飲料メーカーの商標の共起ネットワークを用いたネーミングの模倣・差別化戦略の特徴

Characteristics of Homogenization and Differentiation Strategies for Naming Using Word Co-occurrence Networks of Beverage Companies Trademarks

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海外における研究活動状況

研究目的

研究を始めたきっかけは、商品名は商品の売り上げを左右する重要な要素であるにもかかわらず、ネーミング戦略に関する研究は遅れており、商標データを用いた大規模な研究も行われていないことを問題視した事だった。今回の学会では現時点で導出した結果をもとに、次に踏むべきアクションを見定めることを目的に参加した。

海外における研究活動報告

Recently, many products markets have become commoditized [1]. In commodity product markets, companies need to focus more on branding strategies because it is difficult to differentiate their products from competitors' products by improving the quality of their products and services. In this study, we focus on product naming strategies. Each companies tries to differentiate their own products from competitors' one by giving them unique names. In contrast, other companies may adopt a homogenization strategy in which they attempt to counteract the company's differentiation strategy by introducing a product name that mimics (to some extent) competitors' product name. This balance between differentiation and homogenization has been discussed by the optimal distinctiveness theory [2], but there has been little analysis using real data on naming strategies.

In this study, we focus on the beverage market, which is a highly commoditized market and where product naming is thought to have a significant impact on consumers' purchase decisions. Using data on beverage trademarks [3] (= product names) registered by Japanese four largest beverage companies over the last 13 years, we use a network science approach to elucidate the dynamics of the four companies' naming strategies.

First, we decomposed the trademark into words and excluded company names and one-letter words. Then tagged each word with one of the following four tags depending on its meaning: “ingredient”, “beverage type”, “sensory figurative expression”, and “taste figurative expression”.

Second, we made the network of all trademarks, which the nodes are trademarks. When a same word is included between a pair of two trademarks, which is defined as “homogenization”, an edge is

connected from a trademark with an older filing date to a trademark with a newer one, which the weights are measured by the jaccard coefficients between the two trademarks in the set of words used in the two trademarks.Figure1 shows the network, which some areas where nodes are concentrated(marked). Each area is where “vogue word” is used intensively. We defined vogue words as words that appear 15 or more times in all, and the number of appearances increases as multiple companies imitated to the others in a short time.

Third, we made the four tag-specific networks, which the nodes are only trademarks that include vogue words. To make this, we extracted pairs of nodes that both include vogue words with the same tag and difference in filing dates is within 2 years and edges which connected the pairs. For example, the pair of nodes "honey lemon" and “strong lemon”, which lemon is a vogue word, appears in the ingredient network. We found two major characteristics: first, Asahi and Suntory tend to imitate each other’s words which the meaning tag is classified as ingredients or beverage type.; second, Kirin tend to imitate Asahi's sensory figurative expression.

To our knowledge, this is the first study of branding strategies using large-scale data on trademarks. As mentioned above, in highly commoditized markets, the strategy of trying to disrupt another company's brand and steal consumers by making the product name look exactly like that of the other company is frequently implemented. By visualizing these "naming battle" dynamics as a network, this study successfully captures the differences in each company's strategies and the boom formation process. This study has a significant impact on the field of branding strategy, making known the effectiveness of new analytical methods.

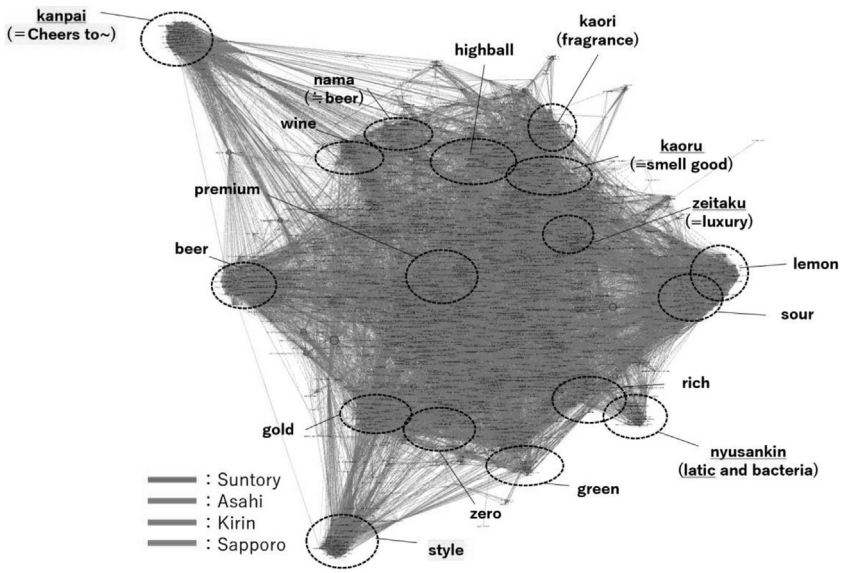

Figure 1 Trademark network in the beverage industry in Japan
Note: The color of each edge is the same as the color of the node on the origin (i.e., imitated) side of the edge.