

Defining Web 2.0

by Dr Ajay Kumar Data, CEO, Data InfoSys Ltd

It is difficult to define Web 2.0. It is not a technical specification; it is a social phenomenon driven by the growing popularity of collaborative, interactive, socially oriented websites. Individual users typically produce much of the content and make it available to friends, family and other interested parties. Web 2.0 is also used to denote the growing use of cloud computing - the use of third party storage, raw computing capacity and many types of software - accessed via the Internet.



Dr Ajay Kumar Data is the CEO of Data InfoSys Limited. He established the first and largest WiFi hot spot in Rajasthan and the first ISP of the State. He has won many honours for his contributions to telecommunications in India including: Certificates of Excellence from the Junior Chamber of Commerce, Jaipur, for outstanding services; the International Millennium Gold Star Award; the Indian Junior Chamber's Outstanding Young Person in Rajasthan; the American Biographical Institute's Recognized Diploma of Honour; a Distinguished Leadership Award in the International Directory of Distinguished Leadership for outstanding contributions to Information Technology; and an Honorary appointment to the Research Board of Advisors of American Biographical Institute, USA. He was elected, unopposed, as President of TiE, Jaipur (The Indus Entrepreneurs) for two years. Dr Data is currently the President of Young Entrepreneurs Organization, Jaipur Chapter, which is a part of the Global Entrepreneurs Organization.

Dr Data earned an MBA in Computer Science from Newport University, USA and a PhD in Electronic Data Processing from the Netherlands. He also holds a diploma in System Analysis & Design from Uptron.

Web 2.0 can be thought of as an advanced new version of the World Wide Web; it does not refer to updated technical specifications, but to changes in the ways Web developers and end-users use the Internet.

I heard about Web 2.0 for first time in 2004; it was referred to as the second generation of the Internet. Web experts said that the main characteristics of the new Internet era are connected to the constant development and delivery of services tailored to each user's needs.

In the opening talk of the first Web 2.0 conference, Tim O'Reilly and John Battelle summarized what they saw as the themes of Web 2.0. They argued that the Web had become a platform, with software above the level of a single device, leveraging the power of the 'Long Tail', and with data as a driving force. They also claimed that Web 2.0 is

going to make the Internet a people-to-people phenomenon rather than just a platform to make information available.

"The best description I have heard about Web 2.0 is that it is like Velcro - sticky, addictive and viral. What Web 2.0 is depends on who you ask."

Technologies such as Wikis, podcasts, RSS Feeds, Web APIs, bookmarking, online Web services such as Gmail (www.gmail.com), Facebook (www.facebook.com) and XgenPlus (www.xgen.in) offer very significant enhancements compared to static websites. Web 2.0 provides interactivity; it

can be seen as the transition of static websites from isolated information into an interlinked computing platform that can provide desktop-like software services to the user.

The best description I have heard about Web 2.0 is that it is like Velcro - sticky, addictive and viral. What Web 2.0 is depends on who you ask. Some see the Web as a liberating platform underpinned by a philosophy of freedom - relinquishing control. The central idea is to give up power and embrace the social, open, aspects of the Web. Regardless of how you define it, Web 2.0 is having a significant impact on the way businesses operate, how they relate to consumers, how consumers relate to them and how industries target and interact with marketplaces.

Web 2.0 is a perceived, or proposed, second generation of the Web. This new Web has evolved and improved over time and now

“Some believe that Web 2.0 refers to such visual design elements as rounded corners or drop shadows. Although such design elements are commonly found on popular Web 2.0 sites, the use of these design elements is a matter of fashion, of designer preferences, which became popular around the same time as Web 2.0.”

offers better, more up-to-date, services like blogs, Wikis, social networking sites etc. It enhances the user's experience by providing information without continually reloading or re-fetching it from the server.

I have seen how Web 2.0 opens up social interaction and lets end users generate their own content to share and re-use. This allows people, i.e. consumers, to produce, publish, to share content and their knowledge with others - to collaborate much more closely than ever before.

Skeptical about Web 2.0?

I am always very skeptical about new buzzwords and technologies, especially when technology promoters have hidden agendas. In case of Web 2.0, I do not see that happening. I often hear the phrase 'technology hype' and that Web 2.0 is just hype - not a business model. I would like to remove the 'smoke' surrounding Web 2.0. Even if Web 2.0 is just hype, so what? Almost all major Web 2.0 developments are free; they offer great social advantages and require no commitments. Can you imagine your life on the Internet without blogs, video sharing, image sharing, document sharing, collaborative tools, feeds, advanced email, or dynamic Web pages? Web 2.0 offers business models built upon the most important societal happening that has occurred in our lifetimes - the *dawn of the Internet*.

“Web 2.0 is a great business model and there are many success stories to prove it.”

Web 2.0 as technology

Web 2.0 websites typically include *folksonomies* (user generated collaborative tagging, indexing and social classification), Microformat, XML or JSON based APIs and the most critical technology component of the Web 2.0 - AJAX, are a group of Web page coding technologies that allows pages to respond to a user's input without processing or reloading the page. Briefly, AJAX (*asynchronous JavaScript and XML*) is a combination of specialised software languages

and techniques used to create interactive web applications.

Companies such as Microsoft, Oracle, Google and IBM rely heavily upon AJAX for their latest technological offerings and products built around Web 2.0 technologies. Google Map, ASP.net and Oracle JDeveloper are but a few popular examples.

Ajax misconception

Some believe that Web 2.0 refers to such visual design elements as rounded corners or drop shadows. Although such design elements are commonly found on popular Web 2.0 sites, the use of these design elements is a matter of fashion, of designer preferences, which became popular around the same time as Web 2.0.

Another common misunderstanding regarding Web 2.0 involves AJAX. This is probably because so many Web 2.0 sites rely upon AJAX or DHTML effects. DHTML, or *Dynamic HTML*, is a collection of technologies used to create interactive, animated. So, while AJAX is often used to simplify the creation of complex Web 2.0 sites, it is not strictly required for Web 2.0 to function.

The Freemium business model - offering basic services for free, but charging a premium for advanced features - is also characteristic of many Web 2.0 sites. This helps build a large base of non-paying users that can later seek - and pay for - premium services.

Some sector experts, notably Tim Berners-Lee, have questioned whether one can use the term We 2.0 in a meaningful way, since so many of its components have existed since the early days of the Web.

Business model

Web 2.0 is a great business model and there are many success stories to prove it. The entire Google Experience along with new initiatives like the JOTLET online calendar, PERSONY Web conferencing, PREEZO online presentations, the g.ho.st Global Operating System, Xgen - 'the World's Most Advanced Email' are but a few of the Web 2.0 applications which are likely to make a

great impact on our lives. You can evaluate the success of Web 2.0 by the number of IPOs (*initial public offerings*) and the stock prices of Web 2.0 start ups, although I cannot guarantee that some of the investment bubbles will not burst. If we look, however, at Web 2.0 for what it really is - an interactive, powerful, social, and dynamic experience where distance between content producers and content consumers are blurred - Web 2.0 is here to stay! ●



Connect-World is celebrating its tenth anniversary

Through the years, *Connect-World's* authors told of the rise of mobile, of fibre, of wireless and of broadband; they told of the dot.com meltdown, of digital inclusion and convergence, of standards and breakthroughs, the rise of IP and the fall of switching and of the regulatory turnaround.

In every issue of *Connect-World* heads of state, ministers and regulators, heads of international institutions and leaders of industry speak of what the ICT revolution, as it happens, means to the people in their regions of the world.

www.connect-world.com

