# Introduction

In 2004, the term Web 2.0 was coined at the O'Reilly Media Web 2.0 conference. At the time, the term was considered revolutionary in identifying and giving credence to a second generation of web-based services—social networking sites, wikis, communication tools, and folksonomies—that emphasize online collaboration and sharing among their users. Now, some eleven years later, in an era dominated by mobile technologies that continue to transform the human enterprise in all sectors, there has been a notable shift in discussions on the continuing relevance of Web 2.0 technologies. Some writers have gone so far as to ask the provocative questions: "Is Web 2.0 dying?"[1] and "Is Web 2.0 becoming more and more a void (and an avoided) term?"[2] These questions have sparked a worthy debate, with proponents on both sides of the argument presenting convincing views.

Protagonists assert that Web 2.0 has indeed "lost its mantle as the most important internet paradigm"[3] and that momentum has shifted to the mobile revolution, justifying this assessment by citing the purchases by social media giant Facebook of the wholly mobile (that is, not web-based) photo-sharing app Instagram for $1 billion in April 2012 and the WhatsApp instant messaging service for $19 billion ($22 billion according to some sources) in February 2014. These investments have been widely viewed as an attempt by Facebook to make itself more relevant in a world that seems to be rapidly shifting away from Web 2.0, into a new world characterized as the "Age of Mobility."[4]

Current data certainly seems to support such a mobile shift, as the majority of consumers are now "spending more time in their mobile applications than they do browsing the web."[5] The Pew Research Center reports that 91 percent of American adults own cell phones and use their devices for much more than phone calls. Popular activities include texting, accessing the internet, sending and receiving mail, downloading apps, listening to music, and getting directions, recommendations, and other location-based information.[6]

Views supporting the sustainability and survival of Web 2.0 technologies and the development of the requisite symbiotic relationship in a mobile-driven environment can best be encapsulated in the following statement: "Web 2.0 is not really dead…but it is certainly in its twilight years."[7] It is safe to say that almost every website you visit on a computer or mobile device has some embedded component of Web 2.0 technology. Web 2.0 survival can be attributed in part to a dedicated base of users and their compulsive need to connect, communicate, and collaborate with family, friends, colleagues and communities, to find information, to be entertained, and to create content on their desktops and mobile devices.

This seemingly obsessive behavior has secured the longevity and profitability of established social networking sites such as Facebook (1.39 billion users), YouTube (1 billion users), Twitter (288 million users), and LinkedIn (332 million users), along with newer platforms such as Pinterest (70 million users), Instagram (300 million users), and Tumblr (420 million users).[8] This push towards online connectivity, communication, and consumer feedback has also ensured that embedded Web 2.0 technologies are now commonplace components in high-volume everyday sites managed by online media outlets.

The fact that Web 2.0 technologies are alive and well is also evidenced in a 2013 Pew report that finds "72 percent of online adults use social networking sites." Further solidifying the enduring nature of this phenomenon, the Pew researchers report that one of the more striking manifestations regarding the social networking population has been the steady growth in senior citizen users, whose numbers have tripled on social networking sites over the past four years. According to Pew researchers, 43 percent of internet users over age 65 used social networking sites in 2013, up from 13 percent in 2009.[9]

Given these realities, it is not surprising that the benefits of Web 2.0 technologies, which allow us to easily create, contribute, communicate, and collaborate with each other in new and exciting ways, are still being touted and experimented with in the library world and allied communities. According to the authors of "Libraries at the Epicenter of the Digital Disruption," "87 percent of respondents indicated that their libraries are using or offering social media experiences in one form or another … and more than half of those surveyed are using social networking services as part of their outreach to patrons and constituencies."[10]

For this author, it seems clear that Web 2.0 technologies continue to provide the technological foundation required to develop social media tools on web-based and mobile platforms. As readers will discover in the chapters to follow, many of these tools and apps remain freely available online and have been successfully integrated into existing library services and other work environments.

## Integrating Social Media Tools and Other Free Online Resources into Library Services—Benefits and Challenges

In the first volume of *The Cybrarian's Web*, I offered a list of immediate benefits for libraries using free Web 2.0 tools and other online resources.[11] These benefits included delivering value-added services to tech-savvy clients, expanding and enhancing library collections during an economic recession, building alliances with patrons, improving communications with staff, democratizing the web, and surviving in a technologically competitive landscape. While these benefits are still relevant and can be used to argue for the continued implementation of these resources, there are now additional research findings to support active implementation and use of free online content. Two noteworthy reports are the Taylor and Francis white paper *Facilitating Access to Free Online Resources: Challenges and Opportunities for the Library Community*, which "explores the issues relating to free online content discoverability from the perspective of librarians,"[12] and a recent IFLA Trend Report that identifies five high-level trends affecting the role and identity of libraries.[13]

Two key findings from Taylor and Francis support the adoption and integration of free online content into existing library services:

- ➢ Librarians and faculty alike agree that free online resources add value to the research process

- ➢ The vast majority of librarians believe that free online content is likely to become at least as important as subscription content in the future

Taylor and Francis also highlight inherent challenges encountered by librarians in identifying, selecting, cataloging, and providing timely

access to this growing volume of free eresources. The value of this research to the library community lies in the areas delineated for improvement and innovation that facilitate the continuing access to free resources. Best practices include the following:

➤ Improving methods of providing permanent access and reliable archiving for free content

➤ Comprehensive indexing of quality free resources by discovery systems

➤ Developing trusted repositories linking to free content

➤ Improving user interfaces for accessing library-surfaced content

➤ Developing metrics for evaluating the impact of subscription and free content on institutional performance

The added observation within the IFLA Trend Report that "the global information economy will be transformed by new technologies" is particularly instructive to libraries and allied information centers. Implicit in this particular trend is an underlying call to arms for librarians and other information professionals to advocate for and become more adept at providing "information literacy skills such as basic reading and competence with digital tools" for their patrons, as "people who lack these skills will face barriers to inclusion within this [new technologies era] and in a growing range of [other] areas."[14]

Mounting evidence points to immediate benefits from integrating free or inexpensive econtent into existing services along with the push toward developing more consumer-oriented products. To this end, many libraries may choose to hasten the process of early adoption and implementation. It is important to note that when implementing any new product or service, a period of critical evaluation and review of factors such as current needs, communities to be served, and product effectiveness, combined with intense consultation of staff, clients, and vendors, is required. Developing an effective social media plan or strategy, with delineated objectives, target audiences, resources, training models, content curation tools, technical support, maintenance, and feedback strategies must also be incorporated into the planning process.[15] Only when these preliminary steps have been taken can a successful program or product be developed.

This book was written to jumpstart your research and implementation process. It can be used as a planning guide initially, then as a reference that supports the continual integration of social media tools and other free online resources into library services.

## How The Book Is Organized

*The Cybrarian's Web 2* shares the same goals as the first volume: to offer an "environmental scan" of available eresources and to methodically identify, select, and evaluate tools that information professionals can effectively introduce and integrate into their workspaces, communities, and even their personal lives.

Each resource covered in the ensuing chapters falls into one of several broad categories:

- ➣ Archiving/Note-taking tools
- ➣ Augmented reality services/Wearable technology
- ➣ Avatar creation services
- ➣ Barcode scanning and generator software
- ➣ Cloud storage/File hosting and sharing services
- ➣ Course management systems
- ➣ Crowdfunding platforms
- ➣ Digital libraries
- ➣ Digital publishing services
- ➣ Digital/Online learning services
- ➣ DIY collaborative workspaces
- ➣ Ebook collections and services
- ➣ Ebook reading devices
- ➣ Infographic creators
- ➣ Massive Open Online Courses (MOOCs)
- ➣ Microblogging/Instant messaging services
- ➣ Mobile applications (apps)

- ➤ Online reputation management services
- ➤ Photo and video sharing services
- ➤ Polling services
- ➤ Productivity tools
- ➤ Reference management services
- ➤ Self-publishing platforms
- ➤ Social bookmarking services
- ➤ Social media management services
- ➤ Social networking services
- ➤ Social news aggregators
- ➤ Video/Global conferencing services
- ➤ Video sharing services
- ➤ Visualization services
- ➤ Web and mobile reading applications
- ➤ Web/Wiki hosting services

The resources are arranged alphabetically to enhance readability and access. Two new appendices in this volume—tools by type of service and by mobile device availability—are designed to help readers easily find appropriate resources within these categories.

Each chapter is independent, enabling readers to jump immediately to those resources that most interest them. Resource information is organized as follows:

- ➤ Name of the resource
- ➤ Category (type of application)
- ➤ Static uniform resource locator (URL)
- ➤ Origin and development
- ➤ Features, functionality, design, and usability
- ➤ Suggestions for use by the library community
- ➤ Fun factoids or interesting snippets of information on the resource (FYI)

Cybrarians[16] will not want to miss the section in each chapter entitled "How Cybrarians Can Use This Resource." Here, I offer suggestions for use of a given resource in the work environment and provide examples of innovative library implementations. This section is valuable for anyone wishing to observe social media tools and apps at work in libraries. For library administrators, these examples will provide supporting evidence of the benefits of using tech tools to showcase innovative services and enhance the library's online presence.

I conclude the book with five appendices. Appendix I presents tips and teaching tools for cybrarians. Appendix II provides very brief summaries of all the covered resources. Appendix III is a list of referenced websites, and, as previously noted, Appendices IV and V list resources by type of service and by mobile device support, respectively.

## Criteria Used in Resource Selection

Nearly all of the resources included in the book are free for cybrarians to use. Some have a minimal subscription fee attached to them, and this cost is disclosed to readers (though needless to say all pricing information is subject to change). Resources were selected based on independent review and analysis, with the following considerations weighing heavily in my decision-making process:

➢  Is the resource useful to librarians and information professionals? Can it add immediate value to current services provided? Can it be easily implemented by less tech-savvy users? Is it organized for ease of use?

➢  Is the resource well known and established? For example, is there constant chatter and buzz in blogs, eforums, and other discussion groups about its reputation?

➢  Does the resource suggest longevity as evidenced by the time since it was created and its current iteration?

➢  Has the resource received positive reviews from users?

➢  Is free technical support available for the resource?

➢  Is the resource supported on multiple platforms and on mobile devices?

# Final Comment

As you navigate, explore, and gain a foothold in the ever expanding digital landscape, I hope *The Cybrarian's Web 2* will help you discover and experiment with free eresources and harvest all things innovative in order to develop information products and services that meet your and your clients' needs. As I have discovered since publishing the first volume, keeping up with eresources can be daunting, as new tools are continually being launched in a dynamic environment dominated by user-generated digital content. I urge you to assist in the task of identifying important resources for the cybrarian community by contributing to the book's companion website at cybrariansweb.com.

## Notes

1. Ryan Alexander Hunt, "DIGIWRIMO Day 7—Is Web 2.0 Dead? Or Can it Even Die," IVRYTWR (blog), November 9, 2012, www.ivrytwr.com/2012/11/29/digiwrimo-day-7-is-web-2-0-dead-or-can-it-even-die.
2. Robin Wauters, "The Death of Web 2.0," *TechCrunch* (blog), February 14, 2009, www.techcrunch.com/2009/02/14/the-death-of-web-20.
3. Hamish McKenzie, "Web 2.0 Is Over, All Hail the Age of Mobile," *Pandodaily* (blog), April 27, 2012, www.pando.com/2012/04/27/web-2-0-is-over-all-hail-the-age-of-mobile.
4. Ryan Alexander Hunt. "Is Web 2.0 Dead? Or Can it Even Die."
5. Charles Newark-French, "Mobile App Usage Further Dominates Web, Spurred by Facebook," Flurry Insights (blog), January 9, 2012, www.flurry.com/bid/80241/Mobile-App-Usage-Further-Dominates-Web-Spurred-by-Facebook.
6. Maeve Duggan, "Cell Phone Activities 2013," Pew Research Internet Project, accessed January 16, 2014, www.pewinternet.org/2013/09/19/cell-phone-activities-2013.
7. Hamish McKenzie, "Web 2.0 Is Over, All Hail the Age of Mobile."
8. Figures based on December 2014 monthly active users statistics.
9. Joanna Brenner and Aaron Smith, "72 percent of Online Adults are Social Networking Site Users," Pew Research Internet Project, accessed January 16, 2014, www.pewinternet.org/2013/08/05/72-of-online-adults-are-social-networking-site-users.
10. Joseph McKendrick, "Libraries: At the Epicenter of the Digital Disruption: The Library Resource Guide Benchmark Study on 2013/14 Library Spending Plans," accessed January 21, 2014, www.comminfo.rutgers.edu/~tefko/Courses/e553/Readings/Libraries-At-the-Epicenter-of-the-Digital-DisruptionThe-Library-Resource-Guide-Benchmark-Study-on-2013-2014-Library-Spending-Plans.pdf.
11. Cheryl Ann Peltier-Davis, *The Cybrarian's Web: An A–Z Guide to 101 Free Web 2.0 Tools and Other Resources* (Medford, New Jersey: Information Today, 2012), xxi–xxv.

12. "Facilitating Access to Free Online Resources: Challenges and Opportunities for the Library Community: A White Paper from Taylor & Francis, May 2013," Taylor & Francis, accessed January 16, 2014, www.tandf.co.uk/libsite/pdf/TF-whitepaper-free-resources.pdf.

13. "Riding the Waves or Caught in the Tide? Insights from the IFLA Trend Report," IFLA, accessed January 21, 2014, http://trends.ifla.org/insights-document.

14. Ibid.

15. "Getting Started with Social Media: A Guide for Nonprofit Organizations and Government Agencies," University of Illinois at Urbana-Champaign—University Library, accessed January 16, 2014, www.uiuc.libguides.com/social-media-for-nonprofits.

16. Cybrarian is a shortened form of *cyberlibrarian*, coined from the terms "cyberspace" and "librarian," to refer to a librarian whose work routinely involves information retrieval and dissemination via the internet and the use of other online resources. This definition is taken from the *ODLIS Online Dictionary for Library and Information Science* (www.abc-clio.com/ODLIS/searchODLIS.aspx).