

IDENTIFYING AND CLASSIFYING VALUE PROPOSITIONS IN BRAND TWEETS – A STUDY OF TOP-10 COFFEE BRANDS

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Abstract

Brand owners have increasingly adopted social media for positioning the values of products and services. This work scrutinizes the nature of 'values' embedded in the tweets as propositioned by brand owners. We extract and analyse the tweets (658 of them) posted by the owners of the top-10 coffee chains in a period of three months (August to October of 2015) for their value propositions. This paper identifies 16 different categories of values propositioned by brands. Using consumption value theory as the theoretical basis, the value categories are grouped into four broader category themes (functional, emotional, social and epistemic). The presence of values in a tweet is classified using content analysis undertaken by 4 independent raters. Our analysis of values in tweets reveals that a) different types of values exist in tweets and there are significant differences between values embedded in tweets (independent of brands), b) brands differ in the values they embed within the tweets and c) the presence of certain values stimulates user interests more than others (e.g. through retweeting or liking a tweet). The paper discusses these results in detail along with the implications of the results for marketing practice.

Keywords: value proposition, value classification, social media, twitter, coffee brand, consumption value theory.

1 INTRODUCTION

Defining the worth or value of a product or a service is fundamental to individual decision-making (Saaty, 2000) as it determines whether the product or service is consumed or not. Marketers have argued that offering value that appeals to the customer must be the reason for a firm's existence and success (Slater, 1997). Thus offering value that is superior to others' offerings in the market is considered to be a competitive advantage for organisations (Wang, Po Lo, Chi, & Yang, 2004). When a product or service is created, firms need to ascertain whether the 'net value' they are proposing are perceived as important by the customer. Not ascertaining this may result in value mismatch and that could result in not meeting the needs of customers. Thus, organisations endeavour to align perceived values of consumers to their marketing offerings and practices. For this reason organisations often identify and enumerate value propositions of products and services from their customers. Enumerating such value propositions aids in identifying the values unique to a brand present in the targeted messages posted by the brand (Anderson, Narus, & Van Rossum, 2006). Herein 'value' and 'values' definitions are adopted from (Lai, 1995) taken that "'customer value' focuses on the buyers' evaluation of product purchase at the time of buying, while 'consumer values' stress people's valuation on the consumption or possession of products". Brand 'value' is thus the unique set of 'values' that matter most to the consumers, which then confers its superiority to other products in the market place. Firms thus need to understand the underlying 'value' propositions to embed in their products and services that are highly regarded by their customers. Such a 'value' inventory informs brands on further enhancements of those 'values', and also facilitates measures to ensure re-alignment, if mismatches are detected.

The high usage of social media sites such as Twitter and Facebook by businesses and consumers provides opportunities to use these platforms for disseminating 'value' proposition. While the importance of computer-mediated interactions for generating information about 'values' of products and services has been well-known (Mangold & Faulds, 2009; Edvardsson, Tronvoll, & Gruber, 2011), seldom has the nature of 'values' that is disseminated through social media sites been investigated. Value classification (Kluckhohn, 1951) is an approach that can be used to identify the nature of 'values' by way of judgement quantifications (e.g. through questionnaires), and the resulting categorization of 'values' then forms the basis of extracting 'value' constructs of businesses.

This work aims to investigate the different kinds of value propositions stated within brand tweets. It seeks to understand whether brands differ in value propositions they communicate in their tweets. Several value theories have been proposed in the marketing literature. The umbrella of theories categorized as *perceived value* theories (Sánchez-Fernández & Iniesta-Bonillo, 2007) note that the theories are either uni-dimensional or multi-dimensional. For example, if the 'value' of a product is based on just its price, the single dimension considered is price (Monroe, 1979). However, multi-dimensional theories consider a range of attributes such as the practical value and emotional value of a product. While the uni-dimensional theories are rooted in economic paradigms (e.g. price), the multi-dimensional theories are rooted in cognitive consumer psychology (Sánchez-Fernández & Iniesta-Bonillo, 2007).

To scrutinize the nature of 'values' conveyed in the top-10 coffee brand tweets, we employ the consumption value theory, a well-known multi-dimensional value theory in marketing literature (Sheth, Newman, & Gross, 1991). Consumption value theory is principally influenced by consumer choice and that each 'value' plays a function in contributing to circumstance of choice. Five independent dimensions (functional, conditional, social, emotional, and epistemic) collectively influence a customer's decision to make a purchase decision.

The structure of the paper is outlined as follows. The next section provides an overview of the marketing literature with an exploration of several schools of thought for the value perceived by a consumer and the research aims scrutinized by our work. Section 3 presents the methodology employed in our work and Section 4 outlines the empirical results. Finally, Section 5 reports the overall study findings, and also discusses the implications of the results obtained.

2 VALUE THEORIES IN MARKETING

Axiology (Hart, 1971) is the investigative field of philosophical observation of *value* or *worth*, aimed at defining and measuring the question of human value. The human value literature grew through reflections of Greek philosophers (300-500 BC) detailing the form of abstract concepts such as Socrates' virtue ethics (Parry, 2014) and aesthetics (Plato & Cornford, 1945). Contemporary *perceived value* is inferable through the use of marketing platforms used by brands as a medium to proposition products and services for consumption. Twentieth century economic-based marketing was driven by a utilitarian perspective (products would provide a 'utility') where 'value' is propositioned and then accepted with some measure of cost.

The marketing literature on value is assembled by two school of thoughts, namely uni-dimensional (Monroe & Krishnan, 1985) and multi-dimensional (Sánchez-Fernández & Iniesta-Bonillo, 2007). The traditional marketers (Kotler, 1967) offer a conservative classification for value propositions based on the four P's marketing mix involving product, price, promotion and place. McCarthy's four P's framework (McCarthy, 1978) is grounded within the 'goods' dominant logic as the focus of exchange in the framework with economic reasoning influencing buyer sacrifice (of cost) and results in benefit (i.e. product ownership or service consumption). Such theories are categorised as uni-dimensional definitions of 'value', whereby an economic transaction sets the foundation for an assessment on overall value.

Beyond economic perspective, other works (Grönroos, 2006) began to recognize the need to incorporate intangibles into the notion of value (ethics, emotion, inquest, co-creation). Researchers have indicated value as a psychological judgement of a product based on broadly perceived evaluations of three attributes - quality, price and value (Zeithaml, 1988). Vargo and Lusch's research (2004) proposed a new frontier in marketing in which 'service' is the dominant logic, widely adopted in contrast to the inadequacy of commodity exchanging models (i.e. goods dominant perspective). The logic posits 10 foundational principles (Vargo & Lusch, 2008), of which three are related to 'value' to the customer. Principle seven in particular notes that the "enterprise cannot deliver value, but only offer value propositions". This implies that organisations create value not by themselves, but in partnership with their customers, through close two-way interactions.

Holbrook's utility-driven typology of consumer value is a multi-dimensional theory (Holbrook, 1999), introducing three dichotomized elements, extrinsic vs intrinsic, self-oriented vs other-oriented and active vs reactive. Drawing from the three elements, eight value types can be recognised and they include – efficiency, play, excellence, aesthetics, status, ethics, esteem and spirituality. Scholars from the University of Western Australia (Sweeney & Soutar, 2001) additionally proposed the 'Perval' measurement scale for perceived value by weighting durable goods along a perceived scale of emotion, social, quality and value for price.

One of the well-known multi-dimensional theories is the consumption value theory (Sheth, Newman, & Gross, 1991). The theory comprises of five value dimensions namely - functional, social, emotional, epistemic & conditional. Functional value pertains to measuring utilitarian or function capabilities (e.g. price and sustainability); social value (e.g. group identification) pertains to measuring relational identity and association to socio-economic groups; emotional value (e.g. nostalgia and excitement) pertains to measuring the capability of impacting feelings or stimulating cognitive state, epistemic value (e.g. facts and questions) pertains to the capacity to stimulate curiosity or drive knowledge inquest, lastly conditional value (e.g. time and consciousness) pertains to the context or circumstances implicit in the decision-making process. The theory notes that the values in the five dimensions "relate additively and contribute incrementally" to the overall perceived value.

Social media has rapidly become the centre stage for 'value' in allowing an impartial forum on which parties can engage in a dialogue on the topics of choice, and this forum plays a critical and active role in firm-survival by representatively positioning brand value. Twitter is a well-known social networking platform in excess of 320 million active users (Twitter, 2015), setting the main focus of this enquiry.

To our knowledge, social media texts have not been scrutinized for the presence of ‘values’ and their types, from the brands’ perspective, and scrutinizing value propositions using user studies (e.g. using questionnaires) has been the norm. This work aims to bridge the gap by investigating the nature of ‘values’ in social-media text with an emphasis on overall messages posted by the coffee industry and study the differences between coffee brands. The ‘values’ embedded in the text are identified based on a) ‘value’ dimensions of Sheth’s framework and b) dimensions reported in the literature include place, promotion (from McCarthy’s 4 P’s), and c) other contemporary value dimensions derived from the content analysis of twitter data such as time, health, weather and eco-friendliness. Given that little is known about ‘values’ embedded in tweets posted by brand owners, we scrutinize three research questions:

RQ1: Are there differences in the different types of values embedded in tweets?

RQ2: Are there differences in values expressed in tweets across brands?

RQ3: Can certain values embedded in tweets predict whether user interest is stimulated (e.g. through retweeting or being favorited)?

3 METHODOLOGY

This study adopts a data-centred, observation-based, content-analysis approach to investigate tweets. Tweets were scrutinized to identify different types of values, based on human judgement (i.e. through manual analysis). The process comprised of four core steps (shown on the left in Figure 1) namely data collection, creation of value categorization, classification of tweets based on the categorization and the results analysis. Four raters were tasked to classify equal-portioned tweets obtained using the Twitter API over a three month period (August-October) in 2015. The four raters were trained on a sample set of 50 tweets, before undertaking the classification of 658 tweets. They were provided descriptions of each category of ‘value’ and example tweets for each category (see Table 1).

A total of 658 tweets were classified by four raters (as shown on the right of Figure 1). Each of the first three raters (A, B and C), classified roughly 220 tweets each. The fourth rater (D), the primary author of the paper, classified the entire tweet set and acted as the mediator between the raters when discrepancies between interpretations arose.

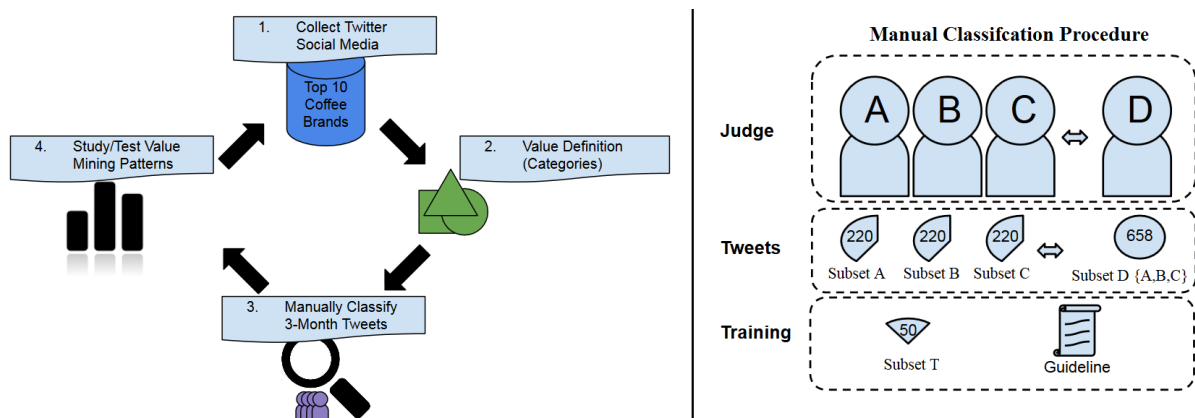


Figure 1. Left - methodology adopted: ‘collect-define-classify-analyse’ framework, Right – Schema for classifying tweets across four raters

The selected context of investigation is tweets posted by top-ten coffee-brands based on the sampling criteria of global market share and market revenue (MBASchool, 2015). These brands were Panera Bread, Tim Hortons, Au Bon Pain, Caribou Coffee, Peet’s Tea & Coffee, Starbucks, Dunkin Donuts, McCafe, Costa Coffee, The Coffee Bean.

The tweets were categorized based on the value categories presented in Table 1. These value categories

were created based on manual analysis of the 1-month observation of brand tweet data, prior to the collection of a 3-month dataset of brand tweets. The first author of the study proposed the initial set of categories and were then refined based on the second and third author's inputs. The first four categories (ids 1-4), are the 4 P's well-known in marketing literature. Social dimension has been reported in work by Sweeney and Soutar (Sweeney & Soutar, 2001). Sport/entertainment has been suggested in (Zhang, Pease, & Hui, 1996). Emotional value has been proposed in the consumption value theory (Sheth, Newman, & Gross, 1991). Researchers have noted that Tweets have some information embedded in them for others to consume (Kwon & Sung, 2011) and also researchers have noted that twitter users pose questions (Malhotra, Malhotra, & See, 2012). Our manual analysis of tweets also revealed several other dimensions were present in the tweets such as time of day details (e.g. morning), health, hiring, weather and eco-friendliness. We have included a separate category where a tweet did not have any of the other 15 value categories (i.e. 'other' category).

ID	Category Name	Definition	Example tweets
1	Product	Relates to product satisfying consumer demand, either tangible commodity or intangible service	A salad isnt just for veggies: the Fuji Apple Chicken Salad
2	Price	Relates to pricing (reference/actual), market or method of purchase (free,hire,credit)	Enjoy half off your favorite iced beverage or Javiva, after 12 PM
3	Place	Relates to location, distribution or place of access to the product/service	The flavors of #fall are now available at your local Au Bon Pain!
4	Promotion	Relates to advertising, PR, brand imagery/loyalty and sales promotion	Take our #SandwichAptitudeTest for a chance to win \$30k for college
5	Social	Relates to notion of interactive collective co-existence	1 Bite, 2 Bites, 3 Bites, 4 Bites... Congrats to the #ALEastChamps @BlueJays! #ComeTogether #MLB #TakeOctober
6	Sport/Entertainment	Relates to organised entertainment participation	Cold press and @Vikings football! #Skol #12HrAdventure
7	Emotion	Relates to feelings of sensation or affective state in regards to product/service/brand	Brought tears to their eyes
8	Informative	Relates to proposition of brand/product/service information	#DYK that kales is one of the most nutrient dense foods? Get your fix with one of our innovative kale creations today!
9	Question	Relates to inquisitive reference or suggestive question	Had #breakfast yet?
10	Time	Relates to time or schedule	Step up your afternoon
11	Health	Relates to "state of complete physical, mental, and social well-being"	Add a boost of potassium to your salad or sandwich by adding an #avocado
12	Hiring	Relates to career opportunities with the brand	Being social is part of the job. Apply now
13	Charity	Relates to philanthropy or morale action	Help the Red Cross provide food, water & cots for refugees across Europe
14	Weather	Relates to environmental condition	Feels like fall, Sips like Summer. #IcedSaltedCaramelMocha
15	Eco-Friendly	Relates to ethical understanding and practice of environmental-friendliness	Which Organic Team are u on? #TeamPeru #TeamMexico #TeamSumatra or #TeamOrganic
16	Other	Significantly unrelated to any of the categories	We usually don't feed bears, but we will always make an exception for TC

Table 1. Categories of value propositions of tweets: names, definitions and examples.

3.1 Data collection and value categorization

Tweets from the top-10 coffee brands were collected for a period of 3 months. Only those tweets that were posted by brand owners were considered for our study. The brand owner's tweet names were identified manually and the tweets posted by these tweet accounts were included in this study. This selection resulted in 708 tweets over the three month period.

In order to manually classify the tweets based on their values, the raters need training. 50 out of 708 were randomly selected. All the four raters identified (multiple) values in each of the 50 tweets independently. The initial match was 91.7%, 80.6%, and 91.5% respectively. After discussions, a full agreement was reached on the mismatched value categories.

The rest of the tweets (658) formed the formal dataset that was considered for further analysis. Three raters were tasked with identifying the values reported. The three raters were assigned 220, 220 and 218 tweets respectively, with a fourth rater categorizing all the 658 tweets.

The inter-rater reliability (McHugh, 2012) of the tweets was measured using Cohen's kappa coefficient. The kappa values for the three pairs of evaluations (AD, BD and CD) were 0.93, 0.85 and 0.84 respectively, suggesting strong agreement as kappa values higher than 0.75 are generally considered to have excellent agreement (Fleiss, Levin, & Paik, 1981). We must note that the agreement of 100% was reached in our case because of the guideline document which helps to avoid deviation on classification based on an individual's personal beliefs. The document provides clear definitions for what should be expected such as assigning informational vs. promotional value for a given tweet. It also suggested the look up of meanings of acronyms and considerations of synonyms of a word. Additionally, it provided examples that can be used to better appreciate the nature of the values embedded in a tweet.

4 RESULTS

4.1 Characteristics of brand tweets

Table 2 shows the number of tweets obtained for each of the 10 brands. It can be observed from Table 2 that Tim Hortons had the most number of tweets (127) and McCafe had the least number of tweets (5). The average number of tweets per brand was 66.

Brand	Tweets	Percentage
Panera Bread	56	8%
Tim Hortons	127	19%
Au Bon Pain	83	13%
Caribou Coffee	78	12%
Peet's Coffee & Tea	48	7%
Starbucks	76	12%
Dunkin Donuts	106	16%
McCafe	5	1%
Costa Coffee	39	6%
The Coffee Bean	39	6%

Table 1. Brand distribution of tweets: brand, tweets and population contribution.

Sheth's multi-dimensional consumption value theory (Sheth, Newman, & Gross, 1991) comprising of 5 dimensions closely align with 10 of 16 value propositions (presented in Table 1). Sheth's functional value is made up of product, price and eco-friendliness attributes of Table 1. The emotional value is

captured by the emotion category in Table 1. The social value is captured using four categories (social, sport, hiring and charity). The epistemic value is captured using informative and question categories, which related to knowledge. The fifth dimension in Sheth’s work (conditional value) has been omitted since there doesn’t appear to be any categories of values that fits into this category. Also another work (Sweeney & Soutar, 2001) did not find any evidence for conditional values in their work and viewed it as non-critical to its aims. Six other values in Table 1, do not fit into Sheth’s categorization (place, promotion, time, health, weather and other). Our further analyses (below) are based on Sheth’s four categories of values.

4.2 Values propositions in tweets

This section answers the question whether there are differences in the different types of values embedded in tweets (**RQ1**). Figure 2 shows the frequencies of value categories of all tweets. From 658 tweets, a total of 1910 values were identified (an average of 2.9 values per tweet). It can be observed that product is the top-ranked value category (a count of 397) followed by time (a count 326). Emotion ranks third with a count of 259. There were several informative tweets (a count of 198). Place and promotion values were expressed in a similar number of tweets, followed by questions, sport, social and price related values. The rest of the value categories were mentioned in fewer than 50 tweets. These results show that the magnitudes of different types of values reported are different.

Further, we conducted analysis by grouping values into Sheth’s four consumption value categories with functional value $F(8, 643) = 7.60$, emotional value $F(8, 643) = 2.30$, social value $F(8, 643) = 4.82$, epistemic value $F(8, 643) = 2.64$. Levene’s test for equality of variances and the following one-way ANOVA show that there were statistically significant differences in the means for the consumption value categories ($p < 0.05$).

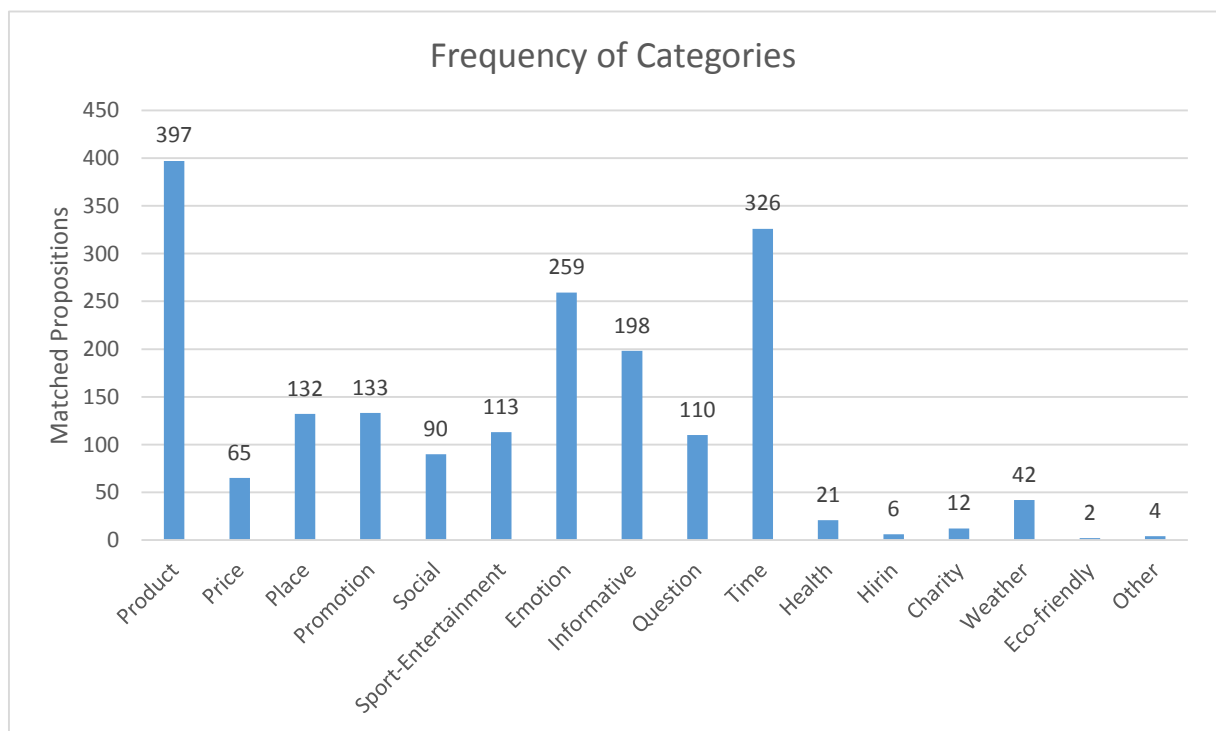


Figure 2. Frequencies of value categories.

4.3 Value differences across brands

We now scrutinize whether the values embedded in tweets of specific brands are different (**RQ2**). Figure 3 shows the value propositions expressed in the top-10 brands on 4 value categories proposed by Sheth et al. It can be observed that the functional value dominates in 7 out of 10 brands and the epistemic value dominates in two others and the emotional value dominating in one of the brands. There appears to be variability in the focus of brands on values with some brands focussing on all the four value categories (e.g. Dunkin Donuts) while others focus more on a specific value category (e.g. Panera Bread and Starbucks focusing on functional value). We conducted a paired samples t-test for all possible combinations of pairs of consumption values highlighting presence of a value over absence of the others. Our results indicate independence for all value-pairs (with $p < 0.05$) except functional-emotion value pair.

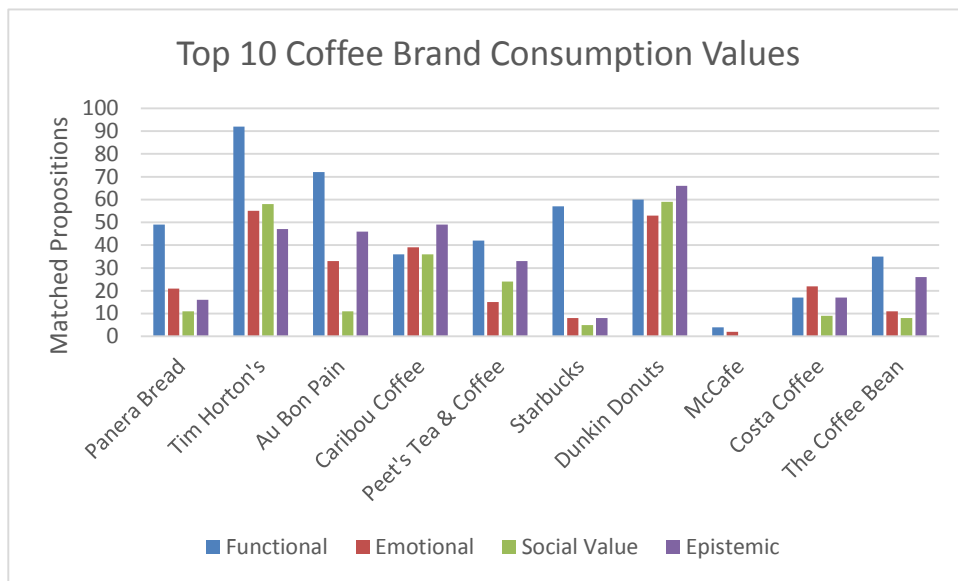


Figure 3. Consumption value histogram: value distribution by brand on 3-month study.

4.4 Predicting values that stimulate user interests in tweets

We investigate our assumption that certain values might trigger user interests in tweets more than others (i.e. embedding certain types of values will facilitate retweeting or 'favoriting' tweets), thus answering **RQ3**. To investigate this, we used the data on the number of retweets for a given tweet and the number of times a tweet had been favorited. Our regression results show that retweets and favourites can be predicted by the functional value dimension (with $p < 0.01$ for favourites and $p < 0.05$ for retweets respectively). The other three categories (emotion, social and epistemic values) do not contribute to the prediction of whether a tweet is favorited or retweeted.

We discuss the implications of our results in the next section.

5 DISCUSSION

This section presents a discussion on the nature of the contributions of this work. It also identifies the limitations of our current work and points towards our future efforts.

The nature of value propositions of brands to their clients through social media platforms hasn't received a lot of attention (Fournier & Avery, 2011). This paper aimed at scrutinizing value propositions from tweets posted by brand owners of top-10 coffee brands. 16 different categories of values were identified. 10 of the 16 categories were aligned to four dimensions of consumption-value theory (Sheth, Newman, & Gross, 1991). Our analysis shows that out of the 16 categories, the top-three value categories based

on frequencies were *product*, *time* and *emotion*. The top value category according to consumption-value theory was the *functional value* (with 7 out of 10 brands having the top score for this value). This shows that functional value which comprises of product, price and eco-friendliness details is perceived to be the important value category by most brands.

Based on the data obtained in the study, we investigated three research questions. Our first question aimed to measure the different values expressed in tweets (independent of the brand that posted the tweet). Our results showed that certain values are reported in higher frequencies (e.g. product, emotion and time) than others. The implication of this result is that brands do not attach the same importance to the propositioning of different types of values.

The second question aimed at investigating whether the values reported in brand tweets vary across brands. Our results in Figure 3 show that brands do not have the same set of value propositions (i.e. distribution of values is different across value categories). This is because the competitive nature of the markets motivate brands to differentiate themselves in terms of value propositions, i.e. organisational brand positioning. It is well-known in the literature that brands follow differentiation strategies to make them unique in what they are offering in comparison to their competitors (Aaker, 2009).

Our results from the first two questions can be beneficial to individual brands to identify the types of value propositions that they offer (see Figure 3) and they could potentially use this information to realign their propositions if they appear too different from what they think they offer to their consumers. Additionally, the results can also inform the value strategies adopted by different competitors and this may need to be factored in when coming up with new value proposition strategies.

Our third question aimed at scrutinizing whether the presence of certain value categories in a tweet could predict the users' interest in the tweet. The user interest in the tweet content is measured using the number of retweets and the number of times a tweet has been favorited. Our investigations show that the presence of the functional value predicts the users' interest in the tweets. In other words, if a tweet contains functional value information (product, price and eco-friendliness information), that tweet is likely to be retweeted or favorited. This finding has implications for marketing theory. In marketing, the service dominant logic (Vargo & Lusch, 2004) notes that 'service' is the dominant logic, in contrast to the goods dominant perspective. However, our finding shows that goods specific information (i.e. functional value comprising product, price and eco-friendliness information), are liked by users more than other types of values. Our results, though at the face value appear to be contradictory to 'service' logic, are in fact pointing to a key aspect underpinning the logic. The service features do not arise from nowhere, but from a core set of product-dominant features (Vargo, Maglio, & Akaka, 2008). For example, a good set of product attributes are required for service-centric values to emerge. For a coffee chain to offer service-related offerings around the coffee requires the product attributes around the coffee to be valuable (quality, flavour, price etc.). Starbucks for example offers service values (e.g. comfortable ambience, spacious seating and music), however, these values cannot be treated in isolation to the value offered by the product (i.e. the product being sold). In fact, the service-values are often derived from product-values (Merz, He, & Vargo, 2009) and are often co-created through a dialogue between the provider and the consumer.

The contributions of this study towards the field of information systems are in establishing a well-defined set of value propositions (16 of them) and grounding them based on real-data. This work can serve as the basis for automatizing value identification in the marketing domain (e.g. through a combination of natural language processing and machine learning approaches) and managers can leverage a tool that is constructed based on this work to assess their own value propositioning with respect to their competitors.

5.1 Limitations and Future research

An inherent limitation of the study is that the value categories were extracted from short plain text posted by brands which comprised of 140 characters, which is in line with many other research works on content analysis of tweets (Cheong & Cheong, 2011). Researchers have noted that the content in a

platform is constrained by the capabilities of a platform (Decrop, 2007). Additional contextual information such as presence of a photograph, video, tags and hyperlinks will need to be considered in a future work. While an overall inter-rater reliability of 87% was achieved for the category ratings in our study which is considered to be an excellent (Fleiss, Levin, & Paik, 1981), we believe there might be opportunities for improving the reliability outcomes by adopting an iterative staged-approach for classification and discussions to minimize interrater-drift. Our agenda further is to build an automatic classifier that identifies the presence of the different values in tweets. This will enable us to scale the study using a larger dataset of tweets. Further, we plan to investigate value co-creation in the twitter platform, by considering the responses obtained from the users for the tweets posted by brand owners. In particular, we will scrutinize the extent to which the presence of the different types of values in brand tweets generates discussion (and arguably value co-creation) from the consumers of tweets (i.e. subscribers of the brand tweets). Another interesting line of research is to identify the differences in value propositions of a brand across different geo-political areas. For example questions such as does Starbucks provide different set of values in their tweets across different countries and are they successful in attracting consumers to contribute to the process of value co-creation through response tweets for the values that they target, can be evaluated. We also intend to include region specific-brands in our future analysis, extending our contributions beyond the top-10 brands in the world.

6 CONCLUSION

Value-propositions in social media posts by different brands have not received much attention. This paper first presents an approach for identifying 16 categories of values in brand tweets based on 3 month twitter data posted by the owners of top-10 coffee brands. Second, using consumption-value theory, it identifies 4 top-level categories comprising of 10 of the 16 categories identified. It contributes to the body of knowledge in marketing by demonstrating that 1) there are significant different values that are embedded in tweets and the frequencies of these value categories vary 2) there are significant differences between values propositioned by brands (i.e. brands propose unique sets of values) and 3) certain value categories stimulate user's interest more than others (i.e. functional value category predicts whether a user retweets or favourites a particular tweet). These findings have implications for marketing practice, which have been discussed. For example, knowing value propositions of successful competitors may help shape new value propositions to be included or the awareness of one's own value-propositions could help fix misaligned propositions. Limitations and future work have also been discussed.

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