Application of Innovative Services in the Library

P Hangsing

Abstract

This paper attempts to look at innovative services within the framework of disruptive innovation. Innovative services are further contextualised to the library services. Key points of disruptive innovations found to be very apt to the library services are analysed and questions of whether to adapt, adopt or disrupt were raised. Non disruptive innovations services are distinguished from the disruptive innovative services. The risks of the disruption of individual library as oppose to the collective libraries are elaborated. Simple and affordable innovative services and conversion of non-users to users are suggested for sustaining the existence of the libraries

Keywords: Disruptive Services, Disruptive Innovations, Sustaining Technologies, Library Services

Background

Disruptive innovation as propounded by Christensen (1997) when applied to library and information services is not just the failure of libraries but the failure of good libraries or library and information services when confronted with certain types of users and technological changes. Failures due to disruptive innovations are more likely to occur in institutions like libraries which are built on technological advances. The question of whether the libraries will survive the technological disruption of computers and computer networks lingers in the minds of the professionals and scholars for quite some time now. The libraries being known to have adapted to the changing needs and adoption of technological changes seems to have survive all the probable disruptions. But the ideal libraries we know some decades back are very different from the ideal libraries today. The same is true with the kind of library professionals we have then and now. The basic purpose of dissemination of information remains but the way libraries disseminate information have change drastically. The survival of libraries regardless of the technological innovations could be attributed to the following hypothetical explanations:

1. Libraries adapts to changing users' need and adopt technological advances. In other words, libraries are not averse to changes in its environment.

2. The absence of disruptive innovation that could lead to the failure of libraries and information services. Till date a complete package of an innovative library or library services having the potential of replacing the libraries in its totality have not emerge.

3. The innovations seen in libraries are not disruptive innovations but emerging technologies that could be implanted as part of the library system.

Looking at how top rated institutions failed due to disruptive innovations of smaller institutions, it is most appropriate to study whether libraries are truly insusceptible to disruptive innovations. To know if libraries are likely to fail or be disrupted it is essential to study how far library services are disrupted by innovative services. This paper being exploratory and descriptive, is an attempt to define innovative services in the light of disruptive innovations and to analyse whether some of these innovative service are disruptive innovations for the libraries. The paper is also based on the assumption that the theoretical framework of disruptive innovation is applicable to the library services. However, such pursuits would often end up slightly outside the strict sense of the framework of Christensen (1997) theory of disruptive innovation. Because, disruptive innovation would not be just the failure of libraries but failure of libraries to be on top due to the disruptive innovations of other entities that ultimately cause the failure of the libraries.As we see libraries are still standing tall all around us, it may be too early to say that libraries have failed due to disruptive technology. Owing to time and space constraint only some of the services reported in the literatures are taken into account.

Adopt, Adapt or Disrupt

Christensen, Horn, and Johnson (2008) categories the disruptive potential of information technology in the world of learning into two stages, (1) computer based learning, and (2) student centric technology. The computer based learning is projected as the disruptor of the teacher and the student centric technology is the disruptor of the conventional educational institution. If these projected disruptions are accurate the demise of the conventional educational institution could also spell the end of libraries. Susan and Edwards (2014) studied the possibilities of the disruption of university libraries. Looking at the increasing number of corporate institutions with its online courses and contents, the necessity to have a collection of digital or physical contents are slowly ebbing away.In India, the launch of online databases like the Shodhganga, Shodhgangotri, ePGPathsala, N-List, UGC-Infonet, CSIR E journal Consortia and INDEST-AICTE Consortium are some of the online contents available just a click away. Once the existing consortia are expanded to include online books or another nationwide consortiaare added, the existing role of libraries will definitely be redefined. Another hiccups besides the limitation to few journal subscriptions and books are the publishing industries insistence on uncertainlong term accessibility, strict license regime and limited or no archival storage. These limitations are the reasons why libraries are still seen as the ideal repository of knowledge.The age of libraries being the storehouse of all its collection has come to an end. Libraries are becoming more and more of facilitators of resources available elsewhere. The possibilities of the role of facilitator disrupted by a smaller and cheaper innovative service provider is very high. All these progresses call for libraries to promptly adopt innovative services not only for the users but also for the non-users, adapt according to the technological innovations even at the cost of complete overhaul of the existing library systems. Failure on the part of any library to adopt and adapt will eventually lead to the disruption of the library itself.

Non Disruptive Innovative Services

Not all innovations are disruptive. Take the example of the internet search engines and library databases. According to Choudhury (2002) personalised services are just the same as reference services, and reference services are not necessarily services provided through human agents or librarians. Though librarians still provide references in the form of Ranganathan's (1961) time, the services have diversified to incorporated services without the human agents. With or without the librarians in between, Chowdhury (2002) finds that provision of a reference or personalised services are important even in the digital library environment. The innovations of reference service without the librarian did not disrupt the reference service rather it adds to the services already in place from the dawn of the libraries. Bawden (2005) made a comparative study of internet search engine, google and some selected library databases. In terms of result, the hits from the library systems are found to be superior to the google hits. What the library databases seems to lack is the searchers skills. If the skill of the searchers were to improve library databases are likely to give better result while google results will remain the same with or without the improvement of the searchers skills. These studies have shown that not all the innovations are disruptive. The very fact that search engines have been incorporated in the library databases means that some innovations compliments the existing services.

Disruption of the Individual Library

The novel idea of library in general may be sustained but some libraries are disrupted. There was a time one would never think of closing down a library but news about the closing down of libraries, no matter

how painful librarians felt, are now real. In 2013, a news article of The Guardian predicted the closure of 1000 libraries in United Kingdom by 2016. Sometimes these libraries are completely closed down or left to the mercy of volunteers who try to run the library with resources generated from the library itself. The government decision of closing these libraries underscore the fact that disruption of individual libraries are possibilities not just in the United Kingdom. A non-performing library serving no user, even if it is opened, is as good as a close library. Far from being decorative public monuments, libraries are established with purposes. Rendering library dysfunctional will invite its own closure. The collective indispensability of the libraries will not save a dysfunctional individual library. Therefore, the collective libraries may continue to exist in its modified or adapted form but the obsolete individual library is always at risk of closure.

Simple and Affordable

Why many disruptive innovations are not "advanced technologies"? Users will welcome simple services without demanding it. As long as the required services are provided, consciously or unconsciously and by demanding or not demanding users will go for the simpler and cost effective innovations. Choudhury (2002) suggested that google search engines are simpler than the library databases. If library databased were made simpler and the need to be more literate on the technology were removed, the library databased with its proven record of better results could be the disruptive innovation of the search engines. On the contrary, search engines are going to be the disruptive innovation that disrupts library databases unless the associated complexities are made simpler. The

tendency to take pride in the sophistication of the adopted or known technology could obscure the librarians' knowledge about the users. Assortment of simple and easy-to-use innovations that are usually taunted at could be the innovative services capable of bringing down the much acclaimed services. Disruptive innovations are often novel combinations of existing off-the-shelf components, applied cleverly to a small, fledgling value network.

Non-users to Users

According to Casey and Savastinuk (2006), besides the users, libraries have non users and shy users (or potential users). The traditional libraries continuesto focus all the library resources and infrastructures on serving the users they have been serving. In the process the non-users and potential-users remain neglected. Potential disruption of the existing services will emerge from services catering the non-users or potential-users. Unless the non-users and potential users are converted into users there is every possibility of the existing services being disrupted, no matter how sophisticated the technologies are. Disruptive services serve the market or users not served by the mainstream services. Looking for new market from the library perspective is looking for new users. Libraries are not likely to be disrupted as long as the present and future generations continues to be library users. Keeping pace with the new generations' changing nature of looking up for authoritative information whether current or archival is a non-negotiable terms librarian had to accept and put into service in order to keep the library and librarians undisrupted.

Conclusion

Christensen (1997) identified two types of technologies – sustaining technologies and disruptive technologies. Sustaining technologies foster improved performance of existing services. Similarly, sustaining technologies will improve the library services to the existing set of users but even the most radical sustaining technologies will not ensure non disruption. On the other hand, disruptive technologies will emerge to end the existing services. One of these two types of technologies could not be put away for the sake of the other. To serve the existing users, libraries need sustaining technologies. But for libraries to remain undisrupted, adaptation to disruptive technologies is necessary. The majority of libraries in India are still struggling with incorporation of sustaining technologies. Known impediments such as funds, infrastructure, human resources etc. in various forms are reported. One of such impediment is attitude towards information technology adoption, which was studied by Temjen (2003). Anxiety, efficiency, performance, confidence and acceptance are found to be the factors associated technological adoption. Among these factors anxiety associated highest with information technology. Anxiety is a mental state born out of inability or unfamiliarity. If these findings are to be generalized, the library professionals in India are likely to fail due to the inability to adopt sustaining technologies and the inability to anticipate disruptive technologies. Though the whole discussions are based on the assumption of the applicability of disruptive innovations, in conclusion, one may be cautioned that library being a service oriented non-profit making institution, it is necessary to study if Christensen (1997) theoretical framework of disruptive innovation is truly applicable to library services.

References

1. Christensen, Clayton M. (1997) The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail. Boston, MA: Harvard Business School Press, 1997.

2. Gobinda G. Chowdhury, (2002) Digital libraries and reference services: present and future. Journal of Documentation, Vol. 58 (3), pp.258 – 283

3. Jan Brophy, David Bawden, (2005) Is Google enough? Comparison of an internet search engine with academic library resources.Aslib Proceedings, Vol. 57 (6), pp.498 – 512

4. S.R. Ranganathan, (1961) Reference Service, New Delhi: Asia Publishing House, pg. 53

5. Casey, Michael E. and Savastinuk,Laura C. (2006) Library 2.0: Service for the next-generation library. Library Journal, 9/1/2006. Retrieved from http://cil733.pbworks.com/f/Library+2.0+Journal.pdf

6. Lafferty, Susan and Edwards, Jenny (2014) Disruptive technologies: what future universities and their libraries? Library Management, Vol. 25 (6-7), pp. 252-258

7. Christensen, Clayton, Horn, Michael B. and Johnson, Curtis W. (2008) Disrupting Class: How disruptive innovation will change the way the world learns, New York:Mc Graw Hills

8. Library campaigners predict 1,000 closures by 2016 (2013) Retrieved August 23, 2016 from The Gurdian website https://www.theguardian.com/books/2013/jul/12/library-campaigners-1000-closures-2016

9. Temjen, T. (2002). Attitudes of academic and research library professional towards information technology and its relationship with library and information science courses in India. Unpublished PhD thesis, North-Eastern Hill University, India

About Author

Dr. P. Hangsing, Department of Library & Information Science, North-Eastern Hill University, Shillong.