



7 Things You Need to Know about Social Rating Systems

A white paper from Teaching and Learning with Technology at Penn State and the University of Calgary

Potential Applications

Sharing Best Presentations

Groups of students within a first year seminar are asked to pick one of the seven undergraduate business majors and create a presentation about that major, current issues, and future careers in that field. These sessions are video recorded and posted online. Faculty review the recordings for their section and select the best ones. With the students' permission, faculty post the best presentations to a social rating system within the college's intranet. Within the social rating system, other faculty and students can view the videos and give a "Thumbs Up" to the videos that they like. They can also leave comments and questions, view the highest rated videos for each business major, see a list of the newly posted videos, and access archives of videos created during previous semesters. At the end of each year, the students with the highest rated videos receive an award from the Smeal College of Business Administration.

This system benefits students in each first year seminar course by giving them access to the best presentations from previous semesters. This sets a high level of expectation for incoming students and gives them access to the best information for each major. In addition, students whose presentations are selected receive public recognition for the quality of their work, which is something they can share through their resume and portfolio.

Integrating Student Blogs

The blog service (see <http://blogs.psu.edu>) gives students, faculty, and staff an easy way to write and share media through their personal web space. Dr. Sandy Newman, is teaching a course in architectural design. Every week, she gives her students a photograph of a location and requirements from a fictional client. Students are asked to sketch a design for that location and describe the features of the building in their blogs. Each of the student entries is added to a private social rating system that is only accessible by members of the class. Students

1. What Is It?

Social rating systems are open systems that allow users to collectively evaluate the quality of nearly anything (e.g. books, blog posts, Broadway shows, movies, news stories, hotels, etc...). In its simplest form, this may involve applying "thumbs up/down" or "star ratings" to a resource, and this can be extended to include reviews and discussions of the resources by multiple contributors. As more items are ranked, it is possible to utilize the rankings to generate sets of "popular" or "important" items, by sorting by applied relevancy ranking. In order to help maintain relevance, subsets of resources, and of people, may be required in order to rank items within the context of a course, semester, or group.



2. Who's Doing It?

Social rating systems are increasing in popularity among commercial sites. The following are some examples from popular companies that illustrate the potential of social rating systems to distill relevant information.

At social news sites like Digg.com, users post links to news stories and other users "digg" them those postings if they find the stories to be interesting. Postings with the greatest number of "diggings" float to the top of the news site. This mechanism acts as a community-based filter to uncover stories that are the most interesting to users of this site.

On Amazon.com, users can leave a rating of items that Amazon is selling. Other people shopping the site can sort search results by "Average Customer Review" to see the top rated items. In addition, Amazon users can leave comments about products and other users can indicate whether those comments were helpful or not. Amazon sorts the comments and creates a list of "Most Helpful Customer Reviews" for each product. Again, this acts as a community-based filter to uncover the most helpful comments from potentially thousands of postings.

Similar to Amazon.com, Netflix.com allows users to rate movies on their site and shows the average rating to other users. In addition, Netflix has a friends network so users can see how their friends have been rating movies that they have watched. Also, Netflix does a comparison of a user's ratings to those of other users and then displays movie reviews of users who rate movies similarly.

3. How Does It Work?

No matter what type of rating (diggings, star ratings, helpfulness) is employed, the mechanism is the same. Existing ratings (if any) are displayed in a conspicuous location along with the item being rated. The rating display itself should contain a mechanism for a user to indicate his or her own rating or indicate that the user has already rated this item. For example, a comment's importance may be rated 3.5/5 stars by other users and those users who have not rated this item before should

go into the system and anonymously rate each design based on aesthetics, feasibility, and the client's requirements. At the end of each week, the highest-rated entries are reviewed and discussed during a class session.

In this case, the rating system acts as a rubric that students can use to evaluate their own work and the work of other students. This system helps students to develop critical thinking skills and a broad understanding of design principles. The rating and critique process also provides an element of competition to the course.

Evaluation of Current Research

Dr. Yu Chen is teaching a nutrition research methods course. He wants students to find the latest experimental studies. He asks his students to submit research articles and conference proceedings to a social rating system and tag those stories with terms like "low-fat diet", "organic", and "nutrient study". Students collectively rate the quality of the research method and interpretation of each study. Then Dr. Chen asks students whose ratings disagree the most to discuss the reasons that their opinions differ.

In this case, the students are finding and sharing current research based on topics of their own interest. As a group, they are examining what factors make the best and worst studies and developing a common understanding of scientific research with the guidance of Dr. Chen. Furthermore, this collection of research articles becomes a growing resource that the entire nutrition program can use.

Examples On the Web

Amazon.com: Product Ratings and Comments
<http://amazon.com>

Digg: Social News Site
<http://digg.com>

Netflix: Movie Reviews and Recommendations
<http://netflix.com>

Pligg: Open Source Social News Software
<http://pligg.com>

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be able to mouse-over the stars and click to submit their own rating. All ratings are stored in a database along with information about the user who submitted the rating, so a single user cannot rate the same item twice. This rating information is attached to the item being rated and it is called upon when the item is displayed as an individual entry or as part of a list (e.g. the top rated of all entries or the highest rated based on search results).

The rating system has to be social and limited to a relevant community of interest to be successful. In other words, if ratings are only displayed to the individual who rated them, this does not help the community as a whole identify the most interesting/important information. Likewise, what is relevant to an interest group (such as a horticulture course) may not be rated as highly among a general population. For this reason, sub-networks based on friends' lists or a class list are important as part of an implementation in an educational setting.

4. Why Is It Significant?

Social Rating takes advantage of multiple contexts, and the various opinions of the individuals that make up a group, in order to make sense of a set of seemingly chaotic resources. On one level, this is democracy in action - individuals cast their "vote" to promote or demote a piece of content, and when aggregated together as a whole, the decisions are made as a unified group. In addition, anyone is free to contribute new content to the system, to be put through the rating system.

5. What Are the Downsides?

Prolific contributors can "own" a conversation, or prolific "voters" can fill the list of highly ranked resources. Individuals who submit multiple resources for rating may appear to have a larger influence on the group as a whole. Newly submitted resources require more "effort" to rise through the rankings against more established resources - the first few resources will appear to be more "popular" because they have had longer to accrue votes.

6. Where Is It Going?

Social rating systems are now being included as optional components for help systems (e.g. "Was this answer helpful to you?") and as modules for collaboration software like Drupal. In addition Pligg.org provides software for running an independent version of Digg that is relevant to a specific interest area. For example, at Killerstartups.com, users can view links to startup companies and vote on which ones they find to be the most interesting.

7. What Are the Implications for Teaching and Learning?

Social rating systems help a community filter relevant and interesting information. These types of systems may be able to help members of a course, department, or college filter and share relevant research, news, media, and other resources. For example, online news articles can be submitted to a departmental social rating site to be reviewed, discussed, and voted upon by students and faculty. Students within a course can read each other's blog postings and vote for the ones that they find to be the most helpful, relevant, or well-written. An instructor can find course-related media clips and submit them to her students for their review and comments. A group of faculty working together on a new research project can rate the relevance and value of existing studies to the objective of their study.

The common teaching and learning theme is that social rating systems help a group of people to discover, share, catalog, and analyze the value of existing resources. At a minimum, these submissions become collections of relevant resources, current events, and real-world examples. These systems may help groups of students to understand the relative value of information sources. This may aid in the development of critical thinking skills and information literacy.

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