

# Chapter XXXVII

## Integrating Web 2.0 Technologies within the Enterprise

**R. Todd Stephens**

*AT&T Corporation Collaboration & Online Services, USA*

### ABSTRACT

*This chapter examines the elements of the new Web 2.0 technology base and reviews the lessons learned when implementing these technologies. Collaborative applications have made enormous inroads into the enterprise and bring unprecedented speed and transparency to communications. Researchers and practitioners alike are focusing on how collaborative applications can replace the one-way communications inherent to Intranet sites. This chapter is intended for individuals who are looking toward the possibility of integrating these new technologies into the core communication medium. Unfortunately, there are still large barriers such as politics, turf battles, integration, and poor usability with the current product set. A company's ability to manage information effectively over its life cycle, including sensing, collecting, organizing, processing, and maintaining information, is crucial to the long term success in a global economy. The success or failure of this integration may very well create or lose a competitive advantage for the enterprise. What is missing is a framework or roadmap in which organizations can plan out their execution of Web 2.0 deployment.*

### INTRODUCTION

Enterprises are being transformed from an old business model built around the command and control aspects information management to a

new one where collaboration is the essential component. We are witnessing this transformation outside the enterprise with the success of Web 2.0 technologies like Wikipedia, YouTube, and Flickr. Yet, within the walls of the organization, progress

is slow. This chapter will examine why the adoption rates for Collaborative and Social Software are low and what can be done to improve them. This research emerges from three Fortune 500 companies which the resulting methodology has worked to increase the adoption rates ten fold.

Traditional implementation methodologies focused on the hardware, software, and the associated functionality. Our research indicates that while these are important they do not lead to mass adoption of the application by the enterprise. Many functions that information workers perform are dictated by the business and current transactional systems like CRM, ERP, or accounting systems. Collaboration and Social Software need to be integrated as situational applications and although they are optional, they are required to reach higher levels of performance. Members of complex teams are less likely to utilize collaborative tools in the absence of other influences such as executive encouragement, modeling collaborative behavior, creating a “gift” culture, training, supporting a strong sense of culture, assigning team leaders, building, and understanding roles (Erickson & Gratton, 2007). Our research indicates barriers to adoption including social issues, cultural issues, awareness issues, educational issues, and political issues. This research will focus on the awareness and educational issues since most organizations implementing Web 2.0 will face these first issues first.

## **BACKGROUND**

### **Web 1.0 Intranets**

The term Web 1.0 emerged from the research around Web 2.0. Basically, Web 1.0 focused on a read only Web interface while Web 2.0 focuses on a read-write interface where value emerges from the contribution of a large volume of users. The Internet as well as the Intranet initially focused on the command and control of the information

itself. Information was controlled by a relative small number of resources but distributed to a large number which spawned the massive growth of the Web itself. Like television, the Web allowed for the broadcasting of information to a large number of users.

Inside the organization, the Intranet has changed the way organizations structure and operate their business. Specifically, the Intranet has centralized communications and corporate information as well as built a sense of community across organizational boundaries (McNay, 2000). Typical organizations will have office-based employees in various locations, telecommuting, and off-shoring staff. The traditional day by day communication landscape has changed from personal to electronic. The migration to electronic communications emerged as standards, technology and infrastructure matured. This allowed more information sharing and community building to occur without a requirement of physical location. Over the past several years Intranets have emerged as the key delivery mechanism for application and business information. Intranets may be thought of as providing the infrastructure for intra-organizational electronic commerce (Chellappa & Gupta, 2002). This allows organizations to utilize the technology to achieve its organizational goals and objectives. Web 1.0 allowed the organization to govern the information flow and focus on achieving the business goals.

Unfortunately, most technologies fail to deliver competitive advantages over an extended period of time. Investments in information technology, while profoundly important, are less and less likely to deliver a competitive edge to an individual company (Carr, 2003). This is especially true in the world of the Web 1.0 since much of the knowledge and information is disseminated all over the world as quickly as it gets published. Organizations are beginning to see that the command and control model is no longer effective at developing a high performance work force which opens the door for the next evolution in technologies as described by the Web 2.0 framework.

16 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/integrating-web-technologies-within-enterprise/20198](http://www.igi-global.com/chapter/integrating-web-technologies-within-enterprise/20198)

## Related Content

---

### Smartphone Effects on Youth: Case of United Arab Emirates

Badreya Al-jenaib and Alyzia A. Almansouri (2020). *International Journal of e-Collaboration* (pp. 82-96).  
[www.irma-international.org/article/smartphone-effects-on-youth/249671](http://www.irma-international.org/article/smartphone-effects-on-youth/249671)

### Propositions for Cognitive Support of E-Collaboration

C. A.P Smith and Stephen C. Hayne (2007). *Emerging e-Collaboration Concepts and Applications* (pp. 226-249).  
[www.irma-international.org/chapter/propositions-cognitive-support-collaboration/10076](http://www.irma-international.org/chapter/propositions-cognitive-support-collaboration/10076)

### Crime Prediction Using Twitter Data

Lydia Jane G. and Seetha Hari (2021). *International Journal of e-Collaboration* (pp. 62-74).  
[www.irma-international.org/article/crime-prediction-using-twitter-data/278839](http://www.irma-international.org/article/crime-prediction-using-twitter-data/278839)

### Impact of Activities in the Virtual Environment

Michelle W.L. Fong (2004). *E-Collaborations and Virtual Organizations* (pp. 206-230).  
[www.irma-international.org/chapter/impact-activities-virtual-environment/8902](http://www.irma-international.org/chapter/impact-activities-virtual-environment/8902)

### A New Algorithm on Application of Blockchain Technology in Live Stream Video Transmissions and Telecommunications

Osamah Ibrahim Khalaf, Ghaida Muttashar Abdulsahib, Hamed Daei Kasmaei and Kingsley A. Ogudo (2020). *International Journal of e-Collaboration* (pp. 16-32).  
[www.irma-international.org/article/a-new-algorithm-on-application-of-blockchain-technology-in-live-stream-video-transmissions-and-telecommunications/244178](http://www.irma-international.org/article/a-new-algorithm-on-application-of-blockchain-technology-in-live-stream-video-transmissions-and-telecommunications/244178)