

# COMMUNITY-AIDED BRAND CONCEPT MAPS: A NEW APPROACH FOR ELICITING BRAND ASSOCIATION NETWORKS

Pradeep Kumar Ponnamma Divakaran

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## Abstract

The graphical representation of brand associations which are stored in consumers' memory is called a brand concept map (BCM). In this study, a new technique called as "Community-aided brand concept map" (CA-BCM) is developed in which consumer or user generated data (e.g., online customer opinions, reviews or postings) is collected from online brand communities and then analyzed using analytical coding software such as NVIVO to identify brand associations which are then classified into strong positive and unique associations. Since consumer data is generated on a continuous daily basis, the CA-BCM method can be repeated at frequent intervals especially before the product is launched in the market so that brand managers can gather useful insights into the evolution and the dynamic pattern of brand associations. Other advantages of CA-BCM include 1) brand favorability and brand equity can be explored as and when it evolves, 2) this method uses readily accessible competitors' brand association data in order to elicit unique brand associations, 3) since actual consumer behavior is used instead of self-reports, biases are minimized, and finally 4) this method in addition to eliciting brand associations, helps to measure brand awareness level.

**Keywords.** Brand association networks, brand image, brand concept maps, consumer generated data, brand equity

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## 1. Introduction and Theoretical background

Brand knowledge can be conceptualized (according to the associated network memory model) as a set of associations related to brand or more specifically a node in the consumer memory to which a variety of associated links are committed.(Keller, 2008). Brand knowledge consists of two components such as brand awareness and brand image. Brand awareness is related to the strength of the brand node or trace in memory which is measured as the consumer's ability to identify the brand under different conditions. Brand image is consumers' perceptions about a brand, as reflected by the brand associations held in consumer memory. In other words, brand associations are the other informational nodes linked to the brand node in memory and contain the meaning of the brand for consumers. Brand associations, in all forms and may reflect characteristics of the product or aspects independent of the product. While brand awareness is important for brand recognition and brand recall performance, creating a positive brand image (through various marketing programs) which are not only strong and favorable, but also unique and not shared with competing brands, enable to create the differential response that leads customer based brand equity<sup>1</sup>, so that consumers choose the brand.

Consumers store brand information in the form of associative networks (Brandt et al., 2011; John et al., 2006; Keller, 1993; Krishnan, 1996; Schnittka et al., 2012; Teichert and Schöntag, 2010) and this association network form a brand's image, identifying the brand's uniqueness and value to consumers (Aaker, 1995). The graphical representation of such a brand memory is called a brand concept map (BCM) and John et al. (2006) differentiated direct (core brand associations) from indirect brand associations. Two categories of techniques exist to measure brand association networks (John et al., 2006) such as 1) consumer mapping techniques (BCM and Zaltman's metaphors elicitation technique (ZMET)(Zaltman and Coulter, 1995)) and 2) analytical techniques . Schnittka et al. (2012) developed an advanced brand concept mapping approach for evaluating the favorability dimension of brand association networks. In consumer mapping techniques individual brand association networks are elicited directly from consumers whereby respondents reveal how the brand associations relate to the brand and thereafter

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<sup>1</sup> **Brand equity** is the added value endowed on products and services, which may be reflected in the way consumers, think, feel, and act with respect to the brand as well as in the prices, market share and profitability the brand commands for the firm (Keller, 1993, 2008).

**Customer-based brand equity** is defined as the differential effect that brand knowledge has on the consumer's response to the marketing of that brand.

researchers can aggregate information to produce a consensus brand association network (John et al., 2006; Schnittka et al., 2012; Zaltman and Coulter, 1995). In the case of analytical techniques brand associations are uncovered through consumer service and thereafter employ analytical methods to uncover the underlying consensus brand association network (Henderson et al., 1998).

All these techniques and studies employ consumer self-reports for eliciting brand associations and self-reports may be subject to one or more forms of bias. This study circumvent this problem by relying on user generated data collected from online communities instead of using self-reports. Unlike self-reports, user generated data used are unobtrusive and, more elaborate, less time-consuming and also less costly. Some of the issues associated with self-reports such as common method variance<sup>2</sup>, social desirability bias<sup>3</sup> and conformity motif<sup>4</sup> (Podsakoff and Organ, 1986) do not rise with user generated data as researchers do not intervene or influence such user generated data Existing literature shows that a number of useful perspectives concerning brand equity has been put forth such as, the firm perspective, product perspective (e.g., product, service, personal brands) and individual perspective (e.g., customer based brand equity, employee based brand equity (King and Grace, 2010)) (Allaway et al., 2011; French and Smith, 2013; Keller, 1993, 2008). This study adds a new perspective to the branding literature-a **community perspective**.

## 2. A New Concept: Community aided brand concept maps (CA-BMC)

The graphical representation of brand associations which are stored in consumers' memory is called a brand concept map (BCM). The BCM approach (John et al., 2006) and the advanced BCM approach (Schnittka et al., 2012) are two of the most recent brand concept mapping techniques available. Both these techniques employ consumer self-reports such as interviews, and questionnaires for eliciting brand associations and self-reports are subject to one or more forms of bias. Several studies have highlighted reliability and validity problems that comes along with self-reported data and the most prominent problems are *common method bias*, *social desirability bias*, *selection bias*, *measurement bias* (such as instrumental bias, insensitive measure bias,

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<sup>2</sup> Arises when measures of two or more variables are collected from the same respondent and the attempt is made to interpret any coalition among them.

<sup>3</sup> Arises when questionnaire items may prompt response that will present the person in a favorable light.

<sup>4</sup> Arises when respondents apparently hand and urge to maintain a consistent line in a series of answers or at least what they regard as a consistent line.

expectation bias, recall or memory bias, attention bias, verification or work-up bias) *discriminant validity and consistency motif* (Craighead et al., 2011; Doty and Glick, 1998; Fisher, 1993; Meade et al., 2007; Podsakoff et al., 2003; Podsakoff and Organ, 1986; Siemsen et al., 2010). Moreover, these techniques are quite tedious especially at the data collection stage, and these approaches may be useful only after brands are launched in the market (and not before launch) so that consumers have developed sufficient brand associations in memory. Hence these techniques may not be useful since data is not readily available to study the dynamics of brand equity as and when it forms especially before the product is launched in the market. Moreover both these techniques are static in nature i.e., brand associations can be elicited for a specific time point during the brands lifetime, and hence these approaches are not useful when brand managers have to regularly monitor brand equity. While the two approaches are useful in eliciting both strong and favorable brand associations, they do not help identify unique brand associations in the context of competitors based on actual competitor data<sup>5</sup> in order to fully understand their competitive advantage (point of difference and point of parity).

All these issues highlight the requirement for 1) a readily available source of data which will provide consumer insights on their brand perceptions and associations, 2) data which can be accessed at any given point in time during a brands lifetime starting from the time when the preannouncement of an upcoming new product is announced to the time when it is launched and until the lifetime of the product, 3) data which allows to study the brand preferences or favorability, brand equity, as and when it evolves, 4) readily accessible competitors' brand association data is required in order to elicit unique brand associations, and finally 5) data which is created not based on self-reports but created based on actual consumer behavior without researcher's intervention so that the above-mentioned biases can be minimized. The solution to all these issues is **user generated data** (UGC) which are created by consumers when they participate in online discussions in online platform such as online brand communities. According to Harley, (2011) since the advent of Web 2.0, user-generated content - or to give it a more

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<sup>5</sup> These techniques provide information on uniqueness of association in terms of the magnitude of brand-specific association in the brand map thereby assuming that additional associations in the brand map increase the probability that associations are unique in comparison with competitors (Schnittka et al., 2012)

commercial label, **consumer-generated content**<sup>6</sup> (CGC) - has demanded more nuanced, innovative and exotic methodologies.

Every time the consumer post a message online release a digital footprint with information such as the date and time when the message is posted, the content of the message, etc. Different consumers participate in online discussions at different points in time with in an online community, leaving behind a continuous and dynamic supply of user generated data. Every time there is a preannouncement of an upcoming product, for example upcoming movies, it triggers consumers to participate in online discussions for each of these upcoming movies until they are launched and also throughout their theatrical lifetime. This user generated data can be collected and then analyzed using analytical coding software such as NVIVO, and consumers brand associations can be identified. This technique is defined in this study as "Community-aided brand concept map" (CA-BCM) and this approach is explained below.

### **3. A new approach for eliciting brand concept maps**

Figure 1 represents the brand association network for the movie "The Princess and the frog" (premiered on 25 November 2009) created using this new CA-BCM technique explained here. Consumer generated data for the movie the Princess and the frog is collected from a movie based online community called Clever movies<sup>7</sup> and then analyzed using analytical coding software such as NVIVO, and consumers brand associations are identified. Once all the brand associations are identified, some of the associations can be grouped under a larger construct which will form the core brand associations. In figure 1 the core brand associations are depicted by circles with thick boundary which is not shaded (e.g., brilliant storyline, reputed production house, best crew members, attitude towards movie, etc.) The coding software NVIVO can display the diversity of brand associations and according to Keller (2013) the strength of brand associations is determined by the diversity of brand associations. In NVIVO also displays the number of times each brand association was coded. From this information is easy to identify the most frequently cited brand associations which can be categorized as favorable associations, which can be either positive or negative.

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<sup>6</sup> The terms user generated data (UGC) and consumer-generated content (CGC) will be used interchangeably in this paper

<sup>7</sup> <http://www.clever.com/> and <https://www.youtube.com/user/ClevverMovies>



As consumer participation in online discussions are voluntarily, the number of consumers who participate in such online discussions for each product is a measure of awareness level (proxy variable for awareness). Comparing this information for different upcoming new products will reveal which among them is the most popular. For the movie *The Princess and the frog*, 1155 consumers participated in online discussions and around the same time its competitor movies such as *Old dogs*, *Ninja Assassin*, and *The Road*, attracted only 189, 625, and 407 consumers respectively, suggesting that the awareness level for the movie *The Princess and the frog* was the highest compared with its competitors. Thus, the CA-BCM is only an initial step to highlight that brand concept maps can be developed using consumer generated data collected from online communities. The CA-BCM method is very rudimentary and hence it can be further refined to improve its quality. Moreover since the data is digital in nature, the coding process can be manual or automated to save time. Since the consumers' data is generated on a continuous daily basis, the CA-BCM method can be repeated at frequent intervals especially before the product is launched in the market so that brand managers can gather useful insights into the evolution and the dynamic pattern of brand associations.

#### 4. Conclusion

Prior studies employed consumer self-reports for eliciting brand associations and brand concept maps (BCM). However, self-reports are subject to one or more forms of bias. Several studies have highlighted reliability and validity problems that comes along with self-reported data and the most prominent problems are *common method bias*, *social desirability bias*, *selection bias*, *measurement bias* (such as instrumental bias, insensitive measure bias, expectation bias, recall or memory bias, attention bias, verification or work-up bias) *discriminant validity and consistency motif* (Craighead et al., 2011; Doty and Glick, 1998; Fisher, 1993; Meade et al., 2007; Podsakoff et al., 2003; Podsakoff and Organ, 1986; Siemsen et al., 2010). This study circumvent this problem by relying on user generated data collected from online communities instead of using self-reports. Unlike self-reports, user generated data used are unobtrusive and, more elaborate, less time-consuming and also less costly. Some of the issues associated with self-reports such as common method variance<sup>8</sup>, social desirability bias<sup>9</sup> and conformity motif<sup>10</sup>

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<sup>8</sup> Arises when measures of two or more variables are collected from the same respondent and the attempt is made to interpret any coalition among them.

(Podsakoff and Organ, 1986) do not rise with user generated data as researchers do not intervene or influence such user generated data. In this study, for illustration purpose, a community aided brand concept map (CA-BMC) was developed using user generated data which are actual user behaviour data. The CA-BMC apart from identifying the core brand associations, secondary associations and tertiary associations, the other main advantage is that this map was generated using data before a product launch and before consumption. Moreover the CA-BMC can be developed at any point in time before or after product release. Therefore CA-BMC can allow brand managers to map brand associations on a periodic basis and then compare to understand the dynamics of the evolution of brand associations.

The study also emphasises the importance of providing online toolkits for customers so that it allows them to share their feelings, preferences, attitude, intentions, choices, etc. community managers must consider potential toolkits and provide those toolkits which are not only useful for customers but also provides a means to gather collective data. As mentioned earlier, this study provides only an initial exploration of the prelaunch dynamics of brand equity and how data from online communities could be used as a diagnostic tool. Based on this initial idea, researchers and practitioners may develop advanced diagnostic tools for the same purpose. Pre-release announcements, pre-release advertising, and online communities provide new product information to customers which trigger online discussions. Therefore managers should proactively release as much information as possible to facilitate online discussions. More the discussions, higher the quality of information on the dynamics of brand associations available. Managers must support customer participation at providing discounts, free tickets or other incentives. In the case of movies, and early diagnosis of moviegoers perception of upcoming movies can enable them to take early corrective measures for example if the diagnosis revealed for awareness level than brand managers can increase the frequency of advertising, release new trailers, etc. If they find the overall brand association to be negative then they can delay or postpone the release date. Another advantage is that online communities can provide a comparative analysis of different new product releases from different companies. For example a movie based online community can provide information about brand favourability and awareness

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for movies which are releasing on the same date. Analysing such data will let the producers to understand which movie created maximum buzz and this information will help both producers and theatre owners to decide which movies should receive maximum screen space. For studios or production houses who have a portfolio of new movies, early insights into brand equity of each of their new movies can enable them to locate their scarce marketing resources, for example, spent more on those movies which have a higher percentage of negative brand association in order to change customer perception.

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## Contact Details

### **Dr. Pradeep Kumar PONNAMMA DIVAKARAN**

Assistant Professor, Marketing (department), ESC Rennes School of Business, 2 rue Robert d'Arbrissel CS 76522, 35065 RENNES CEDEX, FRANCE

Tél. +33 (0)2 99 54 63 79 ; Mail : pradeep.divakaran@esc-rennes.fr