

Chapter 119

Web 2.0 Concepts, Social Software and Business Models

Matthes Fleck

University of St. Gallen - mcm institute, Switzerland

Andrea von Kaenel

University of St. Gallen - mcm institute, Switzerland

Miriam Meckel

University of St. Gallen - mcm institute, Switzerland

ABSTRACT

This article provides an overview of the most prominent definitions, basic concepts and applications of the term Web 2.0. In addition to the seven principles outlined by O'Reilly, this article will investigate Anderson's long tail concept, issues of transparency and the effects of an interconnected user base on E-Business. Later, the focus will shift from the concepts of Web 2.0 towards the social software applications of this new Web era. Blogs, social network sites, wikis, folksonomies and virtual worlds will be explained and their (potential) relevance to e-business will be outlined. The article closes with a brief discussion about the future research directions of Web 2.0 for successful E-Business.

INTRODUCTION

The Internet has become a social catalyst of great importance. In particular, the term Web 2.0 represents a wide range of changes which are worth investigating, specifically with respect to their influence on E-Business. Although Web 2.0 has technical connotations, it describes, first and foremost, the social dynamics of the Internet (Hoegg, Meckel, Stanoevska-Slabeva, & Martignoni, 2006). In its essence, the term Web 2.0 describes the evolution

from a read-only Web to a read-write Web (Warr, 2008).

Coined by Tim O'Reilly (2005, 2006), the term Web 2.0 was used to describe developing forms of web-based co-operation and data exchange. Later, Web 2.0 became a generic expression for the fundamental changes of the Internet. The concepts and ideas of mass collaboration (Tapscott & Williams, 2006), collective intelligence (Albrycht, 2006; Surowiecki, 2004), knowledge exchange (Haythornthwaite, 2005a), boundless democracy (Rheingold, 2002) and the integration of niche offers and remote corners (Anderson, 2006) had been outlined previ-

DOI: 10.4018/978-1-61520-611-7.ch119

ously by Web 1.0 visionaries. The development of Web 2.0 made possible the interaction and communication of users through the production and exchange of information based on platforms such as Weblogs (Blood, 2004; Schmidt, 2007), social networks (boyd & Ellison, 2007), social bookmarking sites (Golder & Huberman, 2005, 2006), wikis (Spinellis & Louridas, 2008) and virtual worlds (Louie, 2007). These new technologies allowed the creation, modification and distribution of almost every imaginable kind of digital content and led to new social and economic phenomena. The current article investigates the most relevant concepts and platforms of Web 2.0 as well as provides an overview of social software and its (potential) uses within E-Business.

BACKGROUND

The Concept of Web 2.0

After the collapse of the dot-com bubble, Tim O'Reilly compiled the following seven principles that exemplified the term "Web 2.0" (O'Reilly, 2005, 2006; Warr, 2008). These seven principles, could be subdivided into the primary drivers of Web 2.0 development and the primary design principles of Web 2.0.

- The Web as platform
- Harnessing collective intelligence
- Data as the next "Intel Inside"
- Perpetual Beta
- Lightweight software and business models with cost-effective scalability
- Software above the level of a single device
- Rich user experience

The Web as Platform

Web 2.0 must be understood as a Platform which is loosely tied together through its users and ap-

plications. The more users who participate, the stronger and better the Platform becomes. Small pieces of information and services are recombined by users leading to an immense variety of social software applications. In the language of relational view, "critical resources may span firm boundaries and may be embedded in inter-firm resources and routines" (Dyer & Singh, 1998, p. 660). Unique data and user participation are the primary resources of those platforms. Technical routines such as RSS (Really Simple Syndication) and API (Application Programming Interface) allow the simple exchange and recombination of these resources.

Harnessing Collective Intelligence

Web 2.0 is based on the strength of collective intelligence. Amazon.com, for example, uses the power of collective intelligence in product reviews by its users to influence the buying decisions of others. This information in these reviews enables more targeted search results for customers, increasing customer value and satisfaction as well as increasing site traffic. The online encyclopedia Wikipedia was founded on the idea that the more people who participate in generating and refining content, the more useful it becomes to its users. The effects of large-scale user collaboration in knowledge systems have been outlined by James Surowiecki (2004) and have been termed crowd wisdom. Collective intelligence is regarded as a core pattern of Web 2.0, relying upon positive network effects and permanent peer review (Warr, 2008) to increase transparency and credibility.

Data as the Next "Intel Inside"

Each Internet application is based on some type of specialized data. Those data might be products, sellers, maps, songs or user profiles. The control over exclusive databases can lead to market control and, consequently, outsized financial returns. Therefore, unique collections of data have become

8 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:
www.igi-global.com/chapter/web-concepts-social-software-business/41281

Related Content

Which Move to the Middle: Industry Consortia or Private Exchanges?

Susan A. Sherer and Yuliang Yao (2006). *International Journal of E-Business Research* (pp. 22-37).
www.irma-international.org/article/move-middle-industry-consortia-private/1857

Mobilization Techniques Utilized by Leading Global E-Commerce Sites

J. Christopher Sandvig (2016). *International Journal of E-Business Research* (pp. 1-16).
www.irma-international.org/article/mobilization-techniques-utilized-by-leading-global-e-commerce-sites/152315

E-Retail Adoption in Emerging Markets: Applicability of an Integrated Trust and Technology Acceptance Model

Amresh Kumar, Pallab Sikdar and Md. Moddassir Alam (2016). *International Journal of E-Business Research* (pp. 44-67).
www.irma-international.org/article/e-retail-adoption-in-emerging-markets/157393

The Future of Mobile Technologies and Applications in China

Xiao Chen and Wei Liu (2006). *Handbook of Research in Mobile Business: Technical, Methodological, and Social Perspectives* (pp. 487-503).
www.irma-international.org/chapter/future-mobile-technologies-applications-china/19496

Strategic E-Business/ IT Alignment for SME Competitiveness

Eduardo Escofet, María José Rodríguez-Fórtiz, José Luis Garrido and Lawrence Chung (2011). *E-Business Managerial Aspects, Solutions and Case Studies* (pp. 23-41).
www.irma-international.org/chapter/strategic-business-alignment-sme-competitiveness/50763