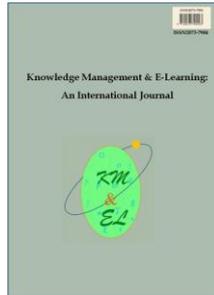


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A study of university student behaviors in using eBooks in Hong Kong

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Abstract: The adoption rate of eBooks has multiplied exponentially in University libraries. Libraries prefer buying eBooks rather than in-print books, mainly because of their low cost-structure and also because eBooks are easier to store. However, many library users still prefer to read in-print books, as compared to reading eBooks. This therefore leads to a potential mismatch between the expectations of the library and its users. This study aims to investigate the usage of eBooks in Universities in Hong Kong. The focus of this research is to analyze the behaviors of students using eBooks at Universities in Hong Kong. Their usage experience would be observed and examined in order to identify and discover a more sustainable system for the future development of eBooks in Universities in Hong Kong. In this study, a questionnaire has been utilized for collecting the experiences of students using eBooks. The results very clearly demonstrated that printed books are the preferential choice for most students, although they were willing to accept eBooks as a substitute for printed books. The concerns of students corresponding to acceptance of eBooks have been examined in this study. This study would be beneficial for academic libraries in Hong Kong, as it would provide valuable assistance in enhancing and refining their services and developing their collection of eBooks, through understanding and appreciating the behaviors of students who use eBooks.

Keywords: eBooks; Behaviors; University student

Biographical notes: Dr. Hokyin Lai is a Lecturer in the Department of Computer Science, Hong Kong Baptist University. Her research interests include technologies in education and information science, social computing, decision support systems and intelligent agent technologies.

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1. Introduction

With the rapid development of the Internet and its revolutionary impact on culture and commerce, through digitalization over the years, electronic resources started to develop very rapidly. It has been documented that in the last decade, many tertiary institutions in Hong Kong started introducing electronic books (eBooks) to augment and enrich their collections for academic or educational purposes. Besides using a library for browsing in-print books, students now had the option to access eBooks through the Internet.

According to statistics provided by Internet World Stats: Usage and Population Statistics in 2011, about 2,267,233,742 people, accounting for nearly 33% of the world's population, used the Internet in that year. As the Internet is a platform which provides stable and speedy availability of information along with ease of accessibility of information, people are eager to use electronic resources more frequently. Mr. Dick Brass, Vice President of Microsoft, had predicted in 1999, that eBooks would become the future of reading and that 90% of in-print books would be replaced by eBooks by 2018. Mr. Brass's statement also implied that eBooks being an important eResource would become progressively more and more popular with students in the future. Consequently, there has been a radical rise in the total number of eBooks and eBooks users, and this rise is expected to continue into the future. A survey investigating the information-seeking behaviors and technology preferences of college students reported that nearly 60% of respondents chose eBooks in preference over other eResources, by retrieving the required information from digital libraries, such as academic digital libraries (De Rosa et al., 2010). The percentage of users using eBooks and the predictions of Mr. Brass are the explanations behind the reason why the future development of eBooks would become a critical issue for tertiary institutions.

There are many researches about eBooks, such as Wilson (2003) examines the attitudes of lecturers in UK toward the design of eBook readers for education, and Hennon, Hopper, Leach, Saunders, and Zhang (2007) examines the search behavior and use patterns of undergraduates majoring in economics, literature, and medicine. They focused on discussing the types of eBooks exist and are used, the purpose of accessing eBooks, and how do students use and manipulate eBooks. However, none of them have studied the reasons for not using eBooks. This is critical to understand the rationales behind, so that eBook publishers or university libraries can further improve their eBooks publishing and adoption. In addition, it is interesting to examine whether the eBook usage is affected by the increasing number of smartphone users. Hong Kong is a typical example of heavy smartphone use. This motivates this study. This study will focus on the usage of eBooks in Universities in Hong Kong through an in-depth exploration of the usage patterns among University students, with the intention of providing suggestions on improving the use of eBooks and facilitating the sustainable development of eBooks in Universities in Hong Kong in the future.

2. Literature review

2.1. *What are eBooks?*

According to Reitz (2010), the full form of eBooks is Electronic Books which are a digital version of a traditional printed book, designed to be read on a personal computer, an e-book reader or other electronic devices. Other than the page of contents, hyper-links or images are usually available, in order to make it convenient for users to connect

information related to the content (Lee & Boyle, 2004). In the past, eBooks were usually stored on various types of electronic storage media, such as hard disks, floppy disks, CD-ROMs, and others (Lester & Koehler, 2007). With the advent of new information and communications technologies (ICT), in particular high-speed internet, users are able to read eBooks either via the web or download their books, with authorization, to their electronic devices.

2.2. Format of eBooks

Recently, there have been many different formats of eBooks available in the market. However, the most popular as well as common format of eBooks continues to be the Portable Document Format (PDF). PDF is the chief format of eBooks which is supported by Adobe Reader nowadays (Cope & Mason, 2002). Cavanaugh (2006) explaining the reason why PDF is the most common format of eBooks, enunciated that this is primarily because many electronic devices, electronic platforms and portable devices such as Microsoft Windows, Apple IOS, Amazon Kindle, Android Devices and Sony Reader, support this format. Due in part to the fact that nearly all common electronic devices and platforms also support this software, eBooks have become popular and gradually won acceptance among users, because of their convenience and portability.

2.3. Advantages of eBooks

The convenience of eBooks is the major factor behind their popularity. When compared with printed books, eBooks possess several benefits and advantages (Sasson, 2012). The process of downloading and using eBooks from the Internet is very simple and straightforward. Rosso (2009) described the uses of eBooks such as mobility, saving physical space and ease-of-use, which would be the primary motivations in preferring eBooks to actual books. eBooks can be remotely accessed from wherever in the world a user is situated and they allow readers to carry an entire library in their pocket, primarily because all eBooks can be stored on one portable electronic device. eBooks not only save physical space, time spent on borrowing actual books but, finally and most importantly, they are environmentally friendly, as trees do not have to be chopped down to read them. eBooks are also resistant to damage or loss (Coleman, 2004). The ability to incorporate multimedia usage and ease of use are significant advantages, which paper books materials do not possess (Clyde, 2005). For example, “eBooks are interactive and contain audio, video, pictures and animations, which can enhance the message that the author is trying to convey (Sasson, 2012),” and “Web-sites with html links and cross references are available as supplements for readers accessing immediately (Coeus, 2008).” In addition to these advantages, eBooks make it easier for people with disabilities to read, because fonts in eBooks can be resized to adapt to their vision. Note-taking is much more powerful, because a reader can make notes and highlight important points and add or delete bookmarks. All notes and bookmarks can be found and referenced speedily and without difficulty, without “earmarking” pages or marking up the paper copy. For easy access to added information and related websites, eBooks text is searchable and can be hyper-linked, making it easier for readers to locate specific content matter and navigate back-and-forth between chapters. One limitation is that the eBook publishers reserve the access right of individual eBooks used in University libraries. The access rights of individual eBooks might be different. Not all the eBooks enable note-taking or searching though these functions are technically feasible. Also, University libraries in general do not have a guideline in how to use eBooks. Students can only know the access right once they start accessing a particular eBook.

2.4. The drawbacks of eBooks

The unwillingness of readers to use eBooks can be attributed to numerous drawbacks. Specific software and hardware are required for reading eBooks (Yu, 2008). The disadvantages of eBooks generally stem from the fact that they cost a substantial sum of money and time as well as assistance may be necessary to use them. The reality that eBooks require special devices or personal computers with an internet connection and sufficient battery power for reading can be considered as a disadvantage. Many eBooks are as a rule, produced to be compatible for certain software, which in turn may be not easily available and this incompatibility is one of the major drawbacks of eBooks (Filipowich, 2011). With accelerated growth and rapid development of information technology, both software and hardware need to be constantly updated, so as to be compatible for eBooks. Besides costing a reader money and time to update, the costs could also prove to be prohibitive. There is also a growing concern that the existing format of eBooks may not be accessible or compatible to future eBooks software or devices, thus becoming completely obsolete in the future. Screen glare and eyestrain are a source of anxiety for many potential users of eBooks technology, because the display resolution of computer screens and electronic devices is markedly lower than the print quality produced by a printing press (Filipowich, 2011). The light of computer screens or glare from the portable device is likely to cause headaches in readers and possible long term damage to their eye sight. Some other issues that make eBooks less attractive to readers are the display which includes poor resolution, contrast and brightness, and color, all of which significantly contribute towards reducing the interest of readers towards eBooks (Rao, 2004).

Whilst comparing eBooks with printed books, Yu (2008) elaborates upon the point that for the purpose of using in-print materials users do not require specific software and hardware and therefore in terms of money, printed books prove inexpensive for a reader to use. Furthermore, printed books do not cause significant eye-strain. Reading from a computer does not possess the friendliness and intimacy of reading from a book, as a reader can open the pages of a paper book and glance randomly through it, while it can be quite complicated to navigate an electronic text. Additionally, the intellectual property rights of eBooks pose another critical problem. Filipowich (2011) stated that "The prevalence of eBooks increases the chance that their work will be stolen online or that they won't earn what they deserve." With the growing popularity of the Internet and the apparent ease of information exchange, the probability of infringements of works is increasing manifold. Readers can very easily search for eBooks from library's website and download these eBooks without appropriate authorization and this infringement of rights poses a serious threat to authors' livelihoods.

2.5. Position on usage of eBooks in universities

This study aims to understand and analyze students' perceptions and reactions towards eBooks and finds that globally, students approve of and acknowledge eBooks usage in Universities. A survey conducted by Rosemary Murray Library at Cambridge University, indicated that nearly all students had broadly accepted eBooks (Makin, 2008). One more review investigating eBooks usage drivers showed that over 60% of respondents would search for full-text eBooks in general libraries or academic libraries (Ernst & Wouter, 2009). This percentage undoubtedly proved that eBooks penetration is very strong (Nicholas et al., 2008). The UK National eBooks Observatory study conducted a survey on eBooks usage and perceptions of students in more than 120 participating Universities in the UK. It was established that 62% of respondents, most of whom were students, were

already using eBooks in connection with their academic works. It can therefore safely be asserted that eBooks are well-received and accepted in the UK, in view of the fact that students at many Universities already make use of eBooks.

In spite of the fact that the number of eBooks available today is on the increase and also accepted and well-received by a majority of students, there are at present several exceptional cases of unwillingness by readers to embrace eBooks. Abdullah and Gibb (2008) in their survey pointed out that 72% of participants from the University of Strathclyde in Glasgow, Scotland, were familiar with eBooks, whereas 57% held that they were not aware of the eBooks available in their library.

The University of Hong Kong conducted a client survey in its libraries in 2011 which showed very obviously that 56% of students still preferred in-print materials for study and research, whilst 63% of students surveyed, preferred in-print materials for leisure reading (Insync Surveys, 2011). Although eResources are readily available in the libraries, about 50% of students in the University continue to indicate a preference for in-print materials rather than eResources. Notwithstanding this inclination for in-print materials, the survey in addition proved that nearly 50% of the respondents agreed that online resources in the libraries (such as databases and eBooks) would probably be helpful in meeting their learning and research requirements.

3. Research methodology

During the course of this research study, a questionnaire was adopted as a data collection tool for an in-depth investigation and analyses of the behaviors and experiences of users of eBooks.

3.1. Sample selection

A random sample of 61 undergraduate and postgraduate students from ten tertiary institutions in Hong Kong was chosen for the study. All of these institutions currently offer eBooks to their students. In view of this fact, students studying at these institutions are expected to possess basic knowledge and an understanding of how to use eBooks.

3.2. Questionnaire design

A questionnaire was designed for the function of collecting the experiences of students using eBooks, and both quantitative and qualitative questions were included as a part of this questionnaire. The questions are designed based on the literature reviewed and are sorted out using the method of card sorting. Two subject experts are involved in the card sorting process. There were questions regarding the frequency of usage, purposes for using eBooks, reasons for using eBooks, preferences of either using eBooks or printed materials and how to access eBooks, to mention but a few. In addition, the questionnaire discussed the topic of infringement of materials. The questionnaire concluded by soliciting views and opinions from students on ideal methods for promoting eBooks among the student community, which in turn would lead to discussions and research on sustainable methods for future development of eBooks.

The three categories of quantitative questions listed in the questionnaire were as follows:

1). Closed-ended questions were primarily used in the questionnaire. The probable answers were set out for respondents, who were asked to choose a single answer. An example of a close-ended question would be.

Q.24. On an average, how often do you read eBooks?

- Everyday
- Once a month
- Once a week
- Not sure

2). Fixed-alternative questions were also adopted, providing multiple-choice answers for respondents, who had the choice of giving more than one answer. An example of a fixed-alternative question would be:

Q. 26. How do you read eBooks? (You may tick more than 1 answer)

- Using a Computer
- Using a Smartphone
- Using a portable electronic device (e.g. eBooks reader or tablet etc.)

3). The summated rating scale, also known as a Likert scale (a seven-point numerical scale) was set for collecting data. The rating scale allowed respondents to select the number which they considered an appropriate reflection of their attitude towards the issue raised in a question, such as asking respondents whether they agreed with a particular statement. For example,

Choose 1 if you strongly disagree with this statement and 7 if you strongly agree with this statement.

Q. 19. eBooks are considered to be physical space saving devices, as they are capable of storing many books in one device.

1 2 3 4 5 6 7

Other than quantitative questions, the questionnaire also comprised of open-ended questions. For these questions, no suggested possible answers were offered and respondents were expected to answer the open-ended questions in their own words. An example of an open-ended question would be:

Q. 31. Any other comments for eBooks?

4. Results and data analysis

4.1. Background of the respondents

61 respondents from ten tertiary institutions in Hong Kong were chosen. Thirty (30) of the respondents, which is almost 50% of those surveyed, possessed a Bachelor's degree, while thirty-one (31) respondents - above 50% - had a taught Master's degree.

Altogether fifty-six (56) respondents in the survey (91.8%) had an experience of reading eBooks, while only five (5) respondents (8.2%) possessed no experience with

eBooks. This data proved that the trend surveyed by De Rosa et al. (2010) which indicated that a growing number of college and University students use eBooks, was accurate, and this also cemented the popularity of eBooks, as an essential component of eResources.

4.2. The behaviors of students using eBooks

Zheng and Tan (2009) mentioned that the frequency of using electronic resources is a significant indicator to demonstrate how they are utilized. The frequency of using eBooks in this study confirmed that there were a definite percentage of students who used eBooks frequently. The study demonstrated that thirty-three (33) respondents (54.1%) read eBooks everyday, whereas seventeen (17) respondents (27.9%) read eBooks a few times a week. The reason behind the high frequency of eBooks usage could be attributed to the popularization of portable electronic devices, which facilitate students to read and access eBooks with ease in any location. Excluding these fifty students, one (1) respondent (1.6%) read eBooks just once a week and ten (10) respondents (16.4%) displayed inconsistent patterns in reading eBooks.

With reference to the key rationale behind respondents reading eBooks, the result revealed that more than fifty percent of the respondents (i.e. thirty-four (34) respondents or 55.7%) favored using eBooks for their assignments and course works. This was an expected result, because nearly all of the respondents were currently students at local Universities in Hong Kong. However, twelve (12) respondents (19.7%) in the survey admitted that they read eBooks purely for leisure purposes. This pointed to the considerably important fact that, other than academic purposes, leisure purposes also played a significant role in eBooks usage. With regard to the remaining respondents, seven (7) respondents, or 11.5% used eBooks for research and eight (8) respondents or 13.1% used eBooks for self-learning purposes. Both research and self-learning could be classified as academic purposes, which would involve study and completion of assignments and course works.

With respect to the methods by which respondents read eBooks, thirty-six (36) respondents (59%) preferred to use their computers to read eBooks. This was an expected result, as almost all of them chose an academic purpose as their reason behind reading eBooks. Keeping in mind the fact that the majority of students work on computers today, to complete assignments as well as to conduct research, it would logically follow that students would read eBooks on their computers for the convenience and ease that it would afford them whilst doing their course and reference work. Reading eBooks on computers would also facilitate students in quoting and citing references for their work. Other than these thirty-six respondents, eighteen (18) respondents were inclined towards using computers and Smartphone to read eBooks and most of them chose leisure purposes as their chief motive for reading eBooks. This result could lead to the assumption that students would rather opt to read eBooks, using Smartphone or portable electronic devices if they read eBooks for leisure purposes, as these devices would give them the liberty to read anywhere and furthermore, whenever they had spare time. Our data do not reflect a specific reading pattern of those students who read eBooks everyday and they might read eBooks for leisure or for academic purposes.

On the subject of the copyright issue, the results of the study confirmed that thirty-nine (39) respondents or 63.9%, claimed to have first-hand knowledge of copying text from eBooks to personal devices without permission. This number indicated that the concern of infringement becomes a critical issue in any discussion on eBooks. This

dilemma would likely encourage students to plagiarize copyrights' references indirectly, thus having a negative impact on students' futures and Intellectual Property Right protection. Consequently, copyrights protection for eBooks is a decisive subject matter confronting eBook publishers and it is in their best interests to attempt to tackle and solve this crucial problem at the earliest.

4.3. Students' attitudes on the topic of using eBooks vs. printed books

This section endeavors to employ the results of questions that are used to explore the reasons for not reading eBooks (Questions 4 to 13) and questions that are used to explore the reasons for reading eBooks (Questions 14 to 23). The questions are designed based on the literature reviewed and are sorted out using the method of card sorting. Two subject experts are involved in the card sorting process. Questions 4 to 13 were put to respondents who currently use eBooks and also to those with prior experience of using eBooks. Questions 14 to 23 on the other hand, were directed towards those respondents who had no prior experiences of using eBooks or even towards those respondents, who had some experiences of eBooks usage, but were not using eBooks at this point in time. It was established that out of the 61 respondents, fifty-six (56) of the respondents used eBooks at this time, although the remaining five (5) respondents did not possess any previous experience of eBooks usage or were presently not utilizing eBooks.

4.3.1. Reasons for using eBooks

Out of the fifty-six (56) respondents mentioned above, the majority of respondents (above 80%) preferred to use printed books rather than eBooks, although at the present time they did use eBooks. Undoubtedly, this result proved that nearly all of the students were, even now, satisfied with traditional books. Thirty-six (36) respondents (68%) preferred to use eBooks under circumstances such as the unavailability of in-print copies. This result is fairly comparable to the research of "Usage of eBooks in International Secondary Schools in Hong Kong" (Warning et al., 2009), which too inferred that students tended to view eBooks as a mere substitute for printed copies of books. It becomes reasonably obvious therefore, that the competition between eBooks and printed books would continue into the future and this factor would also be an integral point to consider for the sustainable development of eBooks.

Thirty-four (34) respondents or 58.9% of the respondents were in agreement that using eBooks was inexpensive and a means to cut costs. This is due to the fact that these days, electronic and portable devices being popular as well as common, are affordable for all people and are also more reasonably priced than in the past. Above and beyond these reasons, printed books may cost a lot of money and the reader would also be required to have time to travel to a library to make an actual physical borrowing of a printed book copy. Furthermore, actual physical storage space is required, either at home or at the University, to store books borrowed from libraries. The advantages eBooks possess far outweigh those of printed books in terms of saving time and space, as well as costs.

In line with the above argument, forty-one (41) respondents or 73.2% agreed that borrowers of books realize they are capable of occupying additional space, but with a reader, the bookshelf is very conveniently situated on a small handheld device, the computer or on both. This saves a lot of storage space, while also implying that an individual has a backup online, in case of something happening to printed books.

Forty-three (43) respondents or 76.8% agreed that eBooks are time saving devices. They facilitate users to save time involved in borrowing books in libraries and people living in large modernized cities, in isolated villages or even on a tiny island, can all equally access eBooks, without incurring any transportation costs. eBooks are often cheaper in the long run because there are no printing fees associated with them.

Ease of retrieval was cited as a major advantage of eBooks by thirty-six (36) respondents (64.4%). When compared to printed books, eBooks are portable and students would be capable of carrying an entire library of hundreds of books with them, on CD, in a laptop, notebook or any eBook reader, without worrying about their weight. eBooks give people the liberty to read anywhere and also, whenever they have spare time, as long as their devices are connected to the Internet.

41 respondents (73.2%) disagreed on the fact that there was an enormous range and wider selection of eBooks, which far exceeded that of printed books. They opined that as many eBooks were actually electronic copies of printed books in the existing market, the range of eBooks was in actual fact, limited to a certain extent. The implication from this view would be that students were keen and eager to access a multiplicity of eBooks.

eBooks possess many distinctive functions, apart from the key words search functions, and almost all of the respondents – forty-four (44) respondents or 78.5%, were in unison about the fact that eBooks are much more informative and interactive because they contain audio, videos, pictures and animations. These functions are solely available on eBooks, giving eBooks an edge of dynamism and variety, over the simpler functions of traditional printed books.

In a world that is progressively and growingly aware of the environment and constantly devising ways and means to protect and nurture the environment, eBooks could help save tree and thus, save the world. This is one of the numerous environmental benefits of digital publishing and reading. A majority of respondents, forty-one (41) or 73.2%, concurred that eBooks are to a large extent more environmentally friendly than traditional books, in terms of the resources (trees as well as other resources) required to produce printed books.

4.3.2. Reasons for not using eBooks

Out of the five (5) respondents who did not have prior experience in using eBooks or opted not to use eBooks any longer, three (3) or (60%) of the respondents confessed to an inadequate knowledge and awareness of the utility of eBooks. In fact, Abdullah and Gibb (2006) pointed out that when college students did not use eBooks, it was a direct consequence of a partial understanding of eBooks usage, for which there could be several reasons. Firstly and most vitally, students would be insufficiently trained at their institutions in using eBooks. The five respondents in reality acknowledged and established the point that they had received unsatisfactory training for using eBooks at their institutions. But the truth is that training and endorsement for eBooks usage is deemed vital and necessary for present-day students.

A second reason why eBooks were not utilized was that a few students considered it a complicated task to use and access eBooks, which would again be a further direct result of deficient training from their institutions on how to use eBooks. Four (4) respondents (80%) indeed ascertained that there was a level of complexity involved in

accessing and using eBooks and it would aid their understanding of eBooks if they received suitable training on eBooks usage.

Over and above the reasons cited in the preceding paragraphs, students also stated that because printed books were obtainable without difficulty, they did not consider it necessary to resort to using eBooks. This in turn implied that printed books were still popular among the student fraternity.

In the same way, almost all of the respondents reflected on the point that the cost of purchasing devices for reading eBooks is not a major cause for not reading eBooks. A majority of respondents (80%) were in agreement that eBooks may have numerous transcriptions, formatting, and spelling errors, making them difficult to read, leading to a lack of interest among the student community to peruse eBooks. Hence, maintaining a certain standard and quality for eBooks is an essential point for the development of eBooks in future.

All respondents were on the same wave length when they affirmed that screen glare and subsequent eye strain were the foremost deterrents in reading eBooks, and one of the fundamental reasons for students to prefer printed books over eBooks. These problems would need to be surmounted by eBooks designers and developers, if they would like eBooks to be one of the prime sources of study in the future. This is because extended periods of time, spent scrutinizing eBooks thoroughly, ultimately accounted for discomfort to the eyes, leading to eye-strain. This point would be in keeping with the findings of Jamali, Nicholas, and Rowlands (2009), who stated in their study that users also found it harder to concentrate and absorb information when they read that information continuously from a screen. Although it must be pointed out at this juncture, that one of the respondents did make a comment concerning the motives students have for using eBooks, by saying: "Convenience of searching by key words on eBooks." This would imply that although it is comparatively more difficult to concentrate and imbibe information which is read from a screen, users do employ this method as an effortless and thereby, effective technique to look for specific information by using the key words function in eBooks.

4.4. Future expectations of students vis-à-vis eBooks

This study determined that in general students possessed a favorable conception of eBooks. This was corroborated by the results of the study, in which almost 60% of the respondents awarded a ranking of excellent and good regarding their impressions of eBooks, while only about 30% of respondents rated eBooks as satisfactory. This indicated a positive attitude with reference to eBooks from the students surveyed for this research. With regards to the remainder of the respondents, about five (5) respondents ranked their impressions of eBooks as unsatisfactory and poor, and this number corresponded to the number of respondents who did not use eBooks. These respondents would almost certainly be predisposed towards using printed books and would not at the present time, be using eBooks either in their studies or for leisure purposes.

More than half of the respondents or 55.7% of respondents in this study opined that the most effective mode of encouraging students to use eBooks would be to provide online user guides, which could be made readily accessible for users on websites of University libraries. This would beyond a doubt appear as the most convenient and appropriate method for students, to learn how to use, as well as how to access eBooks. The reasoning behind this statement would be the fact that the Internet provides a 24x7 platform, which facilitates students who have an urgent and immediate need, to access

requisite information. However, about fifteen (15) respondents (24.6%) endorsed the view that training workshops provided by University libraries would be the most effective approach to teach students about eBooks. Indisputably, training workshops would carry greater weight as students would require to be trained to use eBooks, through actual practice and demonstrations, besides gaining first-hand knowledge from their personal experiences at the workshops. However, Universities would be required to incur enormous expenditure for organization of numerous workshops, given that thousands of students study at a single University. 19.7% of the respondents subscribed to the observation that it would assist and support their education process, if printed user guides for eBooks, were made available in University libraries. In the end, it was evident that it would be more beneficial and advantageous for students to develop their own individual methods and techniques to use and access eBooks.

5. Conclusions and recommendations

To sum up, the study established the ever-increasing popularity of eBooks among University students in Hong Kong. The results indicated very evidently that the frequency of eBooks usage by students was going up steadily and students possessed a positive and in some cases an excellent overall perception about eBooks. The study very clearly proved that progressively more and more students were attracted toward eBooks because of their unique functions and distinctive advantages. In addition, students had very rational and logical views and expectations concerning the future development of eBooks, thus implying a promising potential for the development of the eBooks market. Based on the results, the study has put forth certain recommendations for the sustainable development of eBooks:

- Since eBooks usage is no longer limited merely to academic purposes, students would also be interested to access eBooks without difficulty for leisure reading, which in turn, would necessitate the availability of an extensive variety of eBooks in the market.
- With the rapid development of portable electronic devices, such as Smartphone and table, the numbers of students using portable devices to access eBooks keeps increasing, and this consequently implies that there is a potential for development of eBooks in those devices. Libraries in future, should consider designing eBooks Apps, in order to provide ease of access and convenience to users to read, download and use eBooks.
- With the importance attached today to the matter of Intellectual Property rights, copyright is a critical issue to ensure the sustainable development of eBooks. Therefore, several measures need to be adopted to circumvent this tricky problem. It has been suggested that for eBooks that are available in libraries, the reading materials should include a visible mark of protection, such as copyrights(c), reserved®, or trademarked (™) seals, with the sole intention of urging students to make fair use of the eBooks. Besides, legal statements of copyrights should be stated and written into the eBooks.
- Additionally, in case of those eBooks that are available on databases of libraries, restrictions should be imposed and implemented on the text-copy function for readers. On one hand, these restrictions would go far in protecting the rights of authors. On the other hand, they would act as deterrents to students to explicitly stop plagiarizing text. Meanwhile, students should be reminded to use citations when

utilizing ideas and passages from copyrights' items. Apart from these measures which should categorically be put in place to protect copyrights of authors, appropriate controlling standards should be activated to govern users accessing and using eBooks. For instance, a login password should be mandatory for every user accessing any electronic resource, and this identification of users would be extremely beneficial to assist libraries in controlling their users' access and helping them to use the available electronic resources of the library.

- As is evident from the results of this study, increased knowledge and extended understanding of eBooks is vital for today's students, and to this end, training and promotion would enhance the prevailing grasp of students over eBooks. Online users' guides are the most suitable method for students to learn along with training workshops provided by University libraries to teach students about eBooks. Vendors or University libraries could upload a training video or flash animation as another means of teaching and guiding students to use and access eBooks. In addition to training in specific spheres, Universities could actively seek to promote eBooks through organization of event marketing activities, where the culture of eBooks would be endorsed and promoted by vendors and students would be encouraged to use electronic resources. In today's rapidly evolving media landscape, people turn to search engines and social networks for event information and social media has fundamentally shifted the way people collect and assimilate information. As a result, eBooks vendors and libraries could also leverage social networking platforms, such as Facebook to promote eBooks, and to reach a potential future student data-base.
- Although eBooks have several special functions and advantages, this study confirmed that screen glare and subsequent eye strain were the foremost deterrents in reading eBooks, and one of the fundamental reasons for students to prefer printed books over eBooks. The technology of E-Ink could be introduced for improving and solving these problems. It appeared first on Amazon Kindle, a series of e-book readers produced by Amazon.com, and made the screen look completely different from an LCD screen. E-Ink uses actual ink particles to create crisp, print-like text similar to what readers perceive in a physical book. Kindle e-readers also use proprietary, hand-built fonts to take advantage of the special characteristics of the E-Ink, to make letters appear clear and sharp. Williams (2012) opined that this made the display much easier on the eyes in terms of the light-emitting elements involved. The E-Ink screen reduces stress while reading eBooks, because it creates crisp, print-like text, similar to what readers experience in a physical book.

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