Future National Bibliography of the Islamic Republic of Iran (NBI): the users' perspective

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Abstract:

Purpose: Investigation of the rate of users' satisfaction of current NBI and users' expectations of future NBI.

Design/Methodology/approach: The method of this research is survey methodology. The tool of data collection was questionnaire which was divided by 23 close and 3 open questions and 152 persons were chosen as population-based study.

Findings: The results of this study showed more than half of the users are satisfied with the comprehensiveness of NBI resources. The future services which are expected by users include providing a union catalogue, the possibility of book reservation via OPAC and keeping a history of the user's search strategy. According to the user expectations in existence of the distinctions elements in similar records of NBI, NLAI should implement new user-centered standards such as FRBR. The high user request for presenting related subjects to users' subject search suggest that NBI requires the implementation of FRSAD as well.

Originality/Value: No previous research in this field studied the expectations and viewpoints of individual users of NBI.

Keywords: National Bibliography of Iran, National Library and Archives of the Islamic Republic of Iran, users' perspective, Strategic planning, OPAC
**Introduction**

National bibliography is a mirror which reflects the culture of a country. A current national bibliography should reflect interests and unique characteristics of a country as much as a mirror reflects the uniqueness of an individual (Bell, 1988). The changes in publishing over the last 10 years, have especially brought a multitude of electronic information resources and the World Wide Web has changed the scope of the national bibliography (National Bibliographies ..., 2009). Nowadays, new technologies have undergone major developments in the field.

National library and Archives of the Islamic Republic of Iran (NLAI) is an educational, scholarly, research, and service-providing institution which operates under the supervision of a Board of Trustees headed by the President of the Islamic Republic of Iran. The official establishment and inauguration of National Library goes back to 1937 and its constitution has been approved by National Consultative Assembly in 1991. NLAI consists of four divisions: 1. National Library 2. National Archives 3. Research, Planning, and Information Technology 4. Administrative that operate in two separate buildings: National Library building, and National Archives building. (Shakeri, Akbari-Daryan, & Mohammadi, 2012)

NLAI first published NBI in 1963 (Larijan, 1996). The CD-ROM of NBI was presented in 1996 (Haddad, 2001). The NLAI OPAC system¹ was set on the web in 2006. At present, NBI can be used either on site, or through remote access (PC, mobile phone² and other remote devices) by NLAI users.

NLAI's policy on scope of NBI is as follows:
- All textual and non-textual materials which are published inside the country including books, periodicals, pamphlets, newsletters, posters, maps, audio and video tapes and discs, electronic and digital documents etc, through the National Deposit Act or purchase;
- Materials published outside the country by Iranians;
- Manuscripts existing inside the country regardless of language.

"Our will to preserve and guarantee the existence, accessibility of documentary heritage to present and future generations" is in the Mission Statement of the NLAI. Also "facilitation, acceleration and promotion of accessibility to the documentary heritage for audiences", and "development of the processing capabilities of organizing documentary heritage in order to make it more available" is one of the main strategic objects of NLAI; in other words, services should be organized to speed up and simplify the accessibility of resources by users. Furthermore, "development of services with the highest level of quality, expected by various audience groups" is among the NLAI strategic targets. Since users' satisfaction legitimize the existence of the NLAI, all efforts should move towards providing the highest and qualitative services (Strategic planning document, 2012).

Traditionally, users of the National Bibliography include three different groups: publishers and the bookselling trade, libraries, and end users (especially researchers) (Kett, Beyer, Manecke, Jahns & Svenso, 2012). The main objective of NBI is to provide services for end users, so their satisfaction and expectations of the NBI is very important.

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These are the reasons why this survey was conducted. The results of this research could be used in the NLAI strategic planning especially in developing NBI.

**Literature Review**

Haji Zeinolabedini and others evaluated NBI database. Correctness of cataloging, searching and retrieving, outputs and ... in NBI has been evaluated by this research (Haji Zeinolabedini, Davoodzadeh, Abdollahi & Yousefnejad, 2000). Haddad (2001) in a research studied the satisfaction level of NBI compact disk users. The result of this research showed that 89.4 percent of users have gained satisfaction from request method, cataloging accurateness and price. Kalate Seyfari (2009) in the research under the name of "the Review of weakness and strong points of Iran national bibliography database from the perspective of north khorasan state librarians" surveyed the view point of librarians toward NBI.

Literature review for this project showed that none of researches in this field studied the expectations and viewpoints of individual users, which will be covered by the present research.

**Research Questions**

This research aims to answer the following questions:

1- How much is users’ rate of satisfaction of NBI?
2- What are the users’ expectations of the future NBI?

**Methodology**

The method of this research is survey methodology. The tool of data collection was questionnaire which was divided by 23 close and 3 open questions. Considering the fact that a daily average usage of various National Library Halls amounts to 500 persons, and considering that Mohammadzadeh’s research has shown that half of the users do not use the library resources and merely come to library in order to utilize reading room facilities (Mohammadzadeh & Bozorgi 2013), it is surmised that the daily average NBI on site usages boils down to 250 persons. Sampling Software has been used for providing sample size and 152 persons were chosen as population-based study. The questionnaire was distributed randomly, in different halls among the users of NBI, during a week. This questionnaire was sent to specialists for evaluation, validation, and approval. The Cronbach’s Alpha method was used to test its reliability.

**Results**

<table>
<thead>
<tr>
<th>Demographic information</th>
<th>Gender</th>
<th>Education degree</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Associate degree and lower</td>
<td>Bachelor’s degree</td>
</tr>
<tr>
<td>Percentage</td>
<td>65.28</td>
<td>0.66</td>
<td>5.96</td>
</tr>
</tbody>
</table>

Table 1 shows that demographic characteristics of NBI users are composed of 65.28% female and 34.72% male. In terms of level of education, results shows that more than 90.97% of the NBI users have M.A. degree. With regards to the age of the users, most users are in a group of 26-30 years old and the least users are above 41 years old.

Chart 1 - The rate of NBI usage of various resources

Chart 1 implies that the highest consumption rate relates to book with 47% and dissertation with 45%, and the lowest consumption rate relates to manuscript.

Table 2 - search strategies of NBI users

<table>
<thead>
<tr>
<th>Search Strategies</th>
<th>Types of Search</th>
<th>Search in various fields</th>
<th>Boolean Operators</th>
<th>Limited Search</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Simple Search</td>
<td>Advanced Search</td>
<td>Multi-field Search</td>
<td>Browsing</td>
</tr>
<tr>
<td>Percentage</td>
<td>37.13</td>
<td>31.19</td>
<td>8.42</td>
<td>23.27</td>
</tr>
</tbody>
</table>

Data of table 2 shows that 37.13 % of NBI users have utilized simple search. The multi-field query method constitutes the lowest rate with 8.42%. The highest and lowest utilization of search fields relates to "Title Field" and "Author Field" respectively with 30.48% and 12.86%. Also With regards to the utilizing Boolean operators, 77.78 do not use this operators and 65.13 % of users do not use "Limited Search" option.
Table 3 – Browsing rate of search result pages in NBI by users

<table>
<thead>
<tr>
<th>Rate of pages browsed</th>
<th>Only the first page</th>
<th>Two pages</th>
<th>Two to Five pages</th>
<th>All pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>23.29</td>
<td>10.27</td>
<td>19.86</td>
<td>46.58</td>
</tr>
</tbody>
</table>

Data of table 3 shows that 46.58% of users browse all of the search result pages.

Users’ reply to the question whether" the existing link of [http://dl.nlai.ir](http://dl.nlai.ir) in bibliographic information records and the use of digital source files can replace reference to original sources" is as follows: 31.25% of users expressed more than 50% satisfaction of using digital files instead of the original source.

67.77% gave positive answer to the question whether "utilizing source in the Digital Hall\(^5\) of NLAI satisfies their needs for referencing the original source."

56.03% of users expressed their satisfaction with the comprehensive result produced by searches in the subject field.

Table 4- User satisfaction with respect of information validity

<table>
<thead>
<tr>
<th>Satisfaction rate</th>
<th>Excellent</th>
<th>Very good</th>
<th>Good</th>
<th>Normal</th>
<th>Weak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>9.52</td>
<td>28.57</td>
<td>46.26</td>
<td>10.2</td>
<td>5.44</td>
</tr>
</tbody>
</table>

Data of the table 4 shows that only 5.44% of users complained about information incorrectness.

Table 5.-General user satisfaction rate

<table>
<thead>
<tr>
<th>Satisfaction rate</th>
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Table 5 shows that 46.21% of users’ general satisfaction rate about NBI is between 74-50%. Only 12.41% of users have shown less than 25% general satisfaction rate.

\(^4\) If digital files of a resource exists in Digital Library of National Library and Archives of I.R.(DLNLAI),its link will be included in the bibliographic record of NBI for further benefit and usage of users. For example: [http://opac.nlai.ir/opac-prod/bibliographic/941042](http://opac.nlai.ir/opac-prod/bibliographic/941042)

\(^5\) Resources will be placed in Digital Hall, instead of putting them on the web, because of copyright issues by DLNLAI. Digital objects which have copyright issues for example books and dissertation can be accessed in physical premises of the digital hall by individual users with no download facilities.
<table>
<thead>
<tr>
<th>Expected categorization field</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categorization based on date of publishing</td>
<td>16.67</td>
</tr>
<tr>
<td>Categorization based on different editions</td>
<td>4.55</td>
</tr>
<tr>
<td>Categorization based on type of resources (books, dissertations, manuscripts…)</td>
<td>24.55</td>
</tr>
<tr>
<td>Categorization based on content (fiction, non-fiction, biography…)</td>
<td>4.85</td>
</tr>
<tr>
<td>Categorization based on subject (economy, history and …)</td>
<td>15.76</td>
</tr>
<tr>
<td>Categorization based on audiences (juvenile…)</td>
<td>1.82</td>
</tr>
<tr>
<td>Categorization based on language</td>
<td>4.24</td>
</tr>
<tr>
<td>Categorization based on creator( author, translator, editor, …)</td>
<td>8.48</td>
</tr>
<tr>
<td>Categorization based on related resources</td>
<td>19.09</td>
</tr>
</tbody>
</table>

Data of Table 6 shows that in response to the question about their preferences as to the search results categorization, 24.55% of users expressed their preference for search result categorization based on type of resources (books, dissertations, manuscripts,…), 19.9% preferred categorization based on related resources, and 16.67% preferred categorization base on date of publishing.

At the same time, 72.79% of the users declare their interest in seeing related web resources while NBI search results are displayed.

96.26% gave positive answer to the question whether "they would like to see related subjects while they search in subject field".

67.71 % of users after reviewing results of their search, found some distinctive elements which helped them distinguish the records which had a common title in NBI. 86% of them were satisfied with the distinctions and 19.54 % of those who were dissatisfied, proposed the implementation of the following distinctions:
- Narrowing of subject
- Adding extra bibliographic information, for example table of content and abstract.
- Displaying book cover and preliminary pages.
- Displaying the authors title (such as doctor, engineer…) without omission

Users’ response as to the additional services expected from future NBI, is as follows:
- Providing a comprehensive union catalogue
- Display preliminary pages of resources (books and dissertations)
- Sending loan request via OPAC
- Book reservation via OPAC
- Creating digital format for all resources
- Keeping a history of the user's search strategy

Users' expectations in displaying their search results are as follows:
- Ranking of search results based on users' query
- Presentation of source summary
- Displaying narrower subjects
- No typing errors

Users' suggestions for user-centric and easier usage of NBI are as follows:
- User training for utilizing NBI software
- Simplifying search system
- A more user-friendly interface

**Discussion and conclusion**

According to the results of this research, the most usage of the NBI resources is related to the book and dissertation, and the least is related to manuscript. Impossibility of creating digital files of books and dissertations in DLNLAI due to copyright issues is the main factor for this. On the other hand, there is no need for manuscripts users to go to NLAI as they can access 38711 manuscript titles in DLNLAI, it justifies the low level of user attendance in the NLAI building. Approximately 4000 persons visit DLNLAI per day.

Most users utilize the simple search and browsing instead of advanced search and also more than half of the users do not use "Boolean Operators" and "limited search". This fact implies that users do not master on search methods in NBI which could be improved by training the users. These results show that author and subject fields are used by users less than the others due to the authorized form of these fields. This situation can be improved by training the users in the natural language which is supported by software system. In NBI, there is a possibility of searching the references in the authorized records (see, see also …).

The fact that two-thirds of the users are satisfied with the use of digital files of copyrighted resources in Digital Hall instead of utilizing original sources confirms that NLI is in the line with its mission statement which is declared as "Our will is to preserve and guarantee the existence, accessibility of documentary heritage to present and future generations " and should add more resources in the Digital Hall for preventing their physical destruction. At present, more than 90% resources of Digital Hall are dissertations while the daily average loan of original dissertations amounts to 700 titles. In the case of digitizing whole dissertations of NLAI for the Digital Hall, these valuable research resources will be protected and preserved physically.

More than half of the users are satisfied with the comprehensiveness of NBI resources. This fact confirms that NLAI is on the right track, regarding its mission statement based on: "our aspiration is to make comprehensive treasure of Iranian and Islamic cultural documentary heritage and selection of human knowledge" (Strategic planning document, 2012).
Since Only a very low percentage of users were dissatisfied with the NBI and the accuracy some of the bibliographic information records, it could be concluded that the present NBI has received a favourable response from the majority of users.

The users’ expectations of future NBI in categorization of search results implies that two programs should be set by NLAI. This programmes are: 1) The implementation of FRBR; 2) setting up search result ranking based on users’ query. High rate of full browsing of search result pages confirms the necessity for the ranking.

The high user request for presenting related subjects to users’ subject search suggest that NBI requires the implementation of FRSAD as well. Also utilizing thesaurus and tree display is indispensable for users’ awareness as well as selection of required related subjects. Regarding users’ high request based on displaying of related web resources in NBI, Iran Web Archive project should be implemented in NLAI, as it is mentioned in Shadanpour and others' research (Shadanpour, Akbari Dariyan, Shahrabi Farahani, Seirafi, & Vazifehdoust, 2002).

According to the user expectations in existence of the distinctions elements in similar records of NBI, NLAI should implement new user-centered standards such as FRBR. As expressed in Akbari Daryan and others’ research: "The lowest level of functionality found in records of NBI relates to the user task "select" with 63.73%, which means that bibliographic records of NBI have the least functionality in selecting or rejecting content objects retrieved by users according to their needs. In order to increase functionality of bibliographic records of NBI based on the FRBR model, it is recommended that NLAI cataloguers fulfill the values of the Iran MARC fields which have not been completed up to now" (Akbari Daryan, Taher & Shakeri, 2012).

The Future services which are expected by users include providing a union catalogue, the possibility of book reservation via OPAC and keeping a history of the user’s search strategy. All should be implemented in the line with strategic target of NLAI which follows: "development of expected services of all audience groups with the highest quality". In this regard, Shahrabi’s research shows if NLAI sets up a system under web which provide services such as OCLC, it will be able to establish an interlibrary common ground which could be more effective in National information dissemination (Shahrabi & Khosravi, 2013). Thus users’ expectations of NBI regarding providing a union catalogue will be met.

At the end, in terms of strategic mission of the NLAI based on gaining audience satisfaction, legitimizing the existence of NLAI, future NBI should meet users’ expectations mentioned by this research to make NBI more user-centered and user friendly.
Reference


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