Social Networks and the Value of Collaborative User-Generated Content

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User-generated content is increasingly created through collaborations among multiple individuals. We find that the structure of the social network responsible for collaborative content impacts its value. Effects are stronger for newer content with the exception of network strength, which has a stronger impact on increasing viewership for older collaborative content.

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EXTENDED ABSTRACT
User-generated content is a valuable resource for many firms. Examples include product reviews that affect product search, choice, and sales (Chevalier and Mayzlin 2006; Dellarocas, Zhang, and Awad 2007; Mayzlin and Moe 2009), consumer-created ads that generate brand excitement (Kozinets, Hemetsberger, and Schau 2008), and user-developed information that drives traffic to websites that depend on advertising. Although much user-generated content is created by individuals, an increasing amount is developed by groups of people working collectively. This includes the wiki websites Wikia and Wikipedia, where contributors work together on articles; virtual worlds such as Second Life and World of Warcraft, where participants create shared objects and spaces and perform shared tasks (Hemp 2006); and citizen journalism websites like CNN’s iReport, where amateur reporters create content that drives advertising viewership. All of these involve collaborative user-generated content, which may be distinguished from individually created content through characteristics such as concurrent editing of the same content, the need to reach consensus given constraints about what to include and what not to include, and final output that is often substantially different from the original contributions made by individuals.

We propose that the social networks that result when individuals work with others to generate multiple sources of user-generated content are important determinants of the market value of that content. We assess market value through viewership since viewership is a primary determinant of the revenue that advertisers obtain from user-generated content. We focus on three dimensions of the social networks involved in the creation of collaborative user-generated content: (1) the size of the network (i.e., the number of distinct contributors to the user-generated content), (2) the strength of the network (i.e., the intensity with which collaborators work on multiple other sources of user-generated content), and (3) the richness of the network (i.e., the relative importance of other user-generated content on which collaborators work). We further argue that the effects of these network characteristics in increasing the market value of collaborative user-generated content should be greater for newer relative to older content, since collaborative content is likely to stabilize over time.

We test our hypotheses by applying social network analysis (SNA) to Wikipedia’s Medicine Wiki project, examining how social network characteristics affect the market value of user-generated content. Medical information is an increasingly important and valuable type of user-generated content (Fox and Jones 2009). We downloaded the full text history of 2,026,992 revisions of 14,088 articles by 40,479 unique contributors within the Medicine Wiki project as of March 2009 to construct a 174,800 observation monthly panel. Controlling for article topic, links to other content, and other factors that may affect the market value of user-generated content, our data provide unique insights into the role of social networks in the creation of user-generated content. Results demonstrate a curvilinear relationship between the number of distinct contributors to content and its market value. We also find that content created by stronger and richer social networks of contributors generate more valuable content. These social network effects are stronger for newer user-generated content with the exception of network strength, which has a stronger impact on increasing market value as content ages.

REFERENCES

501 Advances in Consumer Research Volume 38, © 2012