

# **Effect of Novelty and Tie Strength on Sharing Behavior for Firm Generated Content**

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## **Abstract**

Users' sharing behavior determines the diffusion of firm generated content on social media. However, it is unclear whether current literature on antecedents of sharing behavior can be applied to the context of the firm generated content in brand communities. Therefore, this study tackles two research questions about the effect of tie strength on sharing behavior for firm generated content and the moderating role of the novelty on the relationship between tie strength and sharing behavior. To answer the research questions, this study investigates three key constructs: sharing behavior, information novelty, and tie strength and suggests hypothesized relationships among them. This study is expected to contribute current knowledge in information sharing by focusing on strong tie subscribers whose role has been underestimated compared to weak tie subscribers.

## **Keywords**

Information novelty, tie strength, sharing behavior, brand attachment, firm generated content.

## **Introduction**

Information sharing refers to an individual's voluntarily relaying behavior of information (Shi et al. 2014). The examples include forwarding a message to one's social friends by retweeting on Twitter. In online social media, this behavior allows a piece of information to reach the sharer's social network. As with this intuition, Yang and Counts (2010) advocate that the sharing behavior determines the speed, range, and depth of information diffusion. The sharing behavior, especially, has a strong implication for firm generated content. In social media, like any user can become a content creator by freely posting short messages, pictures, or videos on his or her social account, firms can create content about their brands. In this regard, Kumar et al. (2016) define the firm generated content as firm-created marketing content in its social media accounts. Firms interact with users using the firm generated content at their official Twitter account or their page on Facebook as a form of brand communities established on public social networking sites (Habibi et al. 2014). Because individuals' voluntary sharing is a critical factor that determines the diffusion of this firm generated content, it is rational for firms to have interests in what motivates individuals' sharing behavior.

However, it is unclear whether current literature on antecedents of sharing behavior can be applied to the context of the firm generated content in the brand communities. More specifically, non-trivial anomaly arises regarding subscribers' tie strength with the brand communities. First, current literature on sharing behavior emphasizes the negative relationship between tie strength and sharing behavior (Granovetter 1973; Shi et al. 2014). Thus, those who have a weak relationship with a content creator are more likely to involve in sharing behavior for the content of the creator than those who have a strong relationship. However, it is questionable whether the identified relationship still holds for the firm generated content, whose creator is restricted to a firm, and which is primarily on promoting the firm's brand. Rather, subscribers who have a strong tie with the brand community are likely to voluntarily engage in sharing behavior based on the attachment they have developed to the firm's brand. Therefore, the role of

strong ties for the firm generated content would be different from that in the context which current information diffusion literature builds on.

Second, the other question emerges regarding the information quality of the firm generated content. Although Granovetter (1973) highlights the novelty of information, and other IS scholars admit the possibility that dimensions of information quality can affect information diffusion (Goel et al. 2016), little attention has been paid to how the level of novelty affects the relationship between tie strength and sharing behavior for the firm generated content. Especially, important tension arises between preferences of different strength types of subscribers. As current literature predicts, weak-tie subscribers may prefer novel firm generated content. However, it is doubtful whether strong tie subscribers also like novel content because conceptually it may deviate from what strong tie subscribers have attached. Accordingly, this study attempts to answer two research questions:

RQ1: How does the tie strength of subscribers with a brand community affect the sharing behavior for firm generated content?

RQ2: How does the level of novelty of firm generated content moderate the relationship between tie strength and sharing behavior for the firm generated content?

To answer the research questions, this study, first, investigates three key constructs from various literature: sharing behavior, tie strength, and information novelty. Second, the hypothesized relationship between tie strength and sharing behavior is suggested. Also, the hypothesis about the moderating effect of novelty on the relationship is discussed. Next, operationalization and analysis are explored to test the hypotheses. In turn, the expected contributions and limitations of this study will be discussed.

## **Relevant Literature**

### ***Information Sharing Behavior***

IS scholars have focused on the conditions under which individuals are voluntarily involved in knowledge sharing behavior by invoking social exchange theory (Blau 1964; Shi et al. 2014; Wasko and Faraj 2005). Social exchange theory indicates individuals can engage in social affairs when social rewards such as approval, status, and respect are expected (Blau 1964). Leveraging the theory, Wasko and Faraj (2005) state that individuals engage in knowledge sharing behavior such as contributing responses to a collective if the behavior is expected to give them a reputation in the profession. Shi et al. (2014) explain that people can be motivated to share novel content with their online social friends to obtain reputations as a valuable content provider. In addition to social exchange theory, Wasko and Faraj (2005) highlight that individuals who have developed relational capital with a collective contribute to the collective by sharing their knowledge. They further explain that relational capital exists when members have a strong identification with the collective and the affective nature of the relationship with the collective leads to the voluntary contribution.

### ***Tie Strength***

Tie refers to the connection of a dyad in a network (Borgatti et al. 2009). Granovetter (1973) conceptualizes the strength of the tie as a combination of four variables: the amount of time committed to one another, the emotional intensity, the intimacy, and the reciprocity. Granovetter highlights the strength of weak ties (SWT) on information diffusion. On the other hand, a stream of research has indicated an important role of strong ties on sharing behavior (Bakshy et al. 2012; Brown and Reingen 1987; Dewan et al. 2017). Brown and Reingen (1987) find that when a consumer has both weak and strong interpersonal relationships with others, the strong interpersonal tie is more frequently activated for the flow of product referral communication. Bakshy et al. (2012) emphasize that the signal of one's sharing behavior more greatly influences to strong tie friends than weak tie friends.

### ***Information Novelty***

Granovetter (1973) introduces novel information is diffused through weak ties. He uses novelty as the opposite concept of redundancy. Although his research can be interpreted as showing the possibility where the flow of information may benefit from a certain aspect of its quality, he does not argue novel information promotes information dissemination. Instead, he emphasizes the role of weak ties, who take over a bridge role, so that they can bring non-redundant information to a group. Accordingly, it remains unknown how

information novelty is associated with people's sharing behavior. IS scholars have recognized that information quality is a construct that consists of non-exhaustive dimensions, one of which can be information novelty (Ballou and Pazer 1995; DeLone and McLean 1992; Lee et al. 2002). In their conceptual study on idea evaluation, Dean et al. (2006) examine 90 articles and provide a rigorous explanation for the novelty. According to their investigation, novelty is a construct that consists of two sub-dimensions: originality and paradigm relatedness. Originality requires two criteria. First, the information should be rare. Second, the information needs to be ingenious, imaginative, or surprising. Paradigm relatedness refers to the degree to which a piece of information maintains or modifies a paradigm. Thus, according to their study, information is novel if it is rare and has transformation power so that it can force a shift in the way that reality is perceived.

## **Theory Development**

According to the definition of the tie strength by Granovetter (1973), strong tie subscribers can be identified as users who frequently interact with the brand community and have developed positive emotions to it. The literature on consumer behavior defines brand attachment as the bond connecting the brand with the self (Park et al. 2010). Further, brand-self connection and brand prominence are two critical factors that constitute the conceptual properties of brand attachment. According to the same literature, Brand-self connection represents the cognitive and emotional connection between the brand and the self. Brand prominence is reflected by the frequency with which brand-related thoughts and feelings come to mind. The conceptual properties of the brand attachment well match with those of strong tie defined by Granovetter. Thus, the behavior of the strong subscriber is expected to be comparable to that of people who have developed brand attachment. The literature on the consequences of brand attachment shows the extent to which people who have developed brand attachment commit to the brand. They judge the brand's parent firm's behavior as less unethical (Schmalz and Orth 2012). Also, they are willing to use their own resources for the brand (Park et al. 2010). Due to the promotional nature of firm generated content, users who receive the content may regard it as a sort of disturbance (Nisar and Prabhakar 2018). That means the sharer should take the risk of losing a part of their social network. Thus, sharing of firm generated content requires strong tie subscribers who can exchange their social capital for their sharing behaviors. This argument predicts that a strong relationship is an imperative factor that determines users' sharing behavior for firm generated content, implying the following hypothesis.

**HYPOTHESIS 1:** Tie strength of a subscriber with a brand community is positively associated with the sharing behavior for the content generated by the brand community.

Based on the literature on consumer behavior, the positive relationship between tie strength and sharing behavior in the brand community can be attributable to the brand attachment. However, given the multidimensional nature of information quality, not every dimension is equally important for brand attachment. In other words, the focal dimension, which the brand attachment works through, is how much the information is relevant to the brand (Gill-Simmen et al. 2018). To illustrate, the introduction of a new line of product of a brand can be regarded as high-quality information in relevance and this information may attract attention from users who have developed an attachment to the brand. However, local news, which will be categorized as low-quality information in relevance, cannot be associated with users' brand attachment regardless of its interestingness. Thus, for brand attachment to operate, it is important how much the information can secure high quality in relevance to the brand.

Although relevance is the key dimension that invokes brand attachment for strong tie subscribers, it can conceptually conflict with another quality aspect, which is a novelty. As was discussed earlier, novel information can be conceptualized as rare, unusual, or uncommon information (Dean et al. 2006). Thus, novel information in a brand community may somewhat deviate from the identity collectively formed from the existing content of the community. Accordingly, novel information attenuates the effects of brand attachment on sharing behavior, implying that sharing behavior of strong tie subscribers for novel information may not be as active as for content highly relevant to a brand. In contrast, weak-tie subscribers' sharing behavior cannot be explained by brand attachment. Rather, social exchange theory predicts they share novel information. Shi et al. (2014) explain two sources of earning reputation when people relay novel content to their online social friends. First, sharing novel content proves the sharer's ability to process a lot of information and to handpick interesting content. Second, it shows how well connected the sharer is

because the original content came from paths that the sharer had developed. Thus, weak-tie subscribers will more engage in sharing activity for novel content than for content easily expected in the brand community. The discussion so far implies the relationship between tie strength and sharing behavior can be determined by the level of novelty in the firm generated content. Thus, this study hypothesizes that:

**HYPOTHESIS 2:** The level of information novelty negatively moderates the positive relationship between a subscriber's tie strength and sharing behavior.

## **Operationalization of Constructs**

**Sharing Behavior:** Consistent with previous research (Goel et al. 2016; Shi et al. 2014; Yang and Counts 2010), this study uses individuals' retweeting on Twitter as a proxy for sharing behavior. As Facebook and Twitter together are the two largest social networking sites, the feature of 'share' on Facebook could be used. However, previous literature on comparing Twitter with Facebook highlights that Twitter incorporates features of news media and is primarily used to relay content among users (Kwak et al. 2010) while content sharing is not Facebook users' primary purpose (Hughes et al. 2012). Building on the findings, the author of this study decides Twitter is a better platform than other social media in terms of reflecting individuals' sharing behavior.

**Information Novelty:** As discussed earlier, novelty consists of two sub-dimensions: originality and paradigm relatedness. For each dimension, Dean et al. (2006) suggest the four-level quality scales and description for each scale to measure the degree to which a piece of information has the conceptual property. In following their rating procedure, anchoring description for each scale is given to independent raters, and scores for the dimensions are calculated.

**Tie Strength:** Ties on social networking sites such as Twitter is not designed to show how a dyad is emotionally attached (Kane et al. 2014). Thus, previous research has used the concept of reciprocity to measure the strength of ties. In addition to the reciprocity, this study uses frequency of communication between a dyad reflected in their dialogues to measure the tie strength.

This study leverages logistic regression because a binary variable, whether a subscriber in a brand community involves in sharing behavior, becomes the dependent variable for this study. Tie strength of the subscriber with the brand community and the level of novelty of the content which the subscriber shares are used for the independent variables at the analysis stage.

## **Expected Contribution**

This study is expected to make three key contributions to current information sharing literature and practice. First, SWT indicates the importance of weak ties in novel information diffusion, but for sharing of firm generated content, the role of strong ties should not be underestimated. In this regard, this study sheds lights on strong tie subscribers based on their attachment to a brand community. Second, although information quality is an important variable in IS research, current literature is silent on how novelty is associated with information sharing. This study fills this vacancy by drawing the concept of the novelty from creativity literature and finding its moderating effect on the relationship between tie strength and sharing behavior. Third, the result of this study is expected to be applied to social media content strategies for organizations.

## **Limitations**

Current study also has limitations. First, although this study introduces communication frequency in addition to reciprocity to reflect tie strength, the level of the emotional intensity of a tie cannot be observed, thereby not able to be included in the analysis. Second, since dimensions of information quality are not necessarily mutually exclusive, the measurement of novelty can be affected by other quality aspects. However, the author of this study expects these issues can be properly addressed as this study further proceeds.

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