

# Chapter 38

## Measuring Brand Community Strength

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### ABSTRACT

*The emphasis of this chapter is brand community. A brand community is a virtual community where consumers who share a set of social relations based upon usage or interest in a product gather into a group and mutually interact. The consumers' purchase decision-making is often influenced by word-of-mouth communications with the other consumers; who to trust among them is often determined by their similarity of product purchase behavior. This bidirectional effect between trust and product preference explains the emergence and the strength of brand community. This chapter presents a theoretical model of this phenomenon along with analyses of an actual virtual community. We designate the bidirectional effect as community gravity because it represents the power to induce users to join the community. This analysis provides insights for understanding consumer behavior in an online environment.*

### INTRODUCTION

Consumers often seek out others who share similar interests in products or services. Their decisions are often influenced by word-of-mouth (WOM), which is marketing-relevant information transmitted by individuals to individuals. Because the sender of WOM is independent of the market, consumers perceive such a person's opinions to be more reliable, credible, and trustworthy than

firm-initiated communications (Arndt 1967; Bickart & Schindler, 2001).

Recent developments on the internet enable consumers to share their consumption experiences with others in online environments more easily. Users' reviews and ratings of product exert effects on other consumers' purchase behavior. Whether a user refers to other users' ratings depends on the trust accorded by a user to the reviewer. The trust felt by a user for another user correlates with the similarity of the two users' ratings.

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Figure 1 depicts an illustration of bidirectional effects. In the first step, a user buys a product (shown as a music note) and another user trusts her. She will adopt the product (in step 2), which will increase the homophily effect (in step 3). Then, the new product can easily diffuse between the two users. The objective of this chapter is to present a theoretical model along with analyses of an actual virtual community.

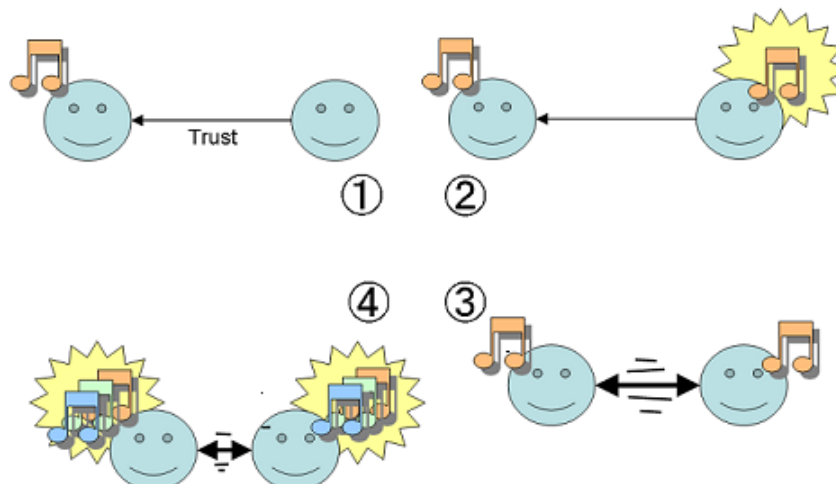
In this chapter, we describe analyses of a knowledge-sharing site called @cosme (www.cosme.net). It is the largest virtual community in Japan targeting women. It provides information and reviews related to cosmetic products. Cosmetic products are a typical experience good, where product quality is ascertained only after consumption. This uncertainty related to the product quality is apparent in various experience goods such as movies and books, but the cosmetic product is unique because of the presence of physical risk. A physical risk is a risk that jeopardizes physical vigor, health, and vitality. Drugs and medical treatments are most sensitive to this risk, but cosmetic products are also highly sensitive to it. The type of good and the presence of perceived risk make the product review useful and valuable for consumers.

Notable characteristics of @cosme are that a user can register other users who can be trusted; she can also post product reviews. The trusted users are bookmarked as *favorite user*, by a user, which signifies a feeling of both favor and trust. An earlier survey of @cosme (Yamamoto, 2005) elicited an interesting comment from an actual user:

First, I used @cosme simply as a product database. Then, I began to devote attention to other users who post reviews and use the social bookmark function. My bookmarks include persons whom I nicknamed ‘master of soap’, ‘master of fragrance’, ‘master of pack and serum’, and so on. I frequently check their reviews. I think I became able to use @cosme more when I started to focus on people.

This comment provides a good insight into how a user has come to devote attention to other reviewers, and how reviewers influence others. Data of more than 670 thousand users gathered over five years enables us to analyze the bidirectional interaction of trust and opinions: (i) How does a user put trust in others based on the similarity of ratings? (ii) What effects does that trust have on users’ purchase behavior and ratings? We designate the bidirectional effect as community gravity because it represents the power to induce users

Figure 1. Sequential model of the trust effect and the homophily effect



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