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2020

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### Recommended Citation

Vlachos, Lydia; Bendahan, Meka; and Rosenblatt, Meryl, "Measuring Brand Equity in the Digital Environment" (2020). *Faculty Works: Business*. 88.  
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# Measuring Brand Equity in the Digital Environment

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## **ABSTRACT**

The internet has had a major impact on the balance of information that for so long worked in favor of brand managers. Consumers are now empowered to interact with brands, and are often willing to “*co-create*” by sharing their experiences, product knowledge and ideas with brand communities and stakeholders. Although brand equity is an important source of competitive advantage, previous conceptualizations do not reflect the unique characteristics of the internet, and the new participatory approach to branding. Christodoulides, De Chernatony, Furrer, Shiu, & Abimbola, T. (2006) addressed this gap by developing a series of constructs and scale items that aligns with the interactions between consumers and online brands. The construct contains five correlated yet distinct dimensions: emotional connection, online experience, responsive service nature, trust, and fulfilment; consisting of 12-item scale with strong psychometric properties.

The purpose of the current research presented here, is to apply the ORS (online retail/service) brand equity scale using a set of predominantly online brands, and to identify any new dimensions and scale items that should be added to reflect recent changes in consumer attitudes and behaviors. In this way we continue to update and build knowledge for the effective evaluation of online brands.

**Keywords: Brand equity, digital brands, co-creation, consumer behavior**

## **1 INTRODUCTION**

In the physical world a brand can be defined as the sum in the consumer’s mind, of the personality, presence, and performance of a given product or service (Saari, Baumgartner & Mäkinen, 2017). These components are also essential for web-based brands except that, on the web, the company needs to have the ability to create, implement, manage and measure brand experience online. Brand builders need to be able to create extraordinary brand experience to achieve positive consumer response out of the exposure. To reach this desired experience brand builders should allow and invite consumers to influence the brand building process. An online based company needs to take this in consideration when attempting to create a long-lasting digital brand, since word-of-mouth is a major element in the digital world. (Fountainebleau, 2015).

The internet is a valuable communication medium that favors co-creation due to its function as an interactive platform. The new generations are often willing to co-create by sharing their experiences, product knowledge and ideas with the brands. Consumers have easy access to a large amount of information letting them make better decisions, but also to increasingly demand a more active influential role in the value and innovation process. This is making the companies step away from the traditional firm-centric view to a more customer-centric view in order to be competitive (Constantinides, Brünink & Lorenzo-Romero, 2015).

Brand equity has more than one definition, some argue that brand equity is constructed in the mind of consumers and other that brand equity is only correlated to the financial perspective. Succeeding with brand equity for online businesses can be defined as ultimately fulfilling consumers’ expectations, including website design, content, navigation design and functionality. Several studies have been conducted to measure brand equity, but the first attempt to do this within an online relationship paradigm online was in 2006, and labelled the ORS (online retail/service) scale developed by Christodoulides, De Chernatony, Furrer, Shiu & Abimbola (2006). The scale contains of five dimensions that could affect the individual perspective of an online brand and its equity. These five dimensions are Emotional connection, Online experience, Responsive service nature, Trust and Fulfillment. However, since then there have been no attempts to further validate or update these dimensions and scale items.

This is important as there are important dimensions not included in the ORS scale. One is eco- friendliness. Eco-friendliness is a growing aspect with several studies confirming that consumer brand satisfaction and brand loyalty can be associated with the level of eco-friendliness and green values represented by the brand. Therefore, companies can gain a higher level of brand equity by linking sustainability and environmental development activities to their company (Saari et.al, 2017).

Another important dimension is mobile- friendliness. According to a report from Hootsuite, 4.021 billion people worldwide were internet users in 2018 and out of these people 52% used internet via their smartphone devices which is an increasing number. (Hootsuite Research, n.d.). The continued expansion of smartphone usage needs to be taken in consideration by

online-based brands. Not meeting the demand of mobile-friendliness could pose serious risk to an important segment of brand users.

## 2 RESEARCH OBJECTIVES

This study aims to validate and extend the learning by testing the ORS brand equity measurement in a multi-country study, and to understand the consumers' attitudes towards digital brands. The main research objective is to research the ORS scale, to see if it is still relevant 13 years later by testing the perceived importance of the 12 scale items today, measuring levels of awareness, brand knowledge and usage/purchasing behaviors. Further, this research seeks to understand the importance of eco- and mobile-friendliness for the brand equity of online brands, and thereby possibly adding these two dimensions to the existing ORS scale. By doing so should help provide predominantly online-based brands further insight regarding building brand equity in the digital environment.

## 3 RESEARCH METHODOLOGY

The data was collected in April 2019 using online surveys distributed among US students in one location. The questionnaire was created using the Qualtrics online survey platform. Qualtrics allows users to create, edit and receive feedback through their platform. The survey was distributed via email, social media and by private users/messages. The survey was created using the ORS scale created by Christodoulides et. al (2006) as a basis for scale item development. The 12-item scale was used to measure consumer attitudes in two different ways. Below are the brand rating items presented in connection with the original ORS scale dimensions. The items were rephrased by the authors to make them clearer to the respondent, but keeping the same context of the ORS scale.

### Table 1 ORS scale dimensions and items used in the survey

#### Emotional connection

*I can relate to the type of people who are users of this brand*

*I feel like this brand values me as a customer*

#### Online experience

*This brand's website is easy to navigate*

*This brand's website has all the information that I need*

#### Responsive service nature

*This brand is willing and ready to respond to customer needs*

*This brand provides opportunity for feedback*

#### Trust

*I trust this brand to keep my personal information safe.*

#### Fulfillment

*The product or service was received as expected*

#### Added items

*This brand is mobile friendly*

*This brand creates an eco-friendly impression.*

*This brand makes me think about the state of the environment*

*This brand creates eco-friendly emotion*

First, survey participants were asked to rate the importance of each of the 12-item statements from the ORS scale and also the added items, using a scale of 1 to 5, with "1" being least important and "5" being most important. This was done to validate the ORS scale, researching if the items are still of importance today. Additionally, respondents were asked for their agreement on each statement as it related to each of the four digital brands measured, and only if they had visited the brand's website. Two questions used for screening and filtering purposes are "Are you aware of any of the following brands?" and "Have you visited or used any of the following brands online?". These questions guided respondents to answer only on the specific brands they were aware of or visited online.

Drawing on the research conducted by Saari, et.al. (2017), the survey included two items of eco-friendliness, and a statement to measure the importance of "mobile-friendliness". These items were added to research their impact on brand equity from a consumer point of view. The two dimensions were presented in the same way as the original scale dimensions to get a justified result, both in importance and brand ratings.

Four brands were selected for this research based on their global presence, and that survey participants were likely to be familiar with them. They were Spotify, eBay, PayPal and Airbnb. These brands also represent four different categories: streaming music/entertainment, ecommerce, payment services and travel.

The data presented in this paper reflects findings for the US only.

## 4 FINDINGS

In the US sample, respondents were primarily 18-24 years old, with 59% completing the survey using their smartphones and 35% using their laptops. The highest rated ORS scale-item is "the product or service is received as expected", receiving a 4.9 on a 1-5 scale rating. With the information given on this particular scale item, it can be concluded that US respondents

highly value the quality of the product or service given. The scale item “the brand keeps your personal information safe” ranks second highest with a 4.8 mean rating. This information is also validated by the open-ended question where respondents responded with “efficiency” and “shipping” because it relates to how the product or service is received. Based on the top two scale items that the US believed to be most important, it is safe to conclude that Privacy and fulfillment are highly important to judging a brand’s values and assets. Privacy is related to trust on the ORS scale and many respondents added that to the open-end question as well. The other category that had a 4.5 rating is “the brand's website is easy to navigate”. This result strongly corresponds to the results of the open-ended question where “ease of use” were a response over 5 times. Consumers value easy access and easy use and it is apparent that accessibility is a brand asset in the US.

The importance attributes mean scores that did not score as high are “the brand values you as a customer.”, “the brand is responsive to customer needs.” and “the brand's website has all the information that you need.”. While these attributes are still important in brand value, they scored at a mean of 4.3 - 4.4. Emotional connection in the ORS scale are connected to “care”, “empathy” and “affiliation”. The importance rating for “the brand values you as a customer” and “responsiveness to customer needs” are related to emotional connection on the ORS scale. The mean of 4.3 shows that emotional connection is closer to “somewhat important” rather than “strongly important”.

Further, the added items of eco-friendliness were in relation to Saari, et. al. (2017) eco-friendly dimensions eco-affective and eco-sensory. These survey questions are directly connected to the importance rating of a brand creating an eco-friendly impression. The mean of the added items for eco-friendliness and environment received a rating of 3 and 2.7 rating on a scale of 1-5. The emotional connection dimension statement “the brand creates an eco-friendly impression received a mean score of 3. This result can conclude that the US consumer neither agrees or disagrees with the overall online brand eco-friendly impression. The item “the brand that makes you think about the state of the environment received a 2.7. This item rated negatively and is shown that it is not a brand asset to the brands used in the survey. According to Saari, et. al. (2017) eco-friendliness is an important factor when determining brand equity, however, this statement is not in accordance to the US survey findings in regards to the eco-friendliness rankings.

The last important item added item is the statement that “the brand is mobile friendly”. This item received a 4.1 rating which concludes that it is a brand asset to overall brand equity. The US somewhat agrees with the importance of this statement to online brands and therefore validates that it can be added into the online experience category for the ORS scale.

## **5 CONCLUSIONS**

This research was conducted to see how well the ORS scale performs today, and to test two new dimensions, mobile-friendliness and eco- friendliness. It was also important to understand the level of importance that consumers assign to each scale item to ensure that it still reflects current wants and needs. This data validates the ORS scale items by asking respondents the 12-item statements used in the scale. The results from the analysis concludes that all but one of the ORS scale items are still align with digital brands.

When testing mobile friendliness and eco-friendliness, two important dimensions in today's society, the survey statistics found mobile friendliness to have a higher importance than eco-friendliness. Eco-friendliness scored between a mean of 2.7 and 3.1 which is not viewed as “very or somewhat” important for online brands and does not accurately capture the concept of sustainability. To further build the ORS scale, the survey asked an additional open-ended question, “What else do you value about online brands?”. Responses varied, but found that across all three countries participants mentioned “free shipping & returns”, “customer support”, “price”. These dimensions should be considered as important dimensions for future research.

The overall conclusion of this research is that the ORS scale, which is the first scale that has been developed to measure the value of online brands, is reliable but needs to be continually validated so that it is an effective measure of online brand equity in an environment where technology and consumer attitudes and behaviors are constantly changing.

## **6 FUTURE RESEARCH**

Future research should address the limitations of this study, namely any distortions in the data due to the demographic skew. There needs to be an effort that tests the ORS scale among a more balanced sample, or in a sample large enough to analyze key consumer segments and demographic groups. A key finding of this research is the identification of new items that should be included in the development of the ORS scale. The consumer open-ended mentions of “what else do you value about online brands?” did yield attributes not yet considered in the current study. They are concerned mainly with aspect of (free) shipping and returns, delivery/shipping options, customer support and price/value. Future research needs to expand the ORS scale to include these items, and optimize a construct to best measure the importance of “sustainability”.

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