Faculty Use of Internet Services at a University of Agriculture and Technology

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Introduction

The Internet provides vast amounts of information on every field and subject. There are hundreds of millions of Web pages, bibliographical databases, and full-text databases available on the Internet (Prasher, 2003). Sardar Vallabh Bhai Patel University of Agriculture & Technology, Meerut, India, was established in 2000, under the Uttar Pradesh Agricultural University Act, the first agricultural university of the century. The development of library equipped with modern facilities, recent text books, and other study material is in process.

Review of Related Literature

Bansode and Pujar (2008) highlight the purpose of use, methods of locating information, and search techniques used in retrieving the information by the research scholars of Shivaji University, Kolhapur. The authors find that scholars use the internet for research and communication purposes, and conclude that more awareness about Internet resources and training in their use should be provided by library professionals. Biradar, et al., (2006) conducted a study on Internet use at Kuvempur University. The results indicated that 42 percent of students use the Internet twice a week, and more than 30 percent of faculty use it daily. The majority of students and faculty use the Internet for study and teaching. They use the Internet in the library, as well as in commercial places. Most respondents are satisfied with Internet sources and services.

Eynon (2005) conducted a study on the use of the Internet in higher education and use of ICTs for teaching and learning. The most common use of ICTs in all subjects was to provide students with the access to a range of online resources. Academics motivations for using ICTs were enhancing the educational experience for their students; to compensate for some of the changes occurring in higher education; and personal interest and enjoyment. The difficulties encountered were lack of time; dissatisfaction with the software available, and copyright issues.

Mahajan (2006) conducted a study of Internet use by researchers in Punjab University, Chandigarh, which analyzed the technologies that have transformed society into a knowledge society. It was stated that the Internet is considered to be the most valuable of all computer technologies.

Mulla and Chandrashekar (2006) conducted a study on Internet users of Mysore University. The study was conducted using faculty, students, and researchers in different science subjects. The study revealed that a majority of users used the Internet and were satisfied with the information available.
Objectives of the Study

The purpose of this study was to investigate the use of Internet services by the faculty members of Sardar Vallabh Bhai Patel Agriculture & Technology, Meerut, Uttar Pradesh, India. It is specifically focused on the following objectives:

- To study the present Internet services provided by university
- To discover the purposes for which the Internet
- To identify sources of information
- To discover preferred search engines
- To identify problems faced by users
- To determine the satisfaction level of users regarding infrastructure facilities, membership fee, and location.
- To discover user satisfaction with the Internet services provided

Methodology

The study uses the case study method. A structured questionnaire was designed and used for collecting data. The sample for the study was selected purposefully from those noticed in the Internet lab more frequently. The questionnaires were distributed among 60 faculty members, of which 50 were completed.

Data Analysis and Interpretation

Table 1: Frequency of Internet Use

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Time</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Daily</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>2-3 times a week</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Once a week</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>4</td>
<td>Not specified</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>No response</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Sixty percent of respondents use the Internet daily or 2-3 times a week.

Table 2: Purpose of Internet Use

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Purpose of Internet Use</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Accessing information quickly</td>
<td>48</td>
<td>96</td>
</tr>
<tr>
<td>2</td>
<td>Study/research</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>3</td>
<td>Communication</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>4</td>
<td>Entertainment</td>
<td>45</td>
<td>90</td>
</tr>
<tr>
<td>5</td>
<td>No response</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>

Virtually all respondents used the Internet for accessing information quickly, and a large number also use it for entertainment. Half say they use it for communication, while 30 percent say they use it for research and development.

“Faculty Use of Internet Services at a University of Agriculture and Technology,” Devendra Kumar. Library Philosophy and Practice 2010 (February)
Table 3: Method of learning Internet skills

<table>
<thead>
<tr>
<th>Method</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trial and error</td>
<td>27</td>
<td>54</td>
</tr>
<tr>
<td>Guidance from colleagues and friends</td>
<td>21</td>
<td>42</td>
</tr>
<tr>
<td>Training from university/Department</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Self instruction</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>External courses</td>
<td>07</td>
<td>14</td>
</tr>
</tbody>
</table>

More than half of respondents learned through trial and error, while a nearly equal number had guidance from colleagues and friends.

Table 4: Average time spent in a week for using Internet facilities for Research Development work.

<table>
<thead>
<tr>
<th>Internet tools/research</th>
<th>30 Minutes</th>
<th>Up to 1 hour</th>
<th>1-2 hours</th>
<th>25 hours</th>
<th>5 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>E Book</td>
<td>11 (19.92%)</td>
<td>12 (18.46%)</td>
<td>7 (10.76%)</td>
<td>5 (7.69%)</td>
<td>2 (3.07%)</td>
</tr>
<tr>
<td>Online Journals</td>
<td>10 (15.38%)</td>
<td>12 (18.46%)</td>
<td>4 (6.15%)</td>
<td>10 (15.38%)</td>
<td>9 (13.84%)</td>
</tr>
<tr>
<td>E-Articles</td>
<td>12 (18.46%)</td>
<td>9 (13.84%)</td>
<td>9 (13.84%)</td>
<td>7 (10.76%)</td>
<td>3 (4.61%)</td>
</tr>
<tr>
<td>E-Thesis</td>
<td>6 (9.23%)</td>
<td>2 (3.07%)</td>
<td>8 (12.30%)</td>
<td>3 (4.63%)</td>
<td>-</td>
</tr>
<tr>
<td>Web Resources</td>
<td>3 (4.61%)</td>
<td>5 (7.69%)</td>
<td>4 (6.15%)</td>
<td>1 (1.53%)</td>
<td>1 (1.53%)</td>
</tr>
<tr>
<td>E-Archives</td>
<td>1 (1.53%)</td>
<td>2 (3.07%)</td>
<td>4 (6.15%)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Download</td>
<td>8 (12.30%)</td>
<td>3 (4.61%)</td>
<td>7 (10.76%)</td>
<td>7 (10.76%)</td>
<td>2 (3.07%)</td>
</tr>
<tr>
<td>Online</td>
<td>3 (4.61%)</td>
<td>11 (16.92%)</td>
<td>4 (6.15%)</td>
<td>7 (10.76%)</td>
<td>12 (18.46%)</td>
</tr>
</tbody>
</table>

Users indicated how their time using the Internet is distributed, showing a wide variety in formats used and time spent.

Table 5: Most-used websites

<table>
<thead>
<tr>
<th>Category</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>49</td>
<td>98</td>
</tr>
<tr>
<td>Discipline-based</td>
<td>38</td>
<td>76</td>
</tr>
<tr>
<td>Recreational</td>
<td>04</td>
<td>08</td>
</tr>
</tbody>
</table>

Most users describe the websites they use most often as general purpose.
Table 6: Use of Internet Services

<table>
<thead>
<tr>
<th>Name of Service</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-mail</td>
<td>48</td>
<td>96</td>
</tr>
<tr>
<td>WWW</td>
<td>45</td>
<td>90</td>
</tr>
<tr>
<td>E-Journal</td>
<td>32</td>
<td>64</td>
</tr>
<tr>
<td>Search engines</td>
<td>43</td>
<td>86</td>
</tr>
<tr>
<td>FTP</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>FAQ</td>
<td>26</td>
<td>52</td>
</tr>
<tr>
<td>Telnet</td>
<td>17</td>
<td>34</td>
</tr>
<tr>
<td>Usenet</td>
<td>32</td>
<td>64</td>
</tr>
<tr>
<td>List services/discussion groups</td>
<td>18</td>
<td>36</td>
</tr>
<tr>
<td>BBS (bulletin board services)</td>
<td>16</td>
<td>32</td>
</tr>
</tbody>
</table>

E-mail and www search are used by virtually all respondents, while search engines and e-journals are also used by a large majority.

Table 7: Internet information resources

<table>
<thead>
<tr>
<th>Type of e-information</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-journals</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>E-articles</td>
<td>34</td>
<td>68</td>
</tr>
<tr>
<td>E-thesis and dissertations</td>
<td>21</td>
<td>42</td>
</tr>
<tr>
<td>Databases</td>
<td>18</td>
<td>36</td>
</tr>
<tr>
<td>E-books</td>
<td>16</td>
<td>36</td>
</tr>
<tr>
<td>Mailing lists</td>
<td>07</td>
<td>14</td>
</tr>
<tr>
<td>Newsgroups</td>
<td>09</td>
<td>18</td>
</tr>
<tr>
<td>Subject gateways</td>
<td>04</td>
<td>08</td>
</tr>
<tr>
<td>E-archives</td>
<td>03</td>
<td>06</td>
</tr>
<tr>
<td>Web resources</td>
<td>07</td>
<td>14</td>
</tr>
<tr>
<td>Downloading services</td>
<td>21</td>
<td>42</td>
</tr>
<tr>
<td>Online search</td>
<td>16</td>
<td>32</td>
</tr>
</tbody>
</table>

E-journals and e-articles are used by a large majority of respondents, followed by other information resources.
Table 8: Favorite Search Engines

<table>
<thead>
<tr>
<th>Search Engines</th>
<th>Number of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google</td>
<td>43</td>
<td>86</td>
</tr>
<tr>
<td>Yahoo</td>
<td>32</td>
<td>64</td>
</tr>
<tr>
<td>AltaVista</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Rediff</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>Hotbot</td>
<td>06</td>
<td>12</td>
</tr>
<tr>
<td>Khoj</td>
<td>03</td>
<td>06</td>
</tr>
<tr>
<td>Lycos</td>
<td>03</td>
<td>06</td>
</tr>
<tr>
<td>Not specified</td>
<td>01</td>
<td>02</td>
</tr>
</tbody>
</table>

It is clear from the data that Google, Yahoo, AltaVista, and Hotbot are the most used search engines among the respondents.

Table 9: Use of advanced search features

<table>
<thead>
<tr>
<th>Search Facility</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boolean operators</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Truncation</td>
<td>02</td>
<td>04</td>
</tr>
<tr>
<td>URLs: Creative guessing</td>
<td>08</td>
<td>16</td>
</tr>
<tr>
<td>Portals</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>Directories</td>
<td>04</td>
<td>08</td>
</tr>
<tr>
<td>Search engines</td>
<td>09</td>
<td>18</td>
</tr>
<tr>
<td>Phrase searching</td>
<td>06</td>
<td>12</td>
</tr>
</tbody>
</table>

Advanced searching features are used by only about 20 percent or less of respondents.

Table 10: Problems

<table>
<thead>
<tr>
<th>Problem</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important sites in the subjects areas are not known</td>
<td>38</td>
<td>76</td>
</tr>
<tr>
<td>Difficulty finding relevant information</td>
<td>27</td>
<td>54</td>
</tr>
<tr>
<td>The allotted time slot is insufficient</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>No problem</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>Electricity failure</td>
<td>03</td>
<td>06</td>
</tr>
</tbody>
</table>

More than three quarters of respondents find that important sites in the subject areas are not known, and more than half indicated that they faced the problem of finding relevant information.
Table 11: Satisfaction with internet for research purpose

<table>
<thead>
<tr>
<th>Category</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most helpful</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Helpful</td>
<td>21</td>
<td>42</td>
</tr>
<tr>
<td>Not helpful</td>
<td>05</td>
<td>10</td>
</tr>
<tr>
<td>No response</td>
<td>09</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Nearly three quarters of respondents find the Internet useful for their research.

Table 12: Infrastructure facilities available in the library

<table>
<thead>
<tr>
<th>Category</th>
<th>Respondents</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Satisfied</td>
<td>Not Satisfied</td>
</tr>
<tr>
<td>Seating</td>
<td>31 (62 percent)</td>
<td>19 (38 percent)</td>
</tr>
<tr>
<td>Number of terminals</td>
<td>22 (44 percent)</td>
<td>28 (56 percent)</td>
</tr>
<tr>
<td>Multimedia</td>
<td>20 (40 percent)</td>
<td>30 (60 percent)</td>
</tr>
<tr>
<td>Number of printers</td>
<td>15 (30 percent)</td>
<td>35 (70 percent)</td>
</tr>
</tbody>
</table>

While respondents are generally satisfied with seating arrangements, they are not satisfied with the number of computers or printers, or with the multimedia resources.

Table 13: Faculty member’s satisfaction with Internet facilities

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partially satisfied</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>Fully satisfied</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>No comments</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Least satisfied</td>
<td>09</td>
<td>18</td>
</tr>
<tr>
<td>No response</td>
<td>08</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Nearly half of respondents were fully or partly satisfied with the available Internet facilities, leaving more than half unsatisfied.

Findings

The following important findings can be noted:

- A majority of the respondents use the Internet for research purposes and to access information quickly.
- E-mail and WWW were the most used Internet services in the library.
- Most of the users prefer Google’s search engine to search for information.
- Most users face some problems, such as lack of knowledge of important websites in subject areas.

“Faculty Use of Internet Services at a University of Agriculture and Technology,” Devendra Kumar. *Library Philosophy and Practice* 2010 (February)
Advanced searching techniques are only used by a small portion of respondents. A large number of Internet users were not satisfied with the infrastructure facilities available in the library. Facilities such as number of terminals, multimedia facilities, and printers, were inadequate for the fulfillment of needs of the users. A large majority of users were satisfied with the use of Internet and the information available there.

**Conclusion and Recommendations**

The present study indicates that a majority of faculty members use the Internet as one of their sources of information. This study gives a snapshot use of Internet by faculty at a single university; however, the snapshot makes it clear that most library users use the Internet daily for research and development purposes and to access information quickly. The study also indicates that most users were satisfied with the information available on the Internet. The present study puts forth the various suggestions to be implemented to improve Internet service in the library. Time slots should be increased, and printers made available to the faculty. Faculty training programs are essential for proper use of Internet resources. Internet facilities should be improved, and upgraded PCs may be installed. CD-ROM/CD writers must be installed for data collection. Internet service should be provided around the clock and broadband facilities should provide more journals online.

**References**


“Faculty Use of Internet Services at a University of Agriculture and Technology,” Devendra Kumar. *Library Philosophy and Practice 2010 (February)*


