Users’ Perception About E-books in India

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ABSTRACT

This paper aims to study the users’ understanding and acceptance of e-books in India. This study was carried out by conducting a survey using questionnaire as a tool to find out users’ views on using e-books as compared to printed documents. This study was carried out during the period of January to March 2006 covering a wide range of ages, subject backgrounds, computer experience, occupations, and comfort in using computers in their daily life. The readers survey found that Indians are generally willing to use and read e-books though they continue to prefer and use printed publications. Generally, the users are aware of the advantages and limitations of each medium and will tailor their choice according to their needs. Of the total, slightly less than half of the users (41 %) are ready to pay the same or slightly lesser price as compared to printed publications, 24 per cent are half or quarter the price of printed publications.

Keywords: E-books, e-publications, users’ perception, e-books use

1. INTRODUCTION

The developments in the field of information technology (IT) have brought about a rapid change in the way people think about information. Nowadays, people want remote information available on their desktops, laptops, and mobile phones. This was unimaginable before the computer era, when books and journals were available only in the print form. In fact after the emergence of electronic books (e-books) and electronic journals (e-journals), the library users have become more demanding and expecting information at their fingertips. While this trend is more or less true-with library users of many developed countries, however, in India though the use of e-journals in libraries is increasing steadily but the use of e-books did not pick up much because of various reasons.

Since then many people worked in this area and developed several new things (both hardware and software) related to e-books. For several years, it has been anticipated that e-books will gain widespread use as an educational tool, but this has not yet actually come to true1-3. After longtime, now we have inexpensive but highly functional portable reading devices and increasing number of e-book titles in majority of the subject4-6 and a technologically literate student population hungry for new electronic media. The college classroom is an obvious target for e-books implementation because college students typically embrace new technologies and also purchase a high volume of expensive7,8 cumbersome and rapidly discarded books.

The aim of this study is to examine the users’ perception about e-books. So, the users in India were surveyed to know their perception and acceptance of e-books. The objectives of this study are: (a) to find out the understanding about e-books; (b) to find out the users usage of e-books; (c) to find out the users preferences between printed and e-books; (d) to find out the users willingness to pay for e-books; and (e) to find out the problems faced by the users while using e-books in India.

2. RELATED RESEARCH

E-books are catching up fast especially with school and college students8. However, the use is not prevalent in all types of users in India. The reasons for this are many: lack of electronic content in Indian languages, lack of proliferation of ICT tools in rural areas which constitute a major chunk of the Indian population, and many others. E-books are not available at affordable price so are not taking their place in people’s collections, educational institutions, libraries, and corporate offices. Presently, reading devices are not that cheaper and needs some more time to become cheaper in India. In spite of many
technological advancements in this area including their size than ever before, and their percentage, which is not that significant in India, as compared to cell phones.

Few studies have been conducted on the use of e-books. Some of the recent research studies addressed the issues related to the acceptance and integration of e-books\textsuperscript{10,11} scholarly monographs\textsuperscript{12} and textbooks\textsuperscript{13} in academic libraries. The results of these studies, showed a slow acceptance of digital resources except e-journals. In another study, it was found that 80 per cent of the e-book users in Spain are men\textsuperscript{14}. Among those who have purchased or received e-books, 25 per cent have bought mysteries and thrillers followed by 26 per cent business and investing books. Several people studied the users’ perception about e-books\textsuperscript{6,13,15,16,17} the use of e-books, impact on print media, and several other environments.

However, some users particularly elders still want printed copies of the works to read and analyse. It was observed in a previous study conducted in Singapore\textsuperscript{19}. The study also revealed that the majority of readers (61 \%) were ready to pay for e-content and e-publications with 26 per cent the same or slightly lesser price compared to print-publications and 15 per cent half or quarter the price. And in the present study, the users prefer to use short-term reading documents like reference tools and reports in electronic form, and printed sources for long hours of reading.

3. METHODOLOGY

A survey was conducted through questionnaires to collect data on the users’ perception about e-books in India. The survey was carried out during January-March 2006. Survey sample covers users ranging from 20 years of age onwards to 52 years belonging to a variety of professions including librarians, software professionals, academicians, students, and other people. A total of 150 questionnaires were distributed to users with varying profiles and backgrounds. Of these, 120 people responded and the same were used for the analysis and results are presented.

4. USERS’ PROFILE

4.1 Demographics of Users

The users surveyed were in the age group of 20 to above 50 years old. Among them 62 per cent are in the early twenties, 10 per cent are in late twenties, 6 per cent are in thirties and the rest are in forties and fifties. All the respondents were Bachelors degree holders, of which 40 per cent were BTech degree holders, 14 per cent MCA degree and rest were having BA, MTech, PhD, and other degrees. The sample covers a range of professionals including software professionals, teachers, research scholars, professors, etc. All the users surveyed were residents of Hyderabad, Delhi, and Bangalore but came from different parts of the country to work in various organisations/institutions.

4.2 Computer Experience of Users

Among the users nearly 42 per cent of the respondents had been using computers for the past 6-10 years, 10 per cent had 15-20 years experience and 20 per cent had 11-15 years of experience. The high percentage of computer experience also has a positive impact on the receptivity and usage of e-books.

4.3 Frequency of Computer Usage

The findings of this study revealed that the majority of the users (82 \%) are daily computer users. Slightly less than half (48 \%) of them use computers only for surfing the internet, and another group of 16 percentage use for sending e-mails. This is significant because it was found in other studies also that frequency of computer and internet usage affects on the receptivity and usage of e-books\textsuperscript{20}.

4.4 Ownership of E-book Reading Devices

Among the respondents, most of them (90 \%) own a PC. Out of the remaining, 6 per cent users owned a laptop, PDA, WAP phone, and an e-book reader. This is not surprising because the PC is no more expensive to many people in the present Indian society and regarded as the most prevalent computing device in the world.

4.5 Frequency of Internet Usage

Users were asked to indicate how often they use the internet. It was found that 48 per cent use internet almost everyday, 44 per cent use a few times a week and rest of them (6 \%) use once in 1-2 weeks. The higher frequency of internet usage also has an impact on the receptivity and usage of e-books, as most of them are spending lot of time on internet.

As per figures released by the Internet Governance Forum, India has 81 million internet users in 2008. India ranks fourth in the world in terms of internet users and US, with 220 million internet users, tops the world. China, with 210 million users, comes in a close second followed by Japan with 94 million users (www.getcounted.net) at third place. About 9 per cent of the users are accessing the internet primarily for entertainment and the number of online transactions (e-commerce) were steadily increased. Out of these users, the young men, older men, and working women groups were using internet mostly. Whereas, non-working women were using internet for searching of jobs and dating purposes in significant numbers. It was found that the time spent on the internet increases with the age of the user. For example, school children spend weekly an average of 322
min, college students spend an average of 433 min, older men spend an average of 580 min, working women spend an average of 535 min, however, non-working women spend 334 min a week.

This clearly shows that the present survey population could be inferred to be generally high computer literates, frequent internet users and owners of computing devices particularly PC and such a profile can be expected to be more receptive to the usage of e-books. Of the total, 90 per cent respondents own some form of computing devices, have internet access and are comfortable in using computer. A survey done in the US has also found among the greatest deterrents to use are technological difficulties as reader’s use of e-publications would require computer and internet access (for online publications) along with the appropriate computer related skills[21].

5. USAGE OF E-BOOKS

Users were asked whether they have read or used e-books before. The majority of the respondents (72 %) have used but slightly over quarter of them (28 %) have not used before. These findings are similar to other studies in which they have already found a co-relation between frequency of computers usage, computing devices ownership, and frequency of internet usage of e-publication[20,21].

The study shows that the respondents do not lack adequate access to e-books, as most of the respondents are known to have frequent access to the internet and online publications also. None of the respondents indicated lack of access as a reason for preferring to use printed version of books.

5.1 Future Use of E-books

Among the respondents who have not used e-books, 54 per cent said they would use in the next 6 months, 15 per cent said they will be using within 1 year and 31 per cent do not know if they will use e-books in future. Of the total, 69 per cent of the respondents indicated that they are eager to start using e-books.

5.2 E-books Usage Place/Point

Among the respondents, slightly less than half of them (45 %) used e-books at work, a third (33 %) used them at home, 15 per cent used at school/college/university, 3 per cent while commuting and a small percentage at other places. It is interesting to know that most users do not prefer using e-books while commuting however, the majority of them prefer in US and European countries. This indicates to the fact that most users preferred to read or use printed publications while commuting, due to several reasons such as satisfaction, comfort, ease of use, etc. Nelson[22] found that the main advantage of e-publications being online they will be able to access them either from the work place or on the home PC. The results of this study also give more or less a similar trend of usage patterns of e-books by users[16].

5.3 Length of E-books Usage

Among the respondents who have used e-books, 21 per cent have been using for more than three years, about a third (32 %) for 2-3 years and 44 per cent varies from six months to one year. Nowadays, e-books are becoming more popular than before so many libraries in India also purchasing a sizable collections in few subject areas such as IT, computer science, reference, medical sciences, entertainment, etc. Nowadays, some of the reference books are very cheap so many people are purchasing for their personal/home use in India.

6. PREFERENCES TOWARDS PUBLICATION FORMAT

Users were asked to indicate the type of documents or publications they prefer to read or use in printed form and in electronic form and also give the reasons for their preference to each medium.

6.1 Users’ Preferences on Print and Electronic Publications

Users were asked to select all the categories of publications that they preferred in print and electronic forms. Table 1 shows that the majority of the users surveyed prefer printed books (72 %), followed by newspapers (56 %) and magazines (54 %) in print form. About 46 per cent prefer journals, 44 per cent prefer reference tools like dictionaries, directories, etc., 22 per cent prefer reports, 26 per cent prefer maps and travel guides and a small percentage (3 %) prefer other types of documents in print form.

Table 1. Users preference print versus electronic form

<table>
<thead>
<tr>
<th>Type of document</th>
<th>Preferred in print form</th>
<th>Preferred in e-form</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Books</td>
<td>86</td>
<td>72</td>
</tr>
<tr>
<td>Magazines</td>
<td>65</td>
<td>54</td>
</tr>
<tr>
<td>Newspapers</td>
<td>67</td>
<td>56</td>
</tr>
<tr>
<td>Journals</td>
<td>55</td>
<td>46</td>
</tr>
<tr>
<td>Reference tools</td>
<td>53</td>
<td>44</td>
</tr>
<tr>
<td>e.g. dictionaries, directories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reports</td>
<td>26</td>
<td>22</td>
</tr>
<tr>
<td>Maps/travel guides</td>
<td>31</td>
<td>26</td>
</tr>
<tr>
<td>Others, if any, please specify</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>386</td>
<td>322</td>
</tr>
</tbody>
</table>

*Respondents chose more than one option so the total percentage exceeds 100 %.

The reasons given by the respondents for preferring print form include: portability, comfort in reading,
usability, and flexibility. Portability of print forms was the most frequently cited by respondents (23%). Comfort in reading was the next most potential factor mentioned by (21%) preferring in electronic form by the respondents with comments like less eye strain, easy to read, etc.

A small percentage (9%) of the respondents quoted readability also one of the factors and other factors mentioned were availability, cost, latest information, searchability, and accessibility. Overall, comfort in using was the main factor because of which the respondents preferred print form over electronic publication.

Users were also asked to select all the categories of publications that they preferred in electronic form. Table 1 indicates that more respondents (56%) prefer reference tools in electronic form, 52% prefer journals, 48% prefer reports, 42% prefer books, 26% prefer newspapers and 20% prefer magazines. It is a good sign that a considerable percentage of the respondents are using reference books in electronic form in India due to low cost and easy availability.

Overall the survey shows that a slight majority of the users surveyed preferred publications in electronic form over to print form. The reasons mentioned by the respondents for preferring to use electronic publications including searchability, accessibility, availability, flexibility, and updated information. Further, it also indicates that users prefer publications like reference tools, journals, and reports in electronic form. The reasons for this could be the easy availability of these publications and availability of updated versions, when compared to other forms of publications. Also these publications, especially the printed report are very costly when compared to the electronic forms.

7. PREFERENCE TO USE E-BOOKS

7.1 Type of E-book Form Preferred

The respondents were asked which type of e-book format they preferred. Less than half of them (46%) prefer in using e-books on internet, more than a third (37%) preferred using e-books on CD-ROMs, 10 per cent prefer DVD and a small percentage (4%) preferred VCD form. These results show that readers are still receptive in using CD-ROMs, whereas the majority accesses e-books on internet. Another possible reason for this could be the availability of free e-books on the internet.

The majority (75%) of the respondents preferred PC to use e-books, 20% per cent preferred laptop and a small percentage (3%) use mobile phones. The reasons for this could be because PCs are nowadays available for an affordable price for common men in India, so majority of them own PCs. Laptops are still expensive compared to PCs so only marketing and executive cadres are using in less percentage. Mobile phones with advanced features are still costlier in India though basic sets are available at reasonable rates hence small percentage of them are only using.

7.2 User Satisfaction Rate

When the users were asked to rate the satisfaction they had got out of reading e-books, less than half (48%) responded that they were somewhat satisfied, 36% were very satisfied, about 12% were very unsatisfied or unsatisfied and 4 per cent were extremely satisfied. This indicates that though the users are receptive to use e-books, they still do not feel comfortable to use e-books because printed books as printed books are handy, still cheaper than e-books.

7.3 Probability of E-books Purchase

About a third (34%) of the users surveyed said they would definitely purchase e-books, 28% said they might or might not purchase, 22% said they would probably purchase, 4% were not sure and 6 per cent said they would definitely not purchase e-books. It was noticed ‘that a small percentage (6%) of the users in the survey had never used e-books. This shows that though readers are using e-books but they are not very much keen on purchasing e-books. The prohibitive costs of e-books, requirement of specific devices to read, and lack of wide subjects’ coverage could be few factors limiting in purchasing of e-books.

7.4 Availability of E-books in Local Libraries

When the users were asked about availability of e-books in their local libraries, half (50%) of them responded positively and the other half (50%) negatively. Among those who responded negatively, 89 per cent said that they want their local libraries to build e-books collection, however, (11%) responded negatively to the same question. This indicates that users are willing to use e-books if they are made available through their local libraries. Nowadays, in cities, university libraries, corporate libraries, and private college libraries started spending 5-7 per cent their budget on purchasing of the e-books. With time this percentage is increasing slowly and plays a significant role on the users perceptions and receptivity.

8. DESIGN AND USABILITY

8.1 Usability of E-books

The usability of e-books are shown in Table 2.
8.2 Suggestions

When respondents were asked to make some suggestions to improve the overall design and usage of e-books, the following suggestions were received: (a) natural language searching should be available; (b) better search facility with more precision; (c) publishers should conduct awareness programs all over the country on regular basis; (d) produce items that are affordable to Indian buyers; (e) e-books must be made available in all major libraries; (f) awareness should be created among the undergraduate and graduate students in usage of e-books; (g) search engines only for e-books should be developed; and (h) general e-books should be made free of cost.

9. USE OF E-BOOK READERS

Of the total users surveyed, most of them (81 %) did not own a PDA; only 19 per cent of them owned a PDA. This could be again for the reason of high cost of PDAs limited to rich and corporate community. But when the users were asked if they would purchase PDA if the costs come down, 73 per cent said they would purchase, however, 27 per cent said they would not purchase a PDA even if the costs came down. This shows that if the e-book reading devices come down at reasonable prices then the users are ready to purchase the reading devices which are similar to mobile phones in today’s context.

When the respondents were asked if they faced any problems with regard to the standards of e-books, the majority of them (62.5 %) responded negatively but the remaining (37 %) reported some problems with standards of e-books. Of those who faced problems with standards, when asked if they expected publishers to produce e-books that can be read anywhere, 80 per cent responded positively, 20 per cent said they did not expect publishers to produce e-books that can be read anywhere. This indicates that users of e-book readers are optimistic that in future the publishers will bring out e-books that are not device specific and can be read across different platforms and will be interoperable.

When asked to list the features of e-book reading device they like the respondents listed out features like: less strain to the eyes, convenient for naive users, low cost, multiple language support, facility to add user comments, facilitate highlighting of important points, ability to render any type of document properly.

Users were asked to rate their user interfaces of different types of e-books they have used. Table 3 indicates the users’ ratings of the interface on a scale of 1-5 where (1 is most easy to use and 5 is the least easy to use).

<table>
<thead>
<tr>
<th>Type of e-book</th>
<th>Rating of interface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encyclopaedia Britannica</td>
<td>4</td>
</tr>
<tr>
<td>Guinness Book of World Records</td>
<td>4</td>
</tr>
<tr>
<td>Oxford English Dictionary</td>
<td>3</td>
</tr>
<tr>
<td>Computer science books</td>
<td>2</td>
</tr>
<tr>
<td>Literature</td>
<td>2</td>
</tr>
<tr>
<td>Novels</td>
<td>2</td>
</tr>
<tr>
<td>Dictionaries</td>
<td>1</td>
</tr>
<tr>
<td>Study purpose</td>
<td>1</td>
</tr>
<tr>
<td>Software utilities</td>
<td>1</td>
</tr>
</tbody>
</table>

Here, students did not understand the question and the meaning to the user interface so gave reverse ranking. Encyclopaedia Britannica has got better user interface than other e-books but it was rated as difficult. If the ranking reverses, the ratings are quite tallying to their actual interfaces.

10. PROBLEMS WITH E-BOOKS

10.1 Problems Encountered While Using E-Books

The users were asked to indicate the problems they had while using e-books. Of the total, 28 per cent said hyperlinks in e-books were a problem, 18 per cent said there was need for an integrated dictionary, 9 per cent said full-text search was a problem, 14 per cent said illustrations were problematic, 13 per cent indicated the support for e-book readers and another 11 per cent indicated references as problematic and remaining (5 %) indicated footnote as problem.

![Figure 1. Problems of e-books.](image-url)
Many studies conducted earlier on problems faced by users of e-publications in various environments with different types of users\textsuperscript{23,24,25} and they all highlight the almost similar kind of problems encountered by respondents in the present study. The common problem stated is the inability of e-publications to be as eye friendly as print publications\textsuperscript{20}. This factor is very essential for long hours of reading; therefore users prefer to read printed books rather than e-books. This also explains the preference of respondents for short time value documents or publications, such as magazines and newspaper articles and reports, in e-format. Users are encounter difficulties like getting lost and disorientated from scrolling on monitor screens\textsuperscript{26,28}. This also compounds the problem of eye strain for the users. Minor bugs in application software and compatibility issues also cause problems to users. These are indicators for the e-media publishers in general and e-books publishers in particular that the current reading devices need to be optimised so that reading on e-platform can be less straining and cumbersome to the users. When asked to indicate whether they would prefer to have facility to add marginal comments, 82 per cent indicated they preferred to have the facility to add personal comments/notes while 18 per cent indicated they did not prefer so.

The users were asked how they felt about frequent updating of e-book’s content. The majority (61\%) of them responded that frequent updating provides latest information whereas for a small percentage (5\%) indicated that frequent updating causes problems, 27 per cent felt that it was good but was expensive to maintain, 7 per cent indicated that they do not like frequent updating because lot of work is involved.

When asked to list the most liked features of e-books, some of the respondents indicated that accessibility, cost effectiveness, ease of use, efficiency, and portability of e-books are some of the most liked features. Respondents indicated that facilities like search facilities, dictionary-aided searches, versatility, and pdf rendering, bookmarks, footnotes, hyperlinks, navigating through the use of hits are useful for their use. Some of them indicated that availability of latest content; updated editions are easier to implement faster in electronic form that in print form, coverage of a wide range of subjects were the features that they liked the most in e-books. Some also indicated that the availability of old and rare publications at free of cost on internet. Some even indicated that the beautiful presentation of e-books is the most liked feature. This indicates that users like flexibility in use of e-books which printed books can not offer like searchability, hyperlinks, etc.

When asked to list the most disliked features of e-books, the respondents indicated that the high cost, requirement of specific devices, lack of facility to add comments in some forms of e-books, small font size used, and hyperlinks were some of the most disliked features of e-books. Some others indicated the inability to take e-books to relaxation places, causing eye strain, lack of readability of content as features that they disliked the most. Some respondents pointed out other reasons like difficulty in concentrating for a long time while reading an e-book, not able to magnify the page content, etc. However, some of the e-books does have this facility to change the font size big and magnify the page reasonably. Many of the respondents also said that power problems, and constantly changing technology were the most disliked features. This indicates that though e-books usage is there, there are problems presented by e-books which need to be resolved, before their usage rate actually catches up.

The respondents were asked to give their recommendations to improve the features of e-books. The respondents came up with many practical suggestions about what features need to be improved and what new features need to be added. The suggestions given by the respondents can be broadly put into the following categories:

(a) Value-added features: like associated dictionaries, should allow to print and should not be protected by security code.

(b) Ease of use: like easy to scroll through pages, there should not be any unwanted links, hence minimise the non-usable or unwanted material.

(c) Modifiable: should be modifiable to highlight important points.

(d) Display: the display area should be bigger more readable fonts should be used, and proper background and foreground colours should be used.

(e) Cost: respondents indicated that costs should be reasonable to Indian users and some of them should be made free and for most commonly viewed e-books there should not be any download limit.

Some other points that the respondents recommended were: (a) e-books should be made available in the libraries and facility to use them remotely from home or office; (b) provide effective searching tool with easy to use interface; and (c) should occupy less storage space.

10.2 Onscreen Problems

When asked to list out the onscreen problems, the users reported the following problems: eye strain, headache, uncomfortable, cannot read for long time at one sitting, font size should be bigger, problems with some illustrations, show display may be disconnected. So, most of them find using e-books at a long stretch uncomfortable and straining.
Users were asked to rate the following problems on a 1-5 scale (where 1 is the most potential problem and 5 is the least potential problem) which inhibited them from using e-books. Each point in the scale was given weightage, i.e., 1 was given a weightage of 5, 2 a weightage of 4, 3 a weightage of 3, 4 a weightage of 2, and 5 a weightage of 1. Each of the value in the scale was multiplied with the respective weightage point given to it. The results thus obtained were added to get the final weightage.

Table 4 indicates that the high cost of e-books, reading software/devices is the most potential factor to inhibit the use of e-books among the respondents. The next most potential problem to inhibit the user of e-books was licensing issues involved in purchase of e-books. This indicates that the users are not happy with the restrictions on copying, printing and download limitations. That is why licensing issues are a potential factor to inhibit users from using e-books. The third most potential factor inhibiting use of e-books is the difficulty in onscreen reading continuously for a longtime. This cannot be helped presently as the reading devices available are not very eye-friendly. The next potential inhibitor is surprisingly libraries. Users indicated that libraries are not keeping up with current technologies and devices. Another factor mentioned by the users is the less number of e-books availability. The next factor mentioned is the requirement of specific devices for e-books. Other factors mentioned were non-availability of e-books in the users’ domain of research interest. E-books are currently available mostly in the fields of science and technology, computer science, fiction, leisure, etc. E-books in social sciences and other areas are very less. Some other factors inhibiting use of e-books mentioned were unable to print from e-books, quick updating of e-books/reading devices, need training to use e-books and not comfortable with electronic gadgets.

11. PURCHASING/PRICING ISSUES

It was revealed in the present study that most of the users preferred using e-books if they are available free of cost on internet. About 15 per cent respondents owned e-books purchased by them and these indicated that they buy e-books online internet.

11.1 Recommend E-books to Others

When asked if they would recommend e-books to their friends/colleagues slightly more than half (54 %) of them responded that they would do so ‘definitely’ 17 per cent said they ‘might or might not’ 15 per cent said they ‘probably’, 5 per cent ‘probably not’, 5 per cent said they ‘do not know’ and 2 per cent said they would definitely not recommend e-books to others. This indicates that by and large the users are satisfied with the e-books and are ready to recommend e-books to their friends and colleagues.

11.2 Preferred Pricing Pattern

When asked to indicate their preferred pricing pattern of e-books, 42 per cent indicated that they prefer. One-time purchase of a title with a premium for perpetual access; 26 per cent preferred annual subscription fees access with ownership; 22 per cent preferred purchase of a title with annual access fee premium and only; and 10 per cent preferred annual subscription fee access without ownership. This indicates that more users prefer to spend one time purpose for e-books with perpetual access.

11.3 Price Currently Being Paid by Users for E-books

A considerable percentage of the surveyed e-book users (41 %) are not willing to e-books, 17 per cent of them pay the same as printed publications, 14 per cent slightly less than printed publications, another 14 per cent quarter of printed publications price, 10 per cent claimed they are paying half of printed publications price and 3 per cent followed other pricing patterns. This indicates that users are still not very comfortable with using e-books.

### Table 4. Problems in using e-books and e-book reading devices

<table>
<thead>
<tr>
<th>Problems with e-books and e-book reading devices</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not comfortable with electronic gadgets</td>
<td>6</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>8</td>
<td>56</td>
</tr>
<tr>
<td>Availability of e-books is less</td>
<td>10</td>
<td>4</td>
<td>8</td>
<td>3</td>
<td>7</td>
<td>103</td>
</tr>
<tr>
<td>High cost of e-books, reading software/devices</td>
<td>13</td>
<td>11</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>125</td>
</tr>
<tr>
<td>Licensing issues involved in purchase of e-books</td>
<td>14</td>
<td>9</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>120</td>
</tr>
<tr>
<td>Libraries do not subscribe or utilise the new technology</td>
<td>10</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>104</td>
</tr>
<tr>
<td>Need training in use of e-books</td>
<td>6</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>11</td>
<td>70</td>
</tr>
<tr>
<td>Not many titles are available in my area(s)</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>91</td>
</tr>
<tr>
<td>Specific device/software requirement for an e-book makes difficult to use</td>
<td>10</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>96</td>
</tr>
<tr>
<td>Unable to print from e-books</td>
<td>9</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>78</td>
</tr>
<tr>
<td>Quick updating of e-books/reading devices</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>58</td>
</tr>
</tbody>
</table>
| Continuously longtime on-screen reading is difficult for me | 15| 6 | 4 | 2 | 2 | 117       

### Table 5. Users willing to purchasing e-books

<table>
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<th>Factors for purchasing e-books</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of print vs. e-book</td>
<td>13</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>109</td>
</tr>
<tr>
<td>E-books reviews appeared in professional magazines</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>7</td>
<td>78</td>
</tr>
<tr>
<td>E-book content quality</td>
<td>11</td>
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<td>6</td>
<td>5</td>
<td>1</td>
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<tr>
<td>E-book publisher</td>
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<td>4</td>
<td>6</td>
<td>9</td>
<td>71</td>
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<tr>
<td>Others if any please specify</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>E-book features</td>
<td>4</td>
<td>8</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>83</td>
</tr>
</tbody>
</table>
hence are not ready to spend on e-books. Some of them purchasing e-books are either priced less than or same as print version.

12. COPYRIGHT ISSUES

The survey indicates that the majority (62 %) of them is aware of International Copyright Laws. However, more than a third (38 %) said they are not at all aware of copyright laws. The survey also indicates that among those who are aware of copyright laws, majority of them (58 %) showed concerns for the rights of the author and indicated that they would not copy content from e-books. Slightly less than half (42 %) do copy content from e-books in spite of being aware of copyright laws. Most of the e-book users (84 %) indicated that they do not face any copyright related problems while copying content from e-books. While one-seventh (16 %) indicated that they do face problems while copying content from the e-books.

When the respondents were asked to give suggestions to combat the copyright problems of e-publications in India, the following suggestions were given: (a) the government should take care of the legal problems; (b) making them available at very nominal price so that copying and piracy can be stopped or minimised; (c) copyright problems should be discussed at length by arranging meeting between different countries technology experts; (d) seminars and road shows should be conducted to raise awareness about e-books and to propagate and promote copyright laws in schools, colleges and universities; (e) stringent laws should be enforced against copying books and CDs; and (f) software should not allow copying and apply these restrictions based on books contents.

When the respondents were asked whether our government should come up with Indian copyright laws that protect the interests of authors, publishers and users, 97 per cent responded positively and only 3 per cent did not want that Indian Copyright Laws should come up. This indicates that it is high time that the government in India not only come up with stringent copyright laws but also enforces them strictly. Unless the government takes steps towards this, plagiarism will become rampant harming the authors’ rights.

13. CONCLUSIONS

Users are generally willing to use e-books though print books are predominant in today’s world. Presently, the choice of the users to use e-books or print books depends on the availability of required information easily whether it is an e-book or print book.

However, it is also found that users are generally not using e-books as extensively as print books. Majority of the users indicated that it was due to the fact that e-books have not become as portable, flexible, and readable as their print counterparts and still much more costly than of print books. However, users in India are willing to use e-books provided that e-books are available for reasonable price in the market. Let us hope in a couple of years the prices will come down, as technology improves, most of the related problem are removed so that users in the libraries, offices, and home environment will start using them in longer quantities. Publishers, authors and uses are looking forward for that scenario very soon in India.

REFERENCES


About the Author

Dr Chennupati K. Ramaiah is working as Professor and Head, Department of Library and Information Science, Pondicherry University, Puducherry. Prior to that he worked as Professor and Librarian at Muffakham Jah College of Engineering and Technology. Before joining the college, he worked as Professor and Director, Centre for Information Science, and Librarian of MGNIRSA, Hyderabad. Before that he worked as an Assistant Professor, Nanyang Technological University, Singapore for 6 years from 1999 to 2005. Prior to that Dr Ramaiah was Deputy Director at DESIDOC, a national information centre in Defence Science and Technology in India. He has worked for 14 years in the Defence Research & Development Organisation, India, as Scientist, and worked in various areas including conducting research, heading A-V Division and Defence Science Library. He was a Commonwealth Scholar for PhD in Information Science in 1989. Soon after obtaining his PhD, he set up a multimedia lab and worked several years in designing multimedia applications, presentation and training materials. Dr Ramaiah’s formal education includes Master’s degrees in Chemistry and in Library and Information Science. He is a member of many international professional bodies/societies such as the Institute of Information Scientists, LA, ASIST, and ACM. He has published more than 80 papers and three books. His research interests include multimedia and hypertext technologies, human-computer interaction, user interfaces, e-books and e-publishing, archival informatics and bibliometrics.