing and Generalising Aaker and Keller's Model', *International Journal of Research in Marketing*, 13(4), pp.365-377.
11. Agarwal, M.K. and Rao, V.R. (1996) 'An Empirical Comparison of Consumer-Based Measures of Brand Equity', *Marketing Letters*, 7(3), pp.237-247.
12. Erdem, T., Swait, J. and Louviere, J. (2002) 'The Impact of Brand Credibility on Consumer Price Sensitivity', *International Journal of Research in Marketing*, 19(1), pp.1-19.
13. Dodds, W.B., Monroe, K.B. and Grewal, D. (1991) 'Effects of Price, Brand, and Store Information on Buyers' Product Evaluations', *Journal of Marketing Research*, 28(August), pp.307-319.
14. Kerin, R.A. and Sethuraman, R. (1998) 'Exploring the Brand Value-Shareholder Value Nexus for Consumer Goods Companies', *Journal of the Academy of Marketing Science*, 26(4), pp.260-273.
15. Schultz, D.E. (2003) 'Brand Equity: Both Ends of the Spectrum', *Interactive Marketing*, 5(1), pp.5-6.
16. Aaker, D.A. (1991) *Managing Brand Equity*, Free Press, NY.
17. Keller, K.L. (1993) 'Conceptualizing, Measuring and Managing Customer-Based Brand Equity', *Journal of Marketing*, 57(1), pp.1-22.
18. Netemeyer, R.G., Krishnan, B., Pullig, C., Wang, G., Yagci, M., Dean, D., Ricks, J. and Wirth, F. (2004) 'Developing and Validating Measures of Facets of Customer-Based Brand Equity',

- Journal of Business Research*, 57(2), pp.209-224.
19. Allawadi, K.L., Lehmann, D.R. and Neslin, S.A. (2003) 'Revenue Premium as an Outcome Measure of Brand Equity', *Journal of Marketing*, 67(October), pp.1-17.
  20. Vázquez, R., Balén del Río, A. and Iglesias, V. (2002) 'Consumer-Based Brand Equity: Development and Validation of a Measurement Instrument', *Journal of Marketing Management*, 18(1/2), pp.27-48.
  21. Yoo, B. and Donthu, N. (2001) 'Developing and Validating a Multidimensional Consumer-Based Brand Equity Scale', *Journal of Business Research*, 52(1), pp.1-14.
  22. Park, C.S. and Srinivasan, V. (1994) 'A Survey-Based Method for Measuring and Understanding Brand Equity and its Extendibility', *Journal of Marketing Research*, 31(2), pp.271-288.
  23. Washburn, J.H. and Plank, R.E. (2002) 'Measuring Brand Equity: An Evaluation of a Consumer-Based Brand Equity Scale', *Journal of Marketing Theory and Practice*, 10(1), pp.46-61.
  24. Mackay, M.M. (2001) 'Evaluation of Brand Equity Measures: Further Empirical Results', *Journal of Product & Brand Management*, 10(1), pp.38-51.
  25. Page, C. and Lepkowska-White, E. (2002) 'Web equity: a framework for building consumer value in online companies', *Journal of Consumer Marketing*, 19(2/3), pp.231-248.
  26. Kim, J., Sharma, S. and Setzekorn, K. (2002) 'A Framework for Building Brand Equity Online for Pure-Play B2C Retailers and Services', *International Journal of Media Management* 4(2), pp.123-133.
  27. Adhikari, A. and Rao, A.K. (2006) 'Technology Inclination-based Segments of Indian Customers', *Journal of Creative Communications*, 1(3), pp.219-233.

