

White Paper



RSS a Web 2.0 technology

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Page	Contents
3	Executive Summary
3	Introduction
3	How RSS Communicates
4	RSS Feeds
5	Podcast
5	Blogs
6	Origins of RSS
7	Legal Issues with RSS
8	The Future of RSS
8	Weblogs
8	Mobile Phones
8	email
9	Conclusion
10	Works Cited

Executive Summary

RSS, an abbreviation for Really Simple Syndication, is a form of web 2.0 that provides easy access to information through webfeeds. It also connects users with similar interest together through a tagging system and allows for subscriptions to newsreader or news aggregators that will update with the information of a website as that website is published. Though it is not the first syndication program, it has become the most widespread. Today, RSS is available for use on many news sites, sports sites, and various other websites and blogs. But because RSS makes content available to such a large audience, complex copyright issues have been brought forth. Yet despite legal issues, the future looks bright for this technology; many have suggested that subscriptions to online blogs will be the new wave of the future.

Introduction

RSS, or Really Simple Syndication, is a technology that allows users to subscribe to chosen content on the web. Various sources are sent through an online feed, which allows the user to be constantly updated on the material of their choice. In order for RSS to continue to grow, the general public should be educated on exactly what RSS is and the services it provides.

How RSS Communicates

RSS (Real Simple Syndication) is a form of Web 2.0 with the ability to transfer information between computer users with similar interests by providing easy access to information quickly and extensively through RSS feeds (Hinchcliffe). RSS requires the use of XML language, a title or brief description of the text in XML language, and an aggregator.

XML is often used to create web pages because it is a form of language different from html; it does not rely on standard rules (RSS Directory).

The title or brief description needs to be linked to the corresponding text of the website

and sent to the aggregator, a receiving program (What is RSS, Jain, Lasica, Pilgrim, & Skonnard). An online user can download an aggregator and supply it with the XML file address, known as a URL, of a particular website which alerts the aggregator when the information from the website (i.e. XML file) is changed and the aggregator displays the link by means of the title/description (How News Aggregators...).

Three specific areas of use for RSS that have the ability to affect a diverse array of online users by saving time are: RSS feeds, Podcast feeds, and Blogs.

RSS feeds

RSS feeds, (Morris, What Are Webfeeds, What Is RSS?, & Lasica) are a commonly used form of RSS because they make it easier for online readers to find the information that is most relevant to the search (What Is RSS? & Lasica). Lasica reports that readers are able to save time by finding exactly what they want without the impediment of sifting through or searching through unwanted information or entire websites in order to find a particular story as is the case in news websites.

Therefore, subscription to an RSS news feed of a particular area of interests on a news website can reduce the time of a search (Lasica).

RSS feeds are not just issued to online news information, but other information as well for example entertainment, science, and weather (Grossnickle).

RSS feeds help readers stay informed on changing information (What Is RSS? RSS Explained). This is especially helpful for news websites because when news change, the reader is able to keep up with the most current information and not get bogged down by old or previously read information (What Is RSS & Lasica).

RSS feeds can be used any form of relaying information; it is not limited to news (Morris, What Are Webfeeds, & Lasica).

By broadening RSS feeds to not only update readers on current news information, but on current information in general RSS can be used to get the word out quicker and more effectively than prior Web 2.0 programs (Lasica).

This is particularly beneficial for small companies because RSS feeds provide free advertisement to large populations of interest (RSS Directory). By connecting information through RSS feeds to online RSS users that are interested in the information provided by the company, the company is able to broaden its viewers and potential consumers at a rapid pace (RSS Directory).

Online users are able to tag like information into subgroups so that others can attach and receive those subgroups via RSS feeds (Morris).

If small companies are able to adjoin to these groups formed of interested users, information can be quickly sent to many individuals without major cost to the business (RSS Directory). In this way, RSS feeds provide a democratic form of internet advertisement that lets small businesses compete equally with larger ones (Lasica).

Unfortunately in order for an RSS feed to be effective; the desired content needs to have a title or description (Lasica). Lasica mentions that if there is no title for the text the link that the Aggregator displays will be the entire content of the text. This defeats the purpose of an RSS feed because instead of eliminating large texts it produces them. Thus making RSS feeds no different than a web page.

Podcast

Podcast feeds are similar to RSS feeds only they are audio instead of text (CBS News). An online user can subscribe to a Podcast feed by means of an aggregator and be updated on new audio files of interest (Housley). Podcasts are mp3 files which let online users transfer the podcasted audio to a portable mp3 player (CBS News).

Housley states that Podcast feeds are beneficial because they save time. Instead of listening through a radio program for wanted information, users simply supply their aggregators with the information (topic of interest & URL) and only the audio file in which they are interested will be provided (Housley).

Blogs

As mentioned earlier, web users are able to combine relevant information into groups to which other users can subscribe (RSS Directory). This ability to connect related information to a vast number of individuals is not just advantageous to companies, but also bloggers (RSS Directory & Lasica).

People who participate in posting blogs are able to tag other blog users to their database of relevant information allowing other bloggers to be updated when their friends post new information, which helps in maintaining current information (RSS Directory & Lasica).

Another benefit for having RSS feeds within a blog is the ability to expand the number of the blog's viewers (RSS Directory). This helps exuberate the influence that an individ-

ual has on readers as well as provide new friends who are interested in the same topics (Grossnickle).

Origins of RSS

RSS, known as Really Simple Syndication, RDF Site Summary, or Rich Site Summary, is not the first site summary or syndication program. BlackWeb and PointCast are examples of technology that never really caught on. A few technologies, like Microsoft's Channel Definition Format, have come and gone since the inception of RSS (Wikipedia). Along with Atom, RSS is one of the few that has really gained a footing.


One of the first key players in the development of RSS is Ramanathan V. Guha, who worked at Apple Computer around the time feeds were emerging. Guha helped to develop the Meta Content Framework (MCF), which was a format for structuring metadata (which is essentially information about information) about websites and other data (goatee). Guha left Apple for Netscape, where he developed MCF into a Resource Description Framework (RDF), a markup language used to store metadata. In 1999, Netscape created a standard for RDF which would become known as RSS version 0.9 (goatee).

Another key player in RSS history is Dave Winer. Winer is a software developer who has made significant contributions to XML dialects, including most of the formats of RSS. Winer used a precursor to RSS in ScriptingNews, one of the first weblogs (Wikipedia). He would eventually design several versions of RSS himself. Unfortunately, numerous versions of RSS would be released that weren't compatible with each other. While working for Netscape, Dan libby created RSS version .91 as a simplified improvement of version .90 (Harvard Law).

When Netscape lost interest in news feeds, a third party consisting of XML-using notables broke off and continued the RSS evolution, creating RSS 1.0 using a mailing list known as RSS-DEV (Wikipedia). Winer stepped in and created his own version of RSS .91 while working for Userland.com. Winer and the Userland group would continue to evolve RSS, ignoring version 1.0 created by RSS-DEV. Just nineteen days after they released .91, Winer released .92. Versions .93 and .94 would follow, with .94 doing little more than to revert the changes made in .93 (Harvard Law).

In 2002, the final version of RSS, version 2.0, was released, emphasizing "Really Simple Syndication." A number of revisions of 2.0 would be released without name changes (Wikipedia). In July 2003, the responsibility and rights to RSS 2.0 were assigned to the Harvard's Berkman Center for the Internet and Society (Wikipedia).

Winer has said that the tipping point at which RSS gained standard usage came in 2002 when the New York Times made subscriptions available to users on its website (Wikipedia). Now, many news, sports, blogs, and other sites have made RSS available. Another widely used feed is Atom, which was created to overcome some of RSS shortcomings, including incompatibility (Wikipedia).

Apple's browser, Safari 2.0, now has RSS feed capabilities built in, using a blue icon with the letters "RSS" inside. The generally used icon originally comes from Mozilla and is an orange square with white radio waves: 

RSS Legal Issues

RSS is used to make publishers' content available to a large audience, and because of this has encountered some complex copyright issues.

The digital age has virtually changed the copyright laws, leaving what is or isn't considered lawful reuse of digital content to the discretion of the courts. However, there are some guidelines RSS publishers and those planning to reuse content are expected to abide by. In terms of linking, quoting, and other blogging activities, RSS falls somewhere in between fair use and implied license laws (Miller).

Though there are no hard rules for fair use when it comes to posting other people's information on a blog, the Copyright Act lays out some guiding principles. For example, short quotations usually will not be considered copyright infringement (EFF). Material used for reasons like teaching (even making multiple copies from use in the classroom), scholarship, or research are usually not considered copyright infringement (EFF). One can also comment, criticize, or report something someone else has reported under fair use (EFF).

A Creative Commons license is one way for authors and publishers to protect their work. A Creative Commons license helps to retain a copyright as well as to permit others' fair use and free expression of their work on file sharing networks (EFF). The license has four versions, which can be combined, to permit different things. Those versions allow the copying or distribution of work if the author is credited, the copy is of noncommercial use, the copy displays/performs the work verbatim, and the copy falls under the same license ("Creative Commons License").

Any fact from a blog can be used without worry of copyright issues because copyright law only protects the word combinations or structures that communicate the information and not the factual material itself (EFF). Trademarks, labels, and company names are allowed to be used in blogs just as long as they are used to refer to the company or

they do not lead to confusion about whether the company endorses what you're publishing (EFF). Also, under the First Amendment, anyone has the right to blog anonymously.

Future of RSS

Recently, users have been wondering where the future lies for RSS. Some say it is in weblogs. Those working in the corporate news field have suggested that subscriptions to online blogs will be the future. Once the users subscribe to a particular blog, they will automatically be updated, and the notifications will be sent via e-mail. RSS allows for timely access to the chosen feeds of the consumers, therefore allowing them to get what they want when they want it. These demands can be met through the use of weblogs.

RSS and Weblogs

Many corporations are looking at investing in this technology. As the population becomes more computer literate, users will flock to the readily available blogs. As mentioned in an article written by Stephen Foley, corporations also believe that RSS can be used as a new and effective means for marketing and advertising. It allows for more avenues to reach the current customer, as well as the potential customer, which is something many companies would welcome in an internet savvy society (Foley).

Mobile Phones

According to Nancy Gohring, the RSS technology may be moving to cellular phones. Most recently, Nokia has come out with WidSets. This application allows chosen information to be sent to the users on their mobile phone, similar to how it is currently done through the computer. It could also move on to be a new strategy for marketing and special content services, as considered by Nokia. It is fairly new, but with time, it will be more easily available to everyone.

RSS and E-mail Communication

Some have wondered if RSS will take over e-mail communication (LLRK.com). As discussed at LLRX.com, many do not understand the different ways e-mail is used. E-mail is used by many corporations as a means of information distribution in addition to conversation (LLRK.com). Because of this two-way communication, RSS cannot provide for the user in the way that e-mail does (LLRK.com).. However, RSS may improve e-mail

(LLRK.com). Many companies may decide to turn to RSS as a means of distribution (LLRK.com).

Conclusion

RSS is a widely used technology that will continue to grow and change over the years. As we move into the future, more and more people will be able to take advantage of it. Because RSS provides individuals with swift access to new and changing content, it can help businesses advertise to new clients with minimal costs. It can also benefit social groups if similar interest to connect and share information on the web. RSS started out as a rapidly changing form of syndication, it has developed into a widely used source of information sharing, and it is continuing to develop towards more effective means of online and mobile communication. Corporations will continue to use RSS to their advantage, and the general public will continue to become aware of exactly what RSS can do for them as well.

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