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A Theoretical Framework for Assessing Effects of User Generated Content on a Company's Marketing Outcomes

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Abstract

Marketing a brand and analyzing the effectiveness of promotional campaigns have always been major topics for marketing. In today's world, marketers use many data sources to analyze the behavior and responses of their consumers. This mainly involves data from Point of Sales, consumer surveys or home visits. However, with the advancement of web technologies, there is one more place where data is available: User generated content (UGC) from Web 2.0 applications. The purpose of this conceptual paper is to formulate hypotheses for the interrelationship between user generated content on the Internet and brand marketing and promotional effectiveness of a firm or campaign.

Keywords

User Generated Content, Marketing, Social Media, Web 2.0.

1. Introduction

The term Web 2.0 is associated with web applications that facilitate participatory information sharing, interoperability, user-centered design and collaboration on the World Wide Web (Kim et al. 2009, Wattal et al. 2010). Before the rise of Web 2.0 (around the year 2003), the Internet was like a broadcast where users were able to download the previously generated content, while the upload process was very slow for Internet users, or not possible. In that context, the Internet was similar to other broadcasting media like television.

However, with the emergence of Web 2.0 technologies, the Internet suddenly became a popular medium that allows users to interact and collaborate with each other using social media dialogue. Users became creators of online content through social networking sites, blogs, wikis, video sharing sites, hosted services or web applications. This phenomenon has also implications for the business world. Consumers are surfing on the World Wide Web, providing their comments, contributions for each and every brand and marketing campaign that companies conduct. Firms are well aware of the effects of the user generated content on the end consumers and the practice of marketing (Cova & White 2010, Lutz 2011). They are generating strategies to use this “user generated content” (UGC) for the advantage of their firms (Jones 2010).

The ultimate aim of the marketing activities of a firm can be summarized to pertain to four areas: to generate some level of awareness on existing and potential customers, to increase the consumer base of the relevant brand, to increase the share of their brand with respect to its competitors and to create maximum customer lifetime value customers for their company (Kotler & Armstrong 1996). In today's world, marketers use several data sources to analyze how to achieve these ultimate objectives. This mainly involves data from retail shipments, end customer sales (Point of Sales), consumer surveys or home visits. This data is consolidated and it is correlated with the companies ultimate marketing objective outcomes. In addition, there are effects of Internet and user generated content on the consumers. Consumers are affected by the comments, likes or dislikes of other consumers on the net (Karakaya & Barnes 2010). This is presumed to have implications of an order that companies are forming special brand management teams to be able to manage user generated content on the Internet, and that many agencies now offer these services.

The outcomes of any Internet campaigns of firms are measured by indicators that are within the Internet context. Metrics are gathered around concepts like reach and stickiness (Spencer & Giles 2000). These include numbers like hits and click counts, like-dislike numbers, comment numbers, length of time spent, specific time of exposure, user profile (gender, age, occupation, location) or how the user got there (through search engine, referred, link from another site). The Internet offers endless opportunities to measure these numbers and other information. The success of an online marketing activity of a firm is measured using these numbers, however it is still unknown whether good results on Internet metrics also lead to better marketing performance in terms of the ultimate marketing objectives of a company, e.g. to grow the consumer base of the products and services or to increase the volume share of company's brand(s).

This paper will try to formulate a model for connecting metrics related to user generated content to the configuration of the marketing domain, and with the marketing performance of a company. It will first offer a framework for marketing activities and measures of performance, then similarly for Internet marketing metrics as a partial mediator. In the theoretical model, a relationship is then assumed which leads to a number of hypotheses. We will also provide some ideas on a possible methodology for testing the hypotheses.

2. Theoretical Framework and Hypotheses

For the purposes of this study, we will simplify the 6P model of Luca and Suggs (2010) to a more standard 4P model (product, place, promotion and price) and will not elaborate on policy and partnerships. These 4P's will have effects that also show up on the Internet. Especially any variations in these 4P's will generate some user generated content on the world wide web (Ho & Dempsey 2010). The user generated content will be classified into 4 main areas for the purposes of this study: Social Networking Sites, Search Engine Results / Trend Sites, Blogs and Video Sharing Sites. Internet users contribute to these web sites through making comments, writing articles, likes, dislikes, adding videos, giving hyperlinks etc. (Ho & Dempsey 2010).

The main research question that will be formulated as a series of hypotheses in this paper is whether there is a relationship between the user generated content and the ultimate key performance indicators of marketing efforts. Based on a review of marketing literature, we identified four different main outcome measures. Please note that these are only meaningful when the firm's values, beliefs and philosophical orientation underlying its marketing program are consistent with the demands of using marketing metrics (Ling-Yee 2011).

1) Sales Volume Increase: This outcome refers to an increase in terms of “volume” of the goods or services that the company offers to the market place. It is usually measured against the market trends, and the companies past performance. This increase is correlated with company growth expectations and many companies have institutionalized ways of placing yearly sales volume targets and mechanisms to accomplish them.

2) Sales Share Increase: Sales share of a product/service is defined as the company’s total sales volume over market sales volume. This key performance indicator actually measures how that product/service is performing relative to its competitors. In a market that’s constantly expanding, only sales volume increase may not be sufficient to understand how that product/service is performing in its own market.

3) Customer Lifetime Value Increase: In marketing, customer lifetime value (CLV), lifetime customer value (LCV), or lifetime value (LTV) is the net present value of the cash flows attributed to the relationship with a customer. The use of customer lifetime value as a marketing metric tends to place greater emphasis on customer service and long-term customer satisfaction, rather than on maximizing short-term sales. (Shaw & Stone 1988). This characteristic therefore includes aspects of both loyalty, which refers to the time period where the customer buys that product/service constantly, and willingness to pay, the price that the customer is willing to pay for that product or service over that period of time.

4) Brand Awareness Increase: Brand awareness means the extent to which consumers know about the brand and the promotional campaigns of that brand either in a positive or negative way. Awareness has impacts on first choice as well as repeat purchase behaviors (Hoyer & Brown 1990). Brand awareness has 2 aspects: Brand recall and brand recognition. Brand recall corresponds to the recall effect of that brand on consumers’ mind when a product family is considered (e.g. measured by questions like “Which brands would you know in the xxx industry?”). Brand recognition corresponds to the comprehension and recognition effect of that brand on consumers mind when that brand name is heard or that brand’s visuals are seen by the consumer.

The framework proposed assumes a relationship from the user generated content caused by changes in the marketing domain on the performance. Naturally there is also a direct influence which is the focus of marketing research, but here we focus on the indirect relationship through user generated content, which mediates or possibly strengthens the effects of any change in the marketing domain on performance. Figure 1 gives an overview of the proposed framework.

Based on the theoretical framework, we will now formulate the related hypotheses. The first main assumption is that the configuration of the marketing domain (4Ps), and especially any change in this configuration, will lead to user generated content. We therefore propose:

Hypothesis 1: The amount and increase of user generated content at any moment in time depends on the current configuration of the 4Ps and any change in this configuration.

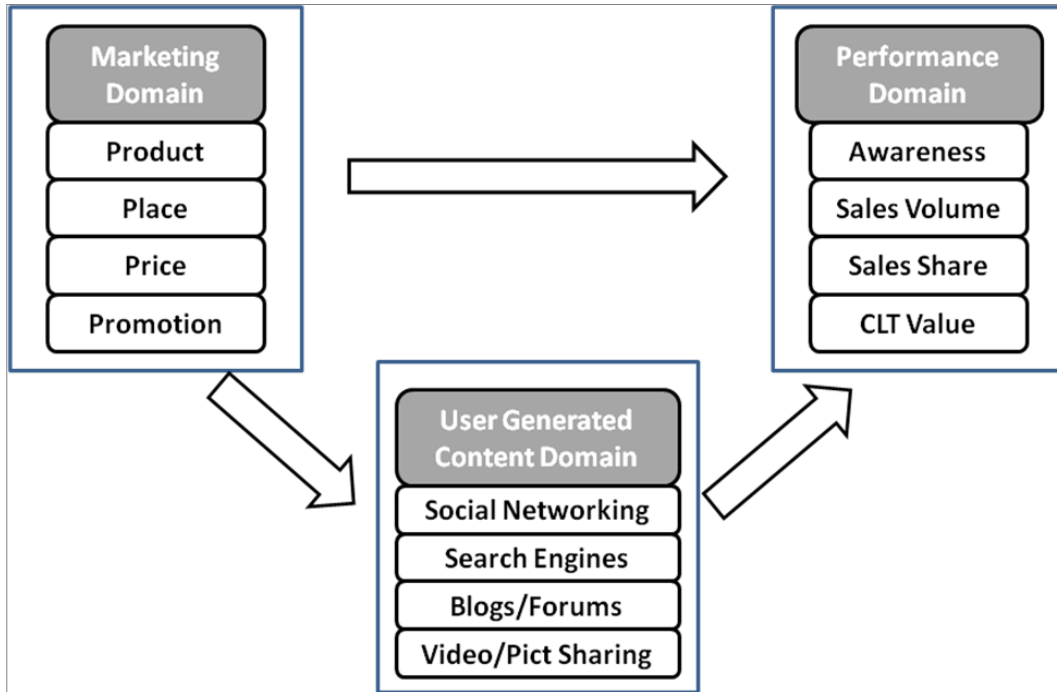


Figure 1: Theoretical Framework

The next hypotheses are formulated to cover the relationship between the user generated content and performance. The hypotheses suggest that the pure amount of user generated content will have an effect on brand awareness, but not on any of the other performance indicators. For those, only positive user generated content will lead to an increase. The reasonin gbehind this is that user generated content can be distinctly negative, e.g. caused by a price increase. This could have a positive effect on awareness, but not on sales volume or other aspects.

Hypothesis 2: The higher the amount of user generated content on the web, the higher the awareness levels will be.

Hypothesis 3: The user generated content amount on the web does not have direct effects on (a) the sales volume increase, (b) sales share increase and (c) average customer lifetime value.

Hypothesis 4: The more positive user generated content on the web, the higher (a) the sales volume, (b) the sales share and (c) average customer lifetime value will be (ceteris paribus).

3. Methodology and Data Gathering

The framework developed in this article is aimed at correlating the marketing activity outcomes of a company with the user generated content on the web. The ultimate aim is to find the relationships and patterns on how the user generated content affects the marketing performance and ultimately the financial performance of the company. These patterns of relation can vary from industry to industry, and from company to company. This paper will propose a method

which can be used by different companies in different industries to analyze their user generated content and correlate it with their marketing performance.

The first step involved in this process is to identify the “operating market” of that brand. An example can be shampoo market for Pantene brand from P&G. Second step is to identify the direct competitors of the brand. The direct competitors of the brand could be specified as the brands which are competing for the same market share in the operating market. After having identified the competitors, the process involves to gather the promotional campaigns of the competitors in a specific time period. It is important that these campaigns are close to each other in terms of their reach and the total marketing investment behind them. Any possible change in the marketing domain (4Ps) in that time also is recorded.

The next step is to measure metrics for user generated content and normalize these across promotions/brands. Normalization process would be a statistical process where each variable is measured across all the promotional campaigns. Then, the score of that promotional campaign is divided by the sum of the scores of all the competing promotional campaigns. By this method, each variable for each competing promotional campaign is assigned a number between 0 and 1. Example user content metrics that could be used include Likes, Shares, Comments, Contributions on Facebook or Tweets on Twitter for social networking, or similar metrics for video sharing etc. These can be considered as an initial base for a company and may be expanded.

The next step in the process is to gather the marketing and financial performance outcomes of the promotions/brand for that specific time period. This step involves to measure the 4 critical marketing performance indicators mentioned in the previous parts of this article. The outcomes are considered as the dependent variables in the context of the analysis.

After having the results of the performance domain indicators, the relationship between the user generated content metrics and performance can be determined. This can take the form of simple correlation analysis, or regression. The main goal is to first validate the hypotheses presented in the research model. This will also help the firm to identify which independent variables – user generated content metrics - are important for the firm and which are less important in causing certain performance changes. The analysis can also use more complex data mining methods related to pattern recognition or association rules.

4. Conclusion

This study has formulated a theoretical framework that marketing managers can embed in their daily operations to be able to analyze the impacts of user generated content on their marketing efforts. The framework considers user generated content as a mediating variable between marketing efforts and marketing performance of a company. Traditionally, marketing efforts will ultimately lead to some marketing performance in terms of awareness, sales volume, sales share and customer lifetime value. The hypotheses underlying this framework propose that it is not only the marketing efforts and spoken word of mouth that determines success of marketing efforts, but also the user generated content on the web. The study has tried to define a process which marketing managers can integrate in their marketing operations and make use of this data for further decision making processes. Currently, there are several software applications in the marketplace which are intended to do a analyses for a given promotional campaign, e.g. SAS® Social Media Analytics. These could help to obtain the necessary user generated content metrics.

In further research, this theoretical framework and process model should be applied in practice to be evaluated. The framework is aimed at being a high level and global framework which can be applied by all the industries who are offering products and services to end consumers and who are doing marketing efforts to create equity for their brands. On the other hand, the results received by one industry may or may not fit the results of other industries. A future research area would be to find the relevant weights of different user generated content metrics on different industries. One metric could be important for one industry but may not be important for some other industry.

References

- Cova, B. and T. White (2010) "Counter-brand and alter-brand communities: the impact of Web 2.0 on tribal marketing approaches", *Journal of Marketing Management* (26)3/4, pp. 256-270.
- Ho, J. and M. Dempsey (2010) "Viral marketing: Motivations to forward online content", *Journal of Business Research* (63)9/10, pp. 1000-1006.
- Hoyer, W.D. and S.P. Brown (1990) "Effects of Brand Awareness on Choice for a Common, Repeat-Purchase Product", *Journal of Consumer Research* (17)2, pp. 141-149.
- Jones, B. (2010) "Entrepreneurial marketing and the Web 2.0 interface", *Journal of Research in Marketing and Entrepreneurship* (12)2, pp. 143-152.
- Karakaya, F. and N.G. Barnes (2010) "Impact of online reviews of customer care experience on brand or company selection", *The Journal of Consumer Marketing* (27)5, pp. 447-457.
- Kim, D. J., Kwok-Bun, Y., Hall, S., and T. Gates (2009) "Global Diffusion of the Internet XV: Web 2.0 Technologies, Principles, and Applications: A Conceptual Framework from Technology Push and Demand Pull Perspective", *Communications of the AIS* 24, 657-672.
- Kotler, P. and G. Armstrong (1996) *Principles of Marketing, 7th edition*, Upper Saddle River, NJ: Prentice Hall.
- Ling-Yee, L. (2011) "Marketing metrics' usage: Its predictors and implications for customer relationship management", *Industrial Marketing Management* (40)1, pp. 139-148.
- Luca, N. and L. Suggs (2010) "Strategies for the Social Marketing Mix: A Systematic Review", *Social Marketing Quarterly* (16)4, pp. 122-149.
- Lutz, R. (2011) "Marketing Scholarship 2.0", *Journal of Marketing* (75)4, pp. 225-234.
- Shaw, R. and M. Stone (1988) *Database Marketing*, London: Gower.
- Spencer, C. and N. Giles (2000) "The planning, implementation and evaluation of an online marketing campaign", *Journal of Communication Management* (5)3, pp. 287-299.
- Wattal, S., Schuff, D., Mandviwalla, M., and C. B. Williams (2010) "Web 2.0 and Politics: The 2008 U.S. Presidential election and an e-politics research agenda", *MIS Quarterly* (34)4, pp. 669-688.