Influential Users in Social Network Services: The Contingent Value of Connecting User Status and Brokerage

TREO Talk Paper

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Abstract

Social network services (SNSs) are fundamentally transforming the way businesses communicate with customers. Key issues in understanding social media and such services include how to generate more information traffic and how to increase information exposure. Unlike previous studies in the research stream studying patterns of information diffusion, we investigate the role of influential Twitter users, focusing on their positions in social networks, in redistributing contents generated by other users. To do this, we employ sociological theories in determining which characteristics of connecting users provide more influence. Specifically, a connecting user’s position in networks observable to audience affects the user’s influence in a way that connecting users with relatively high status and those embedded in a closely connected community exert the greatest impact on the network. Moreover, the value of a connecting user’s network position can be contingent on the source user’s status and network position: a high-status connecting user contributes more to information diffusion when tweets are generated by a low-status source user and a connecting user who is embedded in a well-connected network contributes more to information diffusion when tweets are generated by a source user in a brokerage position. After exploring data on tweets about Apple products and services, we find evidence that support this set of theoretical claims. Such findings would also provide a useful guidance for practitioners to enhance information diffusion by effectively designing the sequence of content recipients based on their network positions. The contributions of this study can be summarized as the following table.

Table. Study Contribution

<table>
<thead>
<tr>
<th>Contribution</th>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distinguishes the role of a “connecting user,” who is not a creator of content yet plays an important role in diffusion of the content, from the role of a “source user,” who is the creator of the content.</td>
<td>Theory</td>
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<tr>
<td>The perceived value of information may be affected by the interplay between source user characteristics and connecting user characteristics (e.g., content may be regarded as more valuable when it is generated by low status source user, yet endorsed by high status connecting user).</td>
<td>Theory</td>
</tr>
<tr>
<td>SNS marketing designs for sequencing users based on their network positions may be helpful.</td>
<td>Practice</td>
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