

# Potentials and Limitations of Cyber Knowledge Brokers as Knowledge Providers

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## INTRODUCTION

This encyclopedia entry examines cyber knowledge brokers (CKBs), which are social media sites that are primarily oriented towards creating, sharing, and disseminating knowledge instead of promoting only sociability. Social media sites that are oriented towards knowledge sharing can further be subdivided into: (a) those that provide the platforms for knowledge sharing and allow users to freely create and to distribute content (for example, YouTube, Digg, and Delicious), and (b) those that assume a strict control of the content creation and distribution process (such as About.com, Ehow.com, and Howcast.com). The focus of the present encyclopedia entry is on the latter category of social media sites. CKB is a phenomenon whereby online content hosts, through the application of various techniques, engage in the solicitation of knowledge sharing, as well as the provision of structures that facilitate the creation and the distribution of knowledge through a particular site. CKBs, such as About.com, Demand Media, and Howcast.com, are similar to websites like Wikipedia and YouTube in their content aggregating functions. However, CKBs' most unique attribute is their commercialization of knowledge sharing, which is done by either paying for knowledge content contributed through their sites or by engaging in advertising revenue sharing arrangements with contributors. There exist various definitions of knowledge in different disciplines and contexts. We follow Nonaka and Takeuchi's (1995) conceptualization of knowledge as a combination of insights and experiences which can be embodied in individuals or embedded in organisations as processes or practices. While much of the debate

in the literature has focused on the extent to which knowledge can be codified (Hayes & Walsham, 2003), we argue in agreement with the content perspective in this entry that practices such as writing an article, making a video, and recording an audio podcast can allow for the transmission of knowledge. Despite the increasing role of knowledge brokers in knowledge sharing, there is a sense that "knowledge brokering is unrecognized and unplanned" (Canadian Health Services Research Foundation, 2003, p. 1). The aim of the present encyclopedia entry is to define CKBs, provide a conceptual framework to better examine CKBs, and to describe existing CKBs, such as About.com and Demand Media.

The encyclopedia entry will start with a general introduction into the topic. In the next section, a review of relevant literature will be conducted comprising: 1) theoretical background of knowledge brokering and sharing, and 2) a brief overview of CKB practices. Then, we examine various CKBs, and show their potentials and limitations to act as knowledge providers. Finally, we discuss how knowledge is being commodified in CKB sites and we draw conclusions for how knowledge is created, diffused, and made sense of on the web.

## BACKGROUND

As social media sites become increasingly integrated into society, they provide a good solution to the problem of connecting people who are looking for expert knowledge with those who have it. According to a new report by the Pew Internet & American Life Project, 66% of all Internet users make use of social networking

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sites (Brenner, 2012). Much of the research examining social media has focused on the social aspects of connecting via these sites (boyd & Ellison, 2008; Hogan & Quan-Haase, 2010), without much regard to the potential informational benefits of the sites for their users. This is in spite of the fact that many social media platforms are specifically geared toward supporting knowledge sharing practices. A study of content contribution to YouTube by Oh, Susarla, and Tan (2008) found that social influence contributes to user-generated content (UGC) in such platforms. The idea is that most people will engage in the generation and sharing of content when other individuals within their social network also engage in similar prosocial behavior. This is often referred to as reciprocity in the social network literature (Wellman et al., 2001). Specifically, Doorn and Taborsky's (2011) concept of "generalized reciprocity" can be used to describe the knowledge sharing that occurs in social networks when members uphold the principle of "help anyone, if helped by someone" (p. 1).

Recent studies have demonstrated that what makes organizations productive and innovative is how workers exchange information across networks (e.g. Teigland & Wasko, 2003; Conklin et al., 2013). Hence, it is essential to the success of an organization that its workers have the skills to build and sustain social networks of experts who can be integrated into problem-solving processes. There is some empirical evidence showing the types of expertise networkers need to have. An ethnographic study followed 30 independent workers and found that connections with colleagues kept them up-to-date and provided them with important opportunities (Nardi, Whittaker, & Schwarz, 2002). Workers were found to spend considerable time building these intentional personal networks. While we have a good understanding of how knowledge brokers facilitate knowledge sharing in organizations (Oldham & Mclean, 1997; Quan-Haase, 2009; Meyer, 2010; Ziam, Landry, & Amara, 2009; Meyer, 2010; Abbate & Coppolino, 2011), little is known about the activities of CKBs. The creation of social media sites geared toward knowledge brokering has established a new culture of knowledge sharing on the Internet. The emerging CKB phenomenon has generated a new level of importance in knowledge brokering that deserves critical investigation both from a practical and theoretical standpoint.

Brokering practices can be analyzed from socio-psychological and economic theoretical standpoints.

In such studies, knowledge sharing is conceptualized as a form of social exchange that is influenced by individuals' considerations of the cost and benefit of engaging in knowledge sharing. The key assumption of social exchange theory (SET) is that human behavior consists of the exchange of rewards or resources (Zafirovski, 2003; Ward & Berno, 2011). Knowledge shared through the various CKBs is constructed as an exchange of monetary compensation for the need to make connections. Through the application of SET theory, it can be argued that knowledge providers will only distribute their work in CKBs when they can expect the benefits to outweigh the costs of creating knowledge content, supporting an important assumption of SET, namely the analysis of costs and benefits (Choo & Cyr, 2009).

The theory of connectivism is used to conceptualize the connection-seeking motivation in knowledge sharing that occurs through knowledge brokering. The theory of connectivism as popularized by Siemens (2004) is founded, among other things, on the principle that the knowledge residing in a database needs to be connected with the right people in the right context to foster learning. Knowledge providers seek to remain current in their field through the connections they form by sharing their knowledge in social media.

## CYBER KNOWLEDGE BROKERING PROCESSES

### Cyber Knowledge Brokering Exchange Relationships

As noted above, the phenomenon of cyber knowledge brokering represents a new culture of knowledge sharing on social media. The emergent knowledge sharing culture is based both on an economic and a social model.

Knowledge brokering involves the negotiation of relationships. The model in Figure 1 depicts how the CKBs enter into three distinct exchange relationships in the process of facilitating the creation and distribution of knowledge. We explain next how these relationships play out in the context of CKBs. A CKB serves as an intermediary between the knowledge provider and the seeker, as well as a *trading* partner of the knowledge provider. The commodity of exchange is the knowledge content created by the knowledge provider. The

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