# Chapter 92
# Social Media and Big Data:
## A Conceptual Foundation for Organizations

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## ABSTRACT

*The introduction of new and the evolution of existing social media technologies have enabled efficient and broader communication through online social interaction. Today consumers' thinking has shifted towards their trusted network for guidance rather than simply accepting what organisations tell them. With the advent of social interaction, knowledge management paradigms are being stretched beyond their ability to deliver useful results, which is forcing change within organisations globally. Using only transactional and internal data will result in mistaken conclusions or missed opportunities. Social media helps organisations acquire and manage massive amounts of data to better understand their customers, products, competition, and markets and make better decisions using Big Data solutions. These solutions enable organisations to decide on the basis of evidence rather than intuition. This chapter introduces Big Data, Big Data technologies used for capturing knowledge from social media and discusses Big Data Solutions for organizations.*

## INTRODUCTION

Knowledge management is about managing the knowledge of and in organizations. According to Duhon (1998), "Knowledge management is a discipline that promotes an integrated approach to identifying, capturing, evaluating, retrieving, and sharing all of an enterprise's information assets. These assets may include databases, documents, policies, procedures, and previously un-captured expertise and experience in individual workers". Traditional Knowledge management is about two ideas:

1.    To capture explicit knowledge from people and
2.    To consistently find the right knowledge at the right time.

The introduction of new technology, such as social media, and the evolution of existing technology have enabled efficient and broader communication and have introduced a significant source of data. Social media is changing organizations around the globe and is increasingly being used as an information source. Social media has sparked thinking and behaviour of people on a massive scale. Today, consumers thinking has shifted towards their trusted network guidance rather than simply accepting what brands tell them.

Social media data can be captured from web-tracking, blogs, discussion forums, chat rooms, social networking websites, video sharing websites, photo sharing websites, collaborative websites, social bookmarking websites and virtual worlds. Social media platforms used by organizations are increasingly being used to engage with employees and the public (National Archive, 2013). The U.S. Navy describes the importance of using social media in its Social Media Handbook as helping (American Council, 2011) "fulfill your obligation to communicate with all of your stakeholders. It also provides another, often richer, means of sharing information with internal and external audiences. Your stakeholders are increasingly using social media, and you're better off reaching them there than not at all". Organizations have described social media tools as a "multiplier of resources" where "more audiences can be reached with fewer resources needed on the part of the organization" (National Archive, 2010).

Social media is impacting knowledge management and decision making. Traditional knowledge management paradigms, focuses primarily on creating structured mechanisms to provide a repeatable process for effective knowledge management. With the advent of social interaction, these knowledge paradigms are being stretched beyond their ability to deliver useful results. Using only transactional data and internal data will result in mistaken conclusions or missed opportunities.

Big Data solutions can help organizations acquire and handle massive amounts of social media data to better understand and make decisions about their customers, products, competition, and markets. The data captured from social media include reposting information available on organizations' websites, posting information not available on publicly accessible organization websites, soliciting and responding to comments, and providing links to other websites. Social media also includes data from communication and interaction with the public or collaborating with other organizations.

Using Big Data solutions enables managers to decide on the basis of evidence rather than intuition. Data-driven decisions are better decisions. For Big Data solution the organization is required to define what Big Data is, the domains of data that need to be considered, characteristics of Big Data and the technologies used for Big Data Solutions. Data integration captures and integrates both structured and unstructured Big Data within the enterprise. Big Data solutions enable data from social media to be captured, stored, processed and analyzed.

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