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Users' Perceptions of FRBRized OPAC in finding, identifying, selecting, and obtaining works on Islam

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Abstract: The aim of the study was: (1) to investigate users’ perceptions of a Saudi university’s online catalog (OPAC), and (2) to compare users’ experience in using FRBR-based online catalog and the university catalog in finding, identifying, selecting, and obtaining works on Islam. The study was concerned with evaluating the four identified FRBR model tasks, i.e. find, select, identify and obtain, with regards to applying FRBR in library online catalog as a means to enhance the quality of its bibliographic records as well as improve the existing services. The population in this study comprised of all undergraduate students of Library and Information Science Department in Umm Al-Qura University, Saudi Arabia. They were asked to perform the four tasks in searching works on Islam for original work, author, editions and translated copies. A questionnaire was designed to investigate their perceptions of Umm Al-Qura University OPAC features, perception of Umm Al-Qura’s online catalogue after task completion, perception of WorldCat after task completion. The findings showed that respondents experienced difficulties in meeting the four user tasks while using Umm Al-Qura’s online catalog. It was also found that the Worldcat FRBR prototype system supports the user tasks; “find, identify, select and obtain” better than the regular online catalog. Moreover, the study discovered perceived ease of use and perceived helpfulness of the Worldcat FRBR-based OPAC and the use of color and design were among the factors contributing in users’ differences in their opinions towards FRBR-based and regular online catalog. The study provided a number of recommendations for Umm Al-Qura University library to improve its OPAC by adopting the FRBR model.

Keywords: FRBR, OPAC, online catalogs, bibliographic control, interface design

Introduction

The Functional Requirements for Bibliographic Records (FRBR) gets its popularity in most of recent library projects and studies due to its potential in making the relationship between entities of the first group (work, expression, manifestation and items). The potential of FRBR entities relationship can be expressed in the relationship between bibliographic records within the online library catalog. FRBR has the potential to eliminate the duplication of similar records and merge different titles and editions of the same work under one record, thus it will maximize user satisfaction and improve the searching results. However, the current regular online library catalog fails to clarify the relationship between one to another record of the same work with different forms.

Utilization of FRBR on the library catalogs can enhance the quality of its bibliographic records as well as improve the existing services in several aspects such as follows:

1. User friendly displays of bibliographic records.
2. Eliminating duplication of bibliographic records by merging them under one record.
3. Users have advantage to search by both title and name of author not by only one as the regular online catalog.
4. Users can take full advantage of system flexibility.
5. The records can be looked in terms of database design.
6. Shows bibliographic relationships between entities.
7. Improves collocation of records.
8. Finds all manifestations of a work and groups them together.
9. Allows for the tracing of the history of works, expressions, and manifestations.

Since the current online catalogs do not recognize the different formats of the same works such as translated and edited works, FRBR has the potential of eliminating redundant records using the entity-relationship model. Traditional online catalogs might discourage users from finding their intended information which is available in the system due to duplication of findings, inconsistency in the searching results and improper relationship between similar records in the bibliographic data.

Zhan and Salaba, (2007) conducted a study to understand user needs and tasks of three FRBR-based online catalogues, i.e WorldCat, Fiction-finder and Libraries Australia. They found that user evaluation is essential in developing future effective systems.

Coyle and Hillmann (2007) noted that one of the major issues many users find when searching a library catalog is that most catalog display multiple occurrences of a work not only through multiple records for all of its different manifestations but also through multiple records for each of those manifestations in different formats, typically without clustering them in any sort of meaningful way.

Carlyle (2006) has assessed the implications of the FRBR model for bibliographic description, and stated that any evaluation of the FRBR model will depend on how successfully a FRBR implementation meets specified user needs declared at the outset.

Simpson et al (2007) reported on a project at the University Of Florida Smathers Library conducted in order to support better linking of catalogue records for multiple manifestations of the same title. They have listed three important obstacles to creating FRBRised catalog: 1) library management systems frequently cannot manage links that exist among bibliographic records 2) catalog records often lack the data necessary to reflect relationships 3) library management systems typically cannot make use of the data even if it is available.

Noting the fact that there has been a lack of user studies of FRBR-based online library catalogs using Arabic language interface, this research investigated library users’ experience in using FRBR-based online catalog. Based on the current literature reviews, majority of the studies have been conducted in the developed world, but not in the Middle East.

The study

Saudi academic libraries are still developing their systems to improve their quality and satisfy their users. Umm Al-Qura as one of the academic libraries is following the same way of enhancing their current online catalog. An understanding about the users’ experiences of online library catalog is very essential to effectively support the future works and researches. Information is being produced in libraries and institutions in a rapid growth with high volume and most probably will be the case for the coming century. To ensure the growth and development of information with high benefits for users, more emphasis has to be paid to users studies. Thus, a serious study has to be conducted in order to investigate the view point of users who experienced the regular library online catalog and FRBR-based online catalog.

The purpose of this research was to describe the online catalog experiences of Umm Al-Qura University students. It also aimed to evaluate and compare Umm Al-Qura’s online catalog
The objectives of the study were:
1. To investigate users’ perceptions of Umm Al-Qura University’s online catalog.
2. To compare users’ experience in using FRBR-based online catalog and Umm Al-Qura University’s catalog in finding, identifying, selecting, and obtaining works on Islam.

The study’s sample was all students enrolled in the final and third year of the Library and Information Science department in Umm Al-Qura University. Using questionnaires, participants were asked to share their perception of Umm Al-Qura’s online catalog features based on five-items Likert scales, i.e. strongly agree, agree, moderately agree, disagree and strongly disagree. Participants were then asked to use the Umm Al-Qura’s online catalog and to perform searching tasks. The tasks were limited to works on Islam. For instance, participants were asked to find, identify, select and obtain works on civilization in Islam. Next, the participants were trained how to use the WorldCat FRFB-based prototype system and then asked to perform searching similar tasks. Finally, they were asked to compare between Umm Al-Qura’s online catalog and WorldCat FRBR-based online catalog in identifying, selecting, and obtaining works on Islam. A numbers of statements related to respondents’ perceptions of both systems have been stated.

Findings

a) Perceptions of Umm Al-Qura’s Online Catalog’s

Table 1
Perceptions of Umm Al-Qura’s Online Catalog
N=60

<table>
<thead>
<tr>
<th>No.</th>
<th>Perceptions of Umm Al-Qura’s Online Catalog</th>
<th>SA &amp; A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The OPAC Interface is Appealing</td>
<td>57 (95%)</td>
</tr>
<tr>
<td>2.</td>
<td>The Interface is User Friendly</td>
<td>57 (95%)</td>
</tr>
<tr>
<td>3.</td>
<td>Easy to link items</td>
<td>49 (81%)</td>
</tr>
<tr>
<td>4.</td>
<td>Easy to use Sort Options</td>
<td>56 (93.3%)</td>
</tr>
<tr>
<td>5.</td>
<td>Easy to use search options</td>
<td>47 (78.3%)</td>
</tr>
<tr>
<td>6.</td>
<td>Easy to Refine Search Options</td>
<td>43 (71.7%)</td>
</tr>
<tr>
<td>7.</td>
<td>Easy to Understand Labels and Terminology</td>
<td>51 (85%)</td>
</tr>
<tr>
<td>8.</td>
<td>Presentation of Information</td>
<td>52 (86.6%)</td>
</tr>
<tr>
<td>9.</td>
<td>Easy to Use Spelling or Search Suggestions Feature</td>
<td>48 (80%)</td>
</tr>
<tr>
<td>10.</td>
<td>Easy to Link External Sources</td>
<td>47 (78.3%)</td>
</tr>
<tr>
<td>11.</td>
<td>Overall, the OPAC is easy to use</td>
<td>56 (93.3%)</td>
</tr>
</tbody>
</table>

The study found majority of respondents (95%) said that the online catalog interface is appealing and user friendly. Fifty-six (93.3%) students agreed that the online catalog provides easy sorting options (by date, format and languages), overall the online catalog was easy to use (93.3%). Moreover, 52 (86.6%) students
were satisfied with the presentation of information. 51 (85%) students said that the labels and terminology was easy to understand and 49 (81%). A lesser number of respondents agreed that easy to ‘use the search options’ (78.3%), ‘easy to link external sources (78.3%)’, and ‘easy to refine options’ (71.7%).

b) Comparing Between Perceptions of Umm Al-Qura Online Catalog and WorldCat after Task Completion

With regards to Umm Al-Qura online catalog, 48 (80%) students agreed that they need to learn more about how to use the online catalog (Table 2). Thirty-nine (65%) students perceived the online catalog as useful, 36 (60%) perceived it as helpful and easy to use. Slightly more than half of respondents (51.7%) students said they could easily move around Umm Al-Qura online catalog, they were satisfied with the use of color and design as well as with the terminology used throughout the online catalog. Surprisingly, less than half of respondents, i.e. 27 (45%) students were generally satisfied with the Umm Al-Qura online catalog. Only 17 (28.3%) students were satisfied with the amount of information given by Umm Al-Qura online catalog.

Table 2
Comparing of the Two Systems after Task Completion
N=60

<table>
<thead>
<tr>
<th>No.</th>
<th>Online Catalog Features</th>
<th>Umm Al-Qura SA &amp; A</th>
<th>Worldcat SA &amp; A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I usually find online catalog useful</td>
<td>39 (65%)</td>
<td>48 (80%)</td>
</tr>
<tr>
<td>2.</td>
<td>I usually find online catalog helpful</td>
<td>36 (60%)</td>
<td>51 (85%)</td>
</tr>
<tr>
<td>3.</td>
<td>I usually find online catalog easy to use</td>
<td>36 (60%)</td>
<td>51 (85%)</td>
</tr>
<tr>
<td>4.</td>
<td>I can move around without getting lost</td>
<td>31 (51.7%)</td>
<td>40 (66%)</td>
</tr>
<tr>
<td>5.</td>
<td>I am satisfied with the amount of information given</td>
<td>17 (28.3%)</td>
<td>53 (88.3%)</td>
</tr>
<tr>
<td>6.</td>
<td>I am satisfied with the use of color and design</td>
<td>31 (51.7%)</td>
<td>49 (81.7%)</td>
</tr>
<tr>
<td>7.</td>
<td>I am satisfied with the terminology used throughout the online catalog</td>
<td>31 (51.7%)</td>
<td>46 (76.7%)</td>
</tr>
<tr>
<td>8.</td>
<td>Overall, I am satisfied with the online catalog</td>
<td>27 (45%)</td>
<td>51 (85%)</td>
</tr>
<tr>
<td>9.</td>
<td>I need to learn more about how to use online catalog</td>
<td>48 (80%)</td>
<td>53 (88.3%)</td>
</tr>
</tbody>
</table>

After their tasks completion using WorldCat, a total of 53 (88%) students were ‘willing to learn more about how to use WorldCat’, as well as ‘satisfied with the amount of information given by WorldCat online catalogue’ (Table 2). This is followed by 51 (85%) students who perceived WorldCat as helpful and easy to use, and they were generally satisfied with WorldCat online catalog. In addition to these, 49 (81.7%) students said they were satisfied with the use of color and design of Worldcat, and 48 (80%) students perceived Worldcat online catalog as useful. Forty-six (76.7%) students were satisfied with the terminology used, followed by 40 (66.7%) students who said they could move easily around the WorldCat online catalog.
Discussion

A big difference was observed between the percentage of Umm Al-Qura (28.3%) and WorldCat online catalog (88.4%), in terms of students’ satisfaction with amount of information given by the online catalogs and with the use of color and design. Next is the difference between the overall satisfaction of the online catalog of Umm Al-Qura (45%) and Worldcat (85%). All the above differences clearly indicates that that WorldCat FRBR prototype system support user tasks “find, identify, select and obtain” better than the regular online catalog. WorldCat scored higher than Umm Al-Qura’s Online Catalog in terms of all the 9 features investigated in this study.

This study also found that there are several other factors that contributed to users’ differences when comparing between FRBR-based online catalog and regular online catalog. Firstly, the use of color and design is one of the major contributing factors in users’ differences between FRBR based (81.7%) and regular (51.7%) online catalogues. Secondly, two factors, which are, perceived ease of use and perceived helpfulness were among the contributing factors in users’ differences between FRBR-based (85%) and regular (60%) online catalog. Overall, students seemed to enjoy using FRBR-based online catalog even though they were not familiar with most of the features and searching tools available. During these periods (tasks completion) the researcher observed the following points:

1. Respondents experienced difficulties in meeting the four user tasks while using Umm Al-Qura’s online catalog.
2. Respondents were impressed with the WorldCat although it was the first time they have used it. They have been introduced to the new features of WorldCat such as other links, classification of sources, different format of sources and different languages of sources.
3. Respondents preferred to have the same system in their library in order to look for information easier by using FRBR-based online catalog.
4. Respondents were very keen to learn more about how to use WorldCat regardless of their unfamiliarity with FRBR and the limited time they had.

Conclusions

By comparing two different systems, i.e. traditional online catalog and FRBR-based online catalog, the study was helpful in discovering better ways to prepare Umm Al-Qura University students to be information masters. Among recommendations that can made to improve the design of traditional online catalogs are: (1) to include features of refining options and improve their existing feature of searching options (keyword, advance & single search), (2) to improve the quality of interface design, (3) to study the possibilities of FRBRizing traditional online catalog in order to enhance its services as well as the improving overall satisfaction online catalog.
Appendices

INTERFACE OF KING ABDULLAH BIN ABDULAZIZ LIBRARY ONLINE CATALOG

INTERFACE OF WORLDCAT
References


