

Cite: Arora, P. (2014). Web 2.0 (and Beyond). In Ang, P. H. and Mansell, R. (eds) *International Encyclopedia of digital communication and society: A synopsis*. ICA publication.

1

Web 2.0 (and Beyond)

Payal Arora

Erasmus University Rotterdam

arora@eshcc.eur.nl

Word count: 1801

Abstract

Web 2.0 is a term coined to mark a new era of Internet usage driven by user interactivity and collaboration in generating content, moving away from the static information dissemination model associated with Web 1.0. It became common in early 2000 with the growth of social network sites, making participatory architectures of digital space the norm. Underlining this phenomenon is the fact that now users can be seen as both consumers and producers of content, significantly transforming all fields from healthcare to entertainment. This creates new challenges in the domain of data privacy and digital labor rights.

Key words: Web 2.0, new media, social network sites, crowdsourcing, prosumption, filter bubble, privacy, digital labour

See also: CMC, online communication, surveillance, social media, digital audiences

Web 2.0 first and foremost is a metaphor coined to signify a new era of Internet usage driven by user interactivity, engagement and collaboration. This digital phenomenon is seen as a marked contrast to the Internet in its initial stage where the World Wide Web served as a mass media tool that communicated information from the producer to their public in a one-way direction. Tim O'Reilly, the Internet guru, is credited with being one of the first to recognize the unique characteristics of this emergent participatory architecture in 2006 (O'Reilly and Battelle 2009). He professed that these digital structures become more effective as usage grows and his insight gained legitimacy with the rise of co-creative platforms such as Wikipedia, Youtube and Facebook. He compared the collective contribution of different users to this platform to a global brain, where the constant streaming of thoughts shape its inherent dynamic structure; the hyperlinking feature of the Web resembling the process of how synapses form in the brain, where associations becoming stronger through repetition and intensity.

Social network sites are seen as synonymous with Web 2.0, allowing individuals to connect with other users within public or semi-public web systems. Boyd and Ellison (2007) underline the uniqueness of these platforms by emphasizing the fact that users can make visible their relationships and networks,

Cite: Arora, P. (2014). Web 2.0 (and Beyond). In Ang, P. H. and Mansell, R. (eds) *International Encyclopedia of digital communication and society: A synopsis*. ICA publication.

extend their offline relations and organize their connectedness via these digital affordances. They emphasize the dynamism of this platform by pushing for the term “networking sites” versus “networks”, since what makes this platform novel in computer mediated communication is its capacity to facilitate connections between strangers. The spread of Web 2.0 has also given rise to new user practices in the online presentation of the self, impression management, and friendship performance, creating an important niche area of research in Internet studies and related fields.

At the center of the innovative Web 2.0 platform is community formation; the intrinsic need for people to create groups to connect, share, and network for common pursuits regardless of geographic constraints or what has popularly come to be viewed as *virtual communities* (Rheingold 1993). This is viewed as much as a social as a technical revolution. The potential of these virtual communities has been wide ranging. Several scholars have been optimistic about this digital shift, equating these information architectures to a new form of the digital commons. For instance, James Surowiecki (2005) argued that Web 2.0 provides the technical affordances to harness collective intelligence or what he terms as *the wisdom of the crowds*. He argues that counter to common perceptions, the masses are better at solving problems, fostering innovation, coming to wise decisions, and even predicting the future than individuals. The social software of Web 2.0 enables massive aggregations of people across diverse contexts to come together and therefore it is said to contribute to the process of democratic knowledge construction. This idea has taken root and given credence to processes such as *crowdsourcing*, soliciting people to execute small tasks, often by businesses, and *crowdfunding*, the collective effort by networks to pool their resources for non-profit and/or for-profit endeavors (Howe 2006).

User-generated content has awakened the classic notion of the public sphere where Web 2.0 serves as a public domain for all people to contribute in the shaping of this digital space. The Wikipedia project is often cited as an ideal example of such collaborative efforts and numerous studies have examined how ‘many minds’ (Sunstein 2006) voluntarily engage and labor extensively in developing the world’s largest online encyclopedia for the common good. This digital/free labor has gained much attention because it challenges the conventional dichotomy between the producer and the consumer in media studies. These distinctions are understood to be fading, giving rise to the term *prosumer*, the blurring of producers and consumers (Bruns 2007). This also implies that the line between professionals/experts and amateurs in creating new media content is also being challenged, compelling us to revisit the notion of credibility, trust and expertise in knowledge production via Web 2.0.

With new technology platforms and new expectations also come concerns. A strong dystopian argument pervades the literature asserting the impersonal nature of virtual networks. There is a fear that the immersion of individuals in virtual communities can serve as a poor substitute for the offline communities around them. Eli Pariser (2011) points out that far from the democratic ideal of a ‘community’ that new media platforms promise, we live in an age where our networks are being carefully curated by algorithms that are programmed to expose us to mainly like-minded people. In other words, we live in a *filter bubble*, an invisible information architecture that appears to be objective, true and neutral but, in fact, is deeply mediated by commercial and other interests, creating the illusion

Cite: Arora, P. (2014). Web 2.0 (and Beyond). In Ang, P. H. and Mansell, R. (eds) *International Encyclopedia of digital communication and society: A synopsis*. ICA publication.

of an harmonious society. Mitch Parsell (2008) suggests that Web 2.0 has escalated the polarization and prejudice between social groups by enabling online communities to remain within their own private spheres of beliefs. These enclosed spaces can be viewed as *echo chambers* where a certain perspective can be reinforced through constant repetition, making it appear as truth. This poses a difficult problem when it comes to knowledge production as the 'wisdom' of the crowds could just as easily prove to be the ideas of false prophets, professing misleading opinions that can have serious negative repercussions in the information age. Andrew Keen (2008), one of the more vocal scholars against the popular notion of collective intelligence, argues that wisdom is not in the crowd but in people with expertise and talent. He criticizes the romanticism of the open system of Web 2.0 where the masses dictate knowledge and culture; he disputes the celebrated and much revered *cult of the amateur* as a signal of equality and democracy in society and calls for an appreciation for healthy differentiation and discrimination to sustain quality in the cultural and intellectual domain.

Another growing concern about the Web 2.0 user generated content is the fear of exploitation of individuals who freely contribute to the building of these platforms through the sharing of their ideas, networks and personal data. With the rise of Web 2.0, there has been a change from traditional media where users had to be proactive when engaging in free labor. Internet users, however, who engage with social networks unintentionally and automatically find themselves engaged with free labor (Terranova 2004). Another conversation that has become central to this area is the notion of data privacy and consumer protection. Mark Andrejevic (2011) calls attention to the growing surveillance and commercialism of personal data for profit by the private sector within Web 2.0 platforms. He makes the case that new media platforms create new ways to monitor and control consumer behavior and render individuals vulnerable to exploitation. He states that Web 2.0 and its participatory culture has created a new online economy that requires overarching legal policy to protect the rights of privacy of the prosumers and pay careful attention to notions of ownership of content.

In looking at the future of Web 2.0 - the rise of *Web 3.0*, what might be the hallmark of the next era of digital media? The medium of access is fundamental to this conversation as the mobile web is transforming how we produce and consume content (O'Reilly & Battelle 2009). From being stationary at the computer to being on the move, the emergence of supplemental tools such as motion sensors, Geopositioning Systems, digital cameras and more, is giving users a set of tools to augment their reality and to seamlessly move between the online and the offline world. Real time content sharing is now a given but how this raw data will be synthesized is the new challenge. Sophisticated and yet user friendly visualization tools are coming to the fore which communicate tremendous amounts of data in engaging and context specific ways. We may encounter a sentient web where its system of intelligence can have wide ranging impacts from the noble to the sinister. By paying attention to the popular rhetoric framing the Web, we can gauge the climate of perception, expectation and the range of cultures being enacted on the Web (Arora 2012). We have come some distance from the *Wild Wild West* and *Information Highway* metaphor of the Web in the 1990s to the *Walled Gardens*, *Electronic Ghettos* and the *Digital Commons* of today. The discourse in the media will continue to guide us with regard to the underlying and emerging sensibilities of the Web 3.0.

Cite: Arora, P. (2014). Web 2.0 (and Beyond). In Ang, P. H. and Mansell, R. (eds) *International Encyclopedia of digital communication and society: A synopsis*. ICA publication.

References

Andrejevic, M. (2011). Surveillance and alienation in the online economy. *Surveillance & Society*, 8(3), 278-287

Arora, P. (2012). Typology of Web 2.0 spheres: Understanding the cultural dimensions of social media spaces. *Current Sociology*, 60 (5), 599-618

Bruns, A. (2007). *Blogs, wikipedia, second life, and beyond: From production to produsage*, Peter Lang.

Boyd, D.M., and Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230.

Howe, J. (2006). The rise of crowdsourcing. *Wired*. 14(6). Retrieved from website: <http://www.wired.com/wired/archive/14.06/crowds.html>

Keen A (2008). *The cult of the amateur: How blogs, MySpace, YouTube, and the rest of today's user-generated media are destroying our economy, our culture, and our values*. Doubleday

O'Reilly, T., & Battelle, J. (2009). *Web squared: Web 2.0 five years on*. Retrieved from website: http://gossgrrove.com/sites/default/files/web2009_websquared-whitepaper.pdf

Pariser, E. (2011). *The filter bubble: What the Internet is hiding from you*. Penguin, London.

Parsell, M. (2008). Pernicious virtual communities: Identity, polarisation and the Web 2.0. *Ethics and Information Technology*, 10, 41–56

Rheingold, H. (1993). *The virtual community: Homesteading on the electronic frontier*. Addison Wesley Publication.

Sunstein, C.R. (2006). *Infotopia: How many minds produce knowledge*. Oxford University Press.

Surowiecki J (2005). *The wisdom of crowds*. Anchor.

Terranova, T. (2000). Free labor: Producing culture for the digital economy. *Social Text*, 18 (2), 33–58.

Further Readings

Arora, P. (2014). *The leisure commons: A spatial history of Web 2.0*. Science & Technology Series, Routledge/Taylor & Francis

Lessig, L. (2006). *Code: Version 2.0*, New York: Basic Books.