February 2018

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Abstract

The purpose of this article is to provide criteria for native model of social cataloging sites based on the world's most visited, popular social cataloging site's components. Social cataloging sites are a kind of web-based social media that allows users to interact. This is an applied research and the research method is library and descriptive scrolling. First, by reviewing the scientific literature and resources, a list consists of 14 criteria which included 73 extracted components, then finalized in Delphi and evaluated was used. The community studied also includes three social cataloging sites, which have the most visitors on the Alexa ranking. The results of this study showed that the total score for the fourteen criteria considered in this study was173/31points. The average of observance of criteria in all social cataloging sites(58.10%)is above the average and is in a favorable situation. Goodreads ranked first among the sites listed in the study list with 46 points(63.01%).after that LT is ranked second by the score of45points(61.64%) and anobi reached third rank with36.25points(49.65). All of the components examined in this study are important and the search facilities with an average of 9.70have the highest importance and error messages with an average of9.24are ranked second.

Key words: social media, social cataloging sites, Goodreads, Librarything, Anobii.

Introduction and problem statement

The advancement of technology and machine life has increased the need for information as it transformed the way people live, so that today information is becoming a valuable commodity and a criterion for the superiority of each country (Safavi, 1392). Information technology has changed today's human life and has brought about changes in the quality of study and the study habits of individuals. These changes have played a major role in the development of reading, thinking, quality, and quantity of study. It ultimately leads to lifelong learning and as a result of the open revolution in society (Shimari, Kirti and Ramayeh, 2015).

Today, with the advent of new technology, people go to electronic and digital books and use modern tools to study, so that digital content production can eliminate the physical boundaries of the home, school, and workplace. In

the current world and with the growth of social networks that have widened the boundaries and communications, users have made significant contributions to the production and transmission of content.

Social cataloging sites are a subset of social media that is web applications that allow users to browse books, movies, music, etc in digital form, and simultaneously share their opinions with others in an online environment. These applications allow users to browse their collections and interact with each other's. Social catalogs are very useful for librarians because they allow them to organize their resources. These sites are also useful in the development of the collection and provide a complete description and critique of books and can be a good tool for librarians to set up a library. Finally, it is a tool for readers' advice, in which librarians can connect with their users and offer them appropriate books (Chow, Goshtin and Hooker, 2009).

There are numerous social cataloging sites around the world, but we can refer to the Goodreads, Librarything and Anobii in the world, ranked 293, 16211, and 25571 on the Alexa site, and have visitors from the United States, Canada, England, Italy, India and others. The Alexa website belongs to the American company Alexa, which performs the ranking of social networking websites based on the four indexes, the number of citations, the number of users, the number of times the site updates, and the number of pages on the site. However, with the review in Iran, there is no social cataloging site in Iran or its activities are limited. This shows that it has not gained much success, which can be attributed to the failure of the network due to being single-minded, apparent lack of attractiveness, sluggishness of the system and its lack of user-friendliness, lack of added value for users, lack of trust Users, lack of information and promotion, and lack of information security and confidentiality of information, Therefore, we can examine the components of the mentioned sites in the world rather than presenting a features of native model with a global image.

By doing this research, we will identify the criteria and components of the social cataloging sites, in order to identify the structural elements of these sites, users' and experts' views about the proposed components should be counted. The desired components can be used to provide the proper patterning features for the native social cataloging site.

Research objectives

The main objective of this research is to identify elements of social cataloging sites to provide criteria for native model of social cataloging sites.

Research questions

1. What are the components of the international social cataloging sites?

2. What is the rate of observance of components in international social cataloging sites?

3. What are the suggested native pattern components for social cataloging sites?

Research History

o   Research background in Iran

In their article entitled as "Typology of Iranian Uses and Gratification in Goodreads", Mahboob and Mirtaheri (2015) examined and categorized the Iranian ways of using the Goodreads Social cataloging sites. They utilized the theory of "use and satisfaction" as a theoretical framework for their research. The target community of the study included the Iranian users who were active in these networks. The factor analysis categorized 25 questioned variables into 6 factors as follows:

1. Information seeking (9 variables)

2. Socializing (6 variables)

3. Escaping from everyday life (4 variables)

4. Being with books (2 variables)

5. Job sustainability (2 variables)

6. Recognition of the famous (2 variables)

Another goal of this study was to detect the determinant factors in the network activation. Three activities on the network, including reviewing books, rating the books and finding friends by users requires a conscious action,

which is needed to enhance the activity within the network. On one hand, these three factors are strengthened, and, on the other hand, those with such factors are considered as the main assets of the network.

Eskandaripour (2010) has first discussed the concept of the internet social cataloging site platform and then defined the thematic social networks and their specific type, the social cataloging sites, which is intended in this paper. Then, with the aim of understanding the features and functions of social cataloging sites and modeling of the top examples of this area as well as identifying the status and position of Iranian users in such networks, he has reviewed the case studies of "Shelfari", "Book Crossing" and "Librarything" as popular examples of book-oriented social networks around the world. Finally, summarizing the set of the characteristics of these networks, some suggestion were made accordingly based on the experiences of social networks as applied and operational recommendations in the form of different groups of people involved with books, namely, publishers, writers, bookstores, professional readers and libraries, with the ultimate goal of promoting reading culture.

Oftadeh (2010) mentions social media as a factor in changes and developments in his article due to the nature of the users of these media and their features, which prevent the users' inactivity. According to him, the advent of social media has not changed the principles and concepts of the domain of books, but has changed the environment, channels, and the quality and nature of the audiences' (users) reactions. Nowadays, social media are at the top of the web and could have had the most influence among the Internet users. Therefore, the most important approach of the author of a book and its publisher can be the attracting of these audiences. Finally, he poses the question that whether the social media are supposed to replace the books or complement them.

Akbari Tabar (2010) has introduced the purpose of his paper to recognize the book-based group activity in virtual social networks. To this end, he has selected and studied the "Social Network of Iranian Specialists (U24)" from three main categories dealing with book-related group activities in these networks (book-based social networks, book publishing and distributing companies on social networks, and the subset groups of different social networks, which topic of formation and activity is book-related. The results showed that among 1941 groups active in the social network of Iranian specialists (U24), eight groups have been involved with book-related activities. Among these groups, based on the members' number measure, the "Short Story" group and the Translation of Some New Books" group has had the

largest and smallest number of members, respectively. Based on the index of the number of messages, the "Short Story" group and the Translation of Some New Books" group have shared the largest and smallest number of messages, respectively. Based on the average activity of the group (average time of group updating), the "Short Story" group and the Translation of Some New Books" group have had the maximum and minimum amount of activity, respectively. Based on the average number of comments (comments on posts), the group of "Interesting Topics" has had the most comments, and as a result, the maximum rate of attractiveness of the notes and the highest rate of feedback, while the Translation of Some New Books" group has had the lowest average rate of comments.

o   Research background in foreign countries

Choi and Joo (2015) stated in their article that the factors affecting the use of users from social cataloging sites are still unknown. This study examined the basic factors of the theory of information systems and its social sense on users and their motivation in using social catalogs. The data was collected and processed online. The findings revealed that the quality of information and quality of the system are the main factors of satisfaction and social sense, which lead to the motivation of users to continue to use these sites. In addition, the social sense has a lasting impact not only directly, but also indirectly on satisfaction. From a management perspective, the findings showed that the providers of social cataloging services should constantly focus on social sensitivity and increase it among their users.

Klingeberg, Irle, & Mandel (2015) studied the learning of social networking throughout the people's lives and stated that despite this feature, some people still do not use these networks. In their research, doing six structured interviews, they identified two reasons in this regard, including the general position of people's lives and various reasons for not using such networks, two of which have not been identified in previous research: The concept of friendship in these networks and the way of communication on social networks where sometimes people sometimes have an unrealistic character.

Richards and Sen (2013) stated in their research that the LibraryThing is a Web 2.0 tool that allows its users to catalog the books through Amazon website or the Library of Congress. They also evaluated the LibraryThing as a tool for libraries for the purposes of users' participation and promotional activities. They suggested that the main reason for the use of the tool by libraries is the promotion for the library and its complex.

In his research, Spiteri (2009) used the International Standard Bibliographic Descriptive Elements (ISBN) to evaluate the content of the records of 16 social cataloging sites. The intelligent communication, identity, and perception of the social features of these sites were used. While the content of the records was poor, the social characteristics created a community where the people could share their study interests with others.

Giustini, Hooker & Cho (2009) in their review article, meanwhile reviewing the use of social cataloging sites for health librarians, introduced some of these catalogues by describing their features. In addition to introducing the strengths, they also highlighted the weaknesses of these sites and mentioned the OPAC II as the new generation of catalogs.

In his research on Shelfari, Goodreads, Visual Book Shelf and LibraryThing, Jeffreies (2008) states that what the librarians need to know about each site. His findings showed that each of these tools has found its place among the users; however, one or two tools may appear as the standard of social cataloging site. He suggested that the LibraryThing is more applicable for librarians than the rest of the applications due to providing the specialized services for the library system.

Cooke (2008) examined a number of social networking sites that relate to books, blogs, wikis and internet tagging. He pointed out the importance of librarians' awareness of providing traditional services using modern online tools. One section of his article referred to the social cataloging sites of Goodreads, LibraryThing and Shelfari and stated that these tools are very useful for the users and librarians.

Research method

The present study is an applied research method and has been mixed qualitative and quantitative methods. First, the top ranking social cataloging sites on the ALEXA which were Goodreads, librarything and anobii, identified. Then in order to prepare a list of component of these sites, review and examine the constituent elements of them. Given that there are no particular criteria in the field of component of social cataloging sites, therefore, in order to provide assessment criteria and an evaluation list, Library studies was handled.. To do this search first navigates the theoretical texts and scientific resources related, through various search databases, such as Scopus, Eric, Emerald and the regional

center for the Humanities database, informing science and technology ,Libgen, doaj. Then the components provided in the various texts and resources mining and proposed criteria based on category. After verification of its validity by experts, the necessary corrections on it were done and the research work was taken.

According to the qualitative research approach, using the Delphi method to obtain the opinions of knowledge and information science specialists and computer professionals and users of these sites.

To review and assess the social cataloging sites an observence was done. This part of the study (in short interval from 10 to 15 June, 2017) was done so that refers to any of the social cataloging sites, it features with checkout list of researcher match. The evaluation method was exploratory based on heuristic method was through the viewing of the study population. To assess the social cataloging sites based on researchermadelist of two checkout log scale of existence and non-existence (Yes and no) was used and intended for those privileges to arrange Yes = 1 no = (one) and 0 (zero). Also according to the qualitative sub components used in this study (that can not be absolut exsitence or nonexseistence) equivalent rates average 75.0good, 50.0 medium, 25.0 poor was used. The collected data were analyzed using descriptive and inferential statistics using spss software

Research findings

First question: What are the components of the international social cataloging sites?

Social cataloing sites according to its function have features and components that identifying them will provide better and effective services by this site. Hence a detailed understanding of the social cataloging sites users and their needs and abilities is essential and should be considered in their design. In table 1 the criteria and the list of social cataloging sites based on the study of the texts and comments of experts using a Delphi Panel is provided.

Table 1 criterias of social cataloging sites

Criteria	component
Appearance features of the screen	Using suitable letter size display for reading
	Choosing the right colors for screen design

Criteria	component
	Having title for each pages
	providing Text on plain background
	avoid designing crowded pages
	Distinct between text and option of background
	Providing possibility images in large/original size by the user
Organization of the screen	Avoid using blind links
	providing illustrations and pictures according to each text
	Providing messages and useful contents where eyes accustomed to it (at the top and bottom of pages)
	Fit background color and text
	Providing access from home page to main sections of the library and vice versa
	View system messages (such as error messages) with using distinct display color or inverted display magnification
	highlighting after selecting options
	Do not use confusing information floats (using the Separate Pages)
	Recognizable data entry fields
	Possibility to select items for display (title, author, ISBN, publisher and ...)
	Proposing a summary or outline of a page
	Given the structure of the site
	Insert ample white space between paragraphs and text lines
	Uniformity in display
Search facilities	Providing search capabilities(via voice,pics, ets…) on website pages
	Providing advance search capabilities
	Providing capability of searching sentences or quots and finding book

Criteria	component
	Providing the capability of searching and finding subject tags
Links	link to OPAC (equivalent proportion of users needs with visual and hearing impairment)
	Link to other similar social cataloging sites
	links to other digital resources on the Internet and databases
	Quick link to other book provider sites like Amazon, Google books
Visual symbols and images	Using visual symbols together with written symbols
	Using the right and usual colors for options
	using Multimedia symbols
Options for customizing the texts	Possibility of changing the font color and size by user
	Choices for selecting different background color
Help services and tips	presentation of accurate Information correlate to the task rather than a generic message
	providing on-line training in the use of the social cataloging sites
	possibility of interrupting help facility and return to the task by user
	Offer Information via text telephones
	Offer Information via email
	Regularly scheduled consultations for users
Error messages alert	messages are short and simple
	The accuracy of the error message
Interaction and feedback facilities	Consecutive evaluations by receiving feedback from users
	Possibility to provide interaction and feedback via e-mail, commenting (online chat and writing)
	Providing the ability to communicate with other users online (through the chat room, discussion groups, etc.)
	Ability for users to interact audio and text with social cataloging site administrators

Criteria	component
	Providing the ability to interact with the authors of the book online (through the chat room, discussion groups, etc.)
Language User Interface	using of common terminology in site
	Using the Short, familiar and descriptive labels for the symbols
	Using simple, clear and easy to understand language to express the content, option and etc.
	Observance of the principle of remembering in all section of library
	Social cataloging sites To be Multi-lingual and user-selectable
user control	Possibility of changing light of pages by user
	Ability to download a book read in accordance with copyright laws
	Ability to use shortcut keys for commonly used symbols
	Possibility to return to the initial settings
	Ability to define a different user interface for different user groups
Different formats of sites resources	Presenting news and interviews about books and authors and ...
	Provide critiques of books
	Presentations of electronic books in various formats
Study services of retrieved resources from the library	Providing audio output with different sounds
	Presenting movies based on the book on the social cataloging sites or link to it
	Possibility choose the narrator by users
	Providing the ability to store resources on a personal computer in order to study them (in compliance with copyright laws)
Other site facilities	Link to the search engine to get the latest relevant information
	Ability to download applications like PDF and ...
	Usability for non-members
	Possibility to display book cover and book contents

Criteria	component
	Providing FAQ on the site
	Provide Free service
	Provide the remaining time of loading books or other multimedia resources available on the site
	The necessity of having a date calendar on the front page of the site
	Provide mobile version of site

Second question: What is the rate of observance of components in international social cataloging sites?

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Table2 rates of social cataloging sites from overal creteria

The percentage of compliance criteria	Overal rates of each creteria	anobii	librarything	Good reads	Components of each creteria	Sites / Creteria
97.62	20.5	7	7	6.5	7	**Appearance features of the screen**
75	31.5	11	10.5	10	14	**Organization of the screen**
35.42	4.25	0.5	2	1.75	4	**Search facilities**
27.08	3.25	.	2	1.25	4	**Links**
63.88	5.75	2	2	1.75	3	**Visual symbols and images**

The percentage of compliance criteria	Overal rates of each creteria	anobii	librarything	Good reads	Components of each creteria	Sites / Creteria
16.67	1	0	0	1	2	**Options for customizing the texts**
50	9	2	3	4	6	**Help services and tips**
100	6	2	2	2	2	**Error messages alert**
68.33	10.25	3	4	3.25	5	**Interaction and feedback facilities**
88.33	13.25	4.25	4.5	4.5	5	**Language User Interface**
28.33	4.25	1.25	1.5	1.5	5	**user control**
86.11	7.75	2	2.75	3	3	**Different formats of sites resources**
20.83	2.5	0.5	1	1	4	**Study services of retrieved resources from the sites**
29.63	8	0.75	2.75	4.5	9	**Other site facilities**
_	174.31	36.25	45	46	73	**SUBTOTAL**
_	_	49.65%	61.64%	63.01%		**The percentage of compliance criteria in the sites**
58.10						**Average of compliance criteria in the sites**

As we observe in table 2, the overall sum of rates corresponding to the 14 criteria assessed in this study is 174.31. Average compliance criteria in all of the studied social cataloging sites (58.10%) above average and is in favorable. this means thant almost all sites which studied in this research Approximately comply fourteen criteria . this shows that these sites do not have long distance to reach the optimal and by providing some functionality can reach the maximum desirable level. In upper mentioned sites, "Goodreads" by 46 points(63.01%) placed first ranked. After that Librarything by 45 points (61.64%) placed second ranke and thiered rank was achive by Anobii by 36.25 points.

Also among the criteria examined, the criteria " Error messages alert "with the acquisition of 100% is the first rank, and then " Appearance features of the screen " the second criterion earned 97.62% point.

"Options for customizing the texts" with 16.67 percent and then" Study services of retrieved resources from the sites" by 20.83% earn lowest rates. Chart 1 shows comparison of earned rate by each social cataloging site.
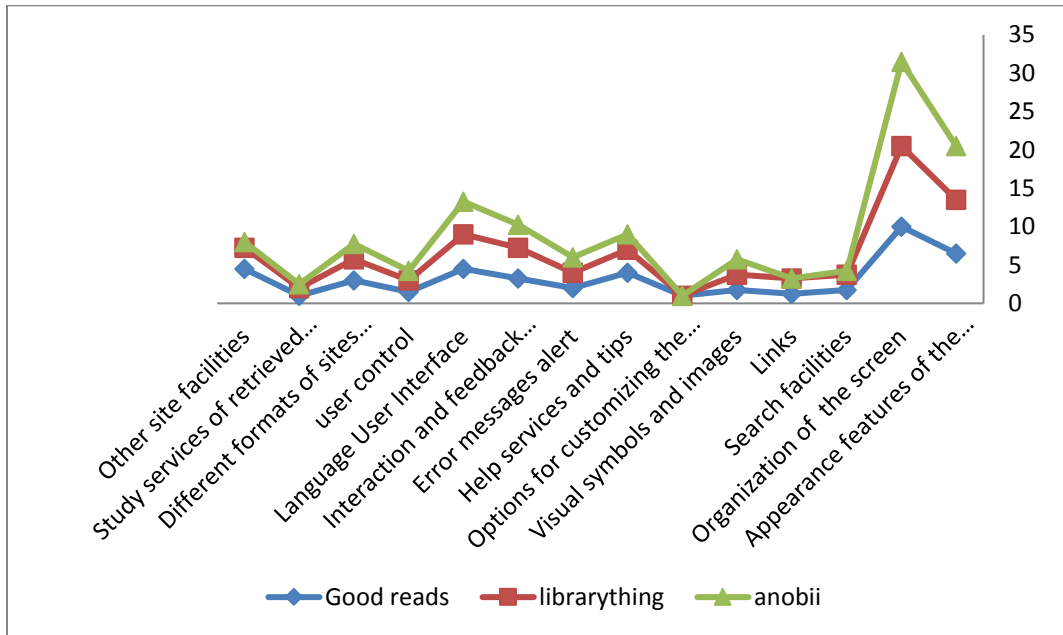

Chart 1 comparison of earned rate by each social cataloging site

Third question: What are the suggested native pattern components for social cataloging sites?

To rate indicatores (creteria of questionnaire) in 14 variables of research, we use Friedman nonparametric test. This test Rates indicators and variables after testing.

Based on data revealed in table 3, Friedman test which is done on each component is significant. That means between rate and importance of main components there is significant difference and based on average rate of main componets of study, "search facilities" gain highest rate and "Help services and tips" gain lowest rate.

Table 3 Friedman's test and the average ranking of the main research component

Average mean	creteria
8/10	Appearance features of the screen
7/33	Organization of the screen

9/70	Search facilities
6/10	Links
6/00	Visual symbols and images
6/93	Options for customizing the texts
5/56	Help services and tips
9/24	Error messages alert
7/54	Interaction and feedback facilities
9/15	Language User Interface
6/91	user control
8/30	Different formats of sites resources
6/70	Study services of retrieved resources from the sites
7/44	Other site facilities
sig=0/001	Friedman's test result

Discussion and conclusion

The results of this study showed that the total sum of scores related to the fourteen criteria investigated in this study is equal to 174.31. The average compliance rate of criteria in all the surveyed social cataloging sites is equal to 58.10, which is above the average level and at the optimal level. That is, almost all sites have met the criteria, but they are still not at the optimal level. Among the surveyed social cataloging sites, the Goodreads site is ranked first with 46 points (36.14%). Next is the LT site with 45 points in the second place, and then, the aNoobi site is at the third place with obtaining the score of 36.25. All of the components examined in this study are important. The ability to provide regular advice to readers with an average of 4.52 has the highest significance from the perspective of users, and then, the access to the site and the rest of the main sectors from the homepage and vice versa is at the second rank with a score of 4.42.

In addition, the results from Friedman test indicate that the search features, user interface language, error message and the types of templates or formats available on the site are the most important ones, and can be used as components of the native suggested model.

Also, by reviewing the sites mentioned, we notice that attention to the discussion language and considering different languages, providing mobile version of the site, and the feature to download applications can be also considered as important factors in the design of these sites.

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