

## Dyah Puspitasari Srirahayu, S.Kom., M.Hum

# HAS PARTICIPATED AS PARTICIPATED AS

ENTITLE :

The Usage of Internet as a New Media in the Libraries

### IN THE

INTERNATIONAL POST-GRADUATE CONFERENCE ON MEDIA AND COMMUNICATION 2017 Organized by Master Media and Communication Airlangga University Surabaya, Indonesia on November 13, 2017



iternational Post Praduate Con Airlangoa University On Media And Communication

Windri Saifudin, S.Sos Chief Committee IPCOMC 2017

#### The usage of internet as a new media in the libraries

Dyah Puspitasari Srirahayu<sup>1</sup>, Misroni<sup>2</sup>

<sup>1</sup>Lecturer of library technisian study program vocational faculty Unversitas Airlangga, e-mail: dyah.srirahayu@vokasi.unair.ac.id

<sup>2</sup>Lecturer at Departement of library Study Program Faculty Adab and Humanity of Raden Fatah Islamic State University

Keyword : web 2.0, OPAC, virtual reference, library 2.0, library promotion

#### Abstract

The library is a provider of appropriate information and updates for the academic community in making research, journal articles and also teaching materials. Formerly the library is a source of information, especially the library in the world of education. But at this time with the growing of the internet and also the change of behavior of information seekers then the library is no longer the main reference and is a problem for the current library, especially the college library. The internet has become a new media for all kinds of activities at this time, almost all of the people use the internet to meet their information needs. This become one of the challenges for libraries from time to time. This research aims to describe the library changes with the internet as a "friend" and also a "rival" in providing information for the academic community. This research is a type of desriptive quantitative research that aims to explore and clarify about a phenomenon or social reality, especially related to the useof internet media in the library of Indonesian universities. Sample in this research are documents available in online media on the internet. From the results of this research in additon to providing changes to the library with the internet also provides an understanding of how the internet can be well matched with libraries to support all library activities in reaching libraries that are always visited by users both online and offline.

#### Introduction

The emergence of new media also contributes to changes in the pattern of community communication. New media affect the way individuals communicate with other individuals. The emmergence of new media also contributes to changes in the pattern of community communication. New media affect the way individuals comunicate with other individuals. Major changes related to the emergence of new media are: Digitalization and convergence of all aspects of media, interaction and network increasing, mobility connectivity is and declocation for sending and receiving, adaptation to the role of public publication, the emergence of various new forms of 'door' (gateway) and media the separation and blurring of 'media intitutions' (McQuail, 2011).

The main characteristic of new media is the interconnection, its acces to individual audiences as receipients and senders of massages, their interactivity, diverse uses as an open character and their ubiquitous nature (McQuail, 2011). The emergence of new media also contributes to changes in the pattern of community communication, new media in this case the internet a little more affect the way individuals communicate with other individuals. Initially, the internet began as a noncommercial communication tool and data exchange between professionals, but the next development is the internet as a means of personal and interpersonal communication.

The internet has grown to the needs of more than tens of millions of people worldwide. The large and growing number of internet users, has emodied the Internet culture. The internet also has a great influence on the science an wordview. By utilizing search engines like Google, users around the world have easy internet acces over a variety of information. Internet symbolizes the decentralization knowledge of information and data quickly.

The presence of internet media to make information spread quickly. Some data mention there is an increase in internet media users. In data ministry of communication and informatics (KemenkoInfo RI. 2010) internet users reached 45 million people. market research institute emarketers also added that the neeter population of the country reached 83,7 million people in 2014. By 2017, eMarketer estimates netter Indonesia will reach 112 million people. Sutarno NS (2006) revealed that the market or market of the library is all citizens and visitors of the library, types of libraries include public libraries, special libraries, school libraries, or college libraries. Each type of library has a different user group, but users of all types of libraries want the same thing that is

getting the same good service, fast, fair and satisfactory. Therefore, libraries should be able to foster users or visitors to the library as well as possible. It is done to maintain or improve for the users or consumers of the library, so do not get bored and move on to other sources of information to get the information they need.

The internet offers a new alternative in the acquisition of information and at the same time dissemination of information. Formerly the library is a source of information for the public in obtaining information, especially the library in the world of education. But nowadays with the growing of internet and also change of behavior of information seeker hence library is no longer become main references. This becomes a problem for library nowadays especially college library. The internet has become a new media for all kinds of activities at this time, almost all people use the internet to meet their information needs. In the environment in Indonesia. university the availability of digital materials is increasingly perceived by the academicians who previously lack acces to the latest publications in their field. In addition, the process of information transfer among academicians in a certain level changed because the procedures and users are connected to each other via the internet.

The existence of a library is now becoming very important as it is mandated by the law no. 43 of 2007, in article 3 it is said that the library serves as vehicle for education, reserach, conservation, information and recreation to improve the nation's intelligence and empowerment. The development of information and communication technology plays an important role in the dissemination of information. Privanto (2011) stated that the big college has three main roles, namely (1)extraordinary education for the students; (2) research, development, and disseminatio of science and; (3) culrural and scientific activities. The library as the heart of the university has great challenges to support these three roles.

One of the contributing factors is charactristic of user, especially students as digital native generation. The younger generation dooes not see the internet as a technology, but rather as a part of life. In various surveys conducted by OCLC, it is evident they prefer to start the search process with search engines compared to other sources of information, including libraries and librarians (OCLC 2005 in Zuntriana, 2010).

The college library is like a heart for a university, where all academic activities undertaken by the academic community are fully supported by the college library, such as supporting research activities with by providing scientific resources, providing discussion facilities, and supporting the creativity of students and lecturers. College libraries are rich in scientific information sources that can be put to good used both directly and online. However, the reality is still a lot of academic community who prefer the source of information coming from google than the library database with the reason pf ease of use and speed, while for the reliability and accuracy of search results users stll rely on library databases. See how powerful college library competitors are in providing instant access to information resources, with the disclosure of information on the internet to make the library must be able to balance the sources of information, one of them by building a digital library, multiply the purchase of database collection journaling, e-book, and build friendly OPAC. But the power of information sources that have been built is not necessarily able to attract users to switch to library databases or use other libarary services. Currently, libraries in Indonesia that provide an average interner service use three services for internet access services namely: (1) web library itself, is a special internet service for web based reference services (2) wifi services; (3) library computer services. This becomes one of the challenges from time to time by the library to be able to use the internet as a friend rather than an opponent. This paper aims to provide an overview of the use of internet media in the library of Indonesian universities

#### **Research Method**

This research is a descriptive quantitative research type that aims to explore and clarify about a phenomenon or social reality, especially those related to the use of internet media in the library of indonesian universities. Universities taken in this research is a college that is favored by kemenristek dikti to enter in the world class university ie the Universitas Indonesia, Intitute Tehnologi Bandung, Universitas Gadjah Mada, Universitas Airlangga, Institute Pertanian Bogor. Data collection is done by literature study through search engine " with OPAC keyword in library ", "digital library", technology and library, library promotion, and online OR digital library service. From the search results in can be several articles from various juornals and also the results of research, mini thesis, thesis and dissertation.

Literature study is a technique of collecting data from secondary sources are sources that do not directly provide data to the data collector (Sugiono, 2011). Data were analyzed by using an interactive model (Miles and Hubermsn, 1992) Of the documents contained on the internet and then veriefied the validity of the data by looking at the source of reference and adress url it, then the data that has been verified processed and analyzed then done conclusion.

#### Result

#### History internet in Indonesia

Internet history in Indonesia began in the 1980s initiated by 5 interconnected universities, namely Universitas Indonesia (UI), Universitas Terbuka (UT), Institut Teknologi Bandung (ITB), Universitas Gadjah Mada (UGM), dan Institut Sepuluh Nopember (ITS) with a dial-up facility called UNInet in the form of computer network. The network is finally not developed because there are problems in the lack of adequate infrastructure. Only in the following years through Amateur Radio Club (ARC) ITB in 1986 the internet has begun to grow again with only the aircaft transceiver HF SSB Kenwood TS430 Harya Sudirapratama (YC1HCE) with apple's Onno W. Purbo (YC1DAV) II computer. And dozens of other ITB youth.

1992 to 1994 TCP/IP packet Radio Technology adopted by collegues BPPT, LAPAN, UI, and ITB which became the foundation of PaguyubanNet. AMPR-net (Amatir Packet Radio Network) that uses the first IP is known as AMPR.org domain name and IP 44.132. In the 1994s , IndoNet's first commercial ISP began operations. The initial connection to the internetis done using dial-up by IndoNet. Since 1994 internet entered into Indonesia with top level domain ID (TLD ID) primary built on UUNET server, , then continue with a second-level domain. The first ISP in Indonesia is (Internet Service Provider) IPTEKnet connected to the internet with a bandwith capacity of 64 kbps,.

Finally, internet access in Indonesia continues to grow with time. Indonesia can be said to follow the development of information and communication technology until now. According to APJIL (Association of internet service providers), an institution that can estimat internet users, internet users in Indonesia until 2014 reached about 88,1 million and it is expected to continue to increase due to the increasingly sophisticated and affordable mobile technology. The use of the internet in the library of indonesian universities did not begin in the same year with the start of internet usage in Indonesai, this fund allocated in the library is still minimal so in the development of information technology in the library of Indonesi through several stages of library computerization, the development of electronic collections, provision of facilities from internet sources and cooperation with local and overseas libarary organizations (Siregar, 2004).

#### The Use of Internet in academic Library

Computer activities in Indonesia Library began in the 1970s in the form of making a list of mazines with the help of computers by the centre of the national information documentation now LIPI. Then continued on the magazine's catalog of libraries with 33 libraries until 1975. Information retrieval began 1975 by the library of labor issues institutions using the HP 9845B computer. The 1980s library began to use computers for routine activities in the library the term is "housekeepingactivities" this is because of the ease in the DBMS and there CDS/ISIS from Unesco. In Indonesia is known as the library automation that is still offline is not connected with other libraries (Sulistyo-Basuki).

Library house keeping or library management, is a general term that refers to a variety of routine activities that need to be done so that libraries can run properly. With the progressof information technology can be done by using an integrated system consisting of several modules, namely the aquisition or procurement, cataloging, circulation, access catalog by the public or known as the OPAC (Online Public Access Catalog), and lending between libraries. Information system for electronic information retrieval were first used for local data retrieval using catalogs. Then with the progress of information technology or information retrieval known as information retrieval are also progressing, ie by the use of electronic means.

With the development of information technology, especially the internet as a new media communicating the impact on services provided in the libray. Services in libraries that used to still use conventional systems changed with the digital system such as web opac, digital libraries, promotions using social media and virtual reference services.

One of the examples of he implementation of the web OPAC is the universitas indonesia (UI) library which uses the information system with the name "Lontar" that can be accessed online through url address,, there is also Airlangga University (UNAIR) with the url address,, using a system with the name "Laris ". OPAC of the two instances is built by the library itself there are sveral librariy automation systems that are open sources. Cervone (2003) provides the definition of open source software as access to real code where other programmers can develop and redistribute thesoftware as needed and provide the code for other development. For example in Indonesia is Senayan Library Manegement (SLIMs) which can be downloaded for free at <u>http://slims.web.id/</u>.

Digital libraries in Indonesia have been developed primarily by colleges, has has formed several digital library networks such as Indonesia digital Library Network, Spektra Virtual Library, and most recently is Garuda (Garba Rujukan Digital). Digital libraries built by colleges in Indonesia not only provide and organize collections and services digitally, but combine them with conventional library form, where most library collections are available in printed and digital form.

Indonesia Digital Library Network (IDLN) is the first digital library in Indonesia. IDLN began operations in june 2001 which was initiated by Knowledge Mangement Research Group (KMRG) Institut Teknologi Bandung (ITB) which pioneered the creation of digital library network among institutions of higher learning. The digital library network is built with the aim of facilitating the academic and the general public to access research results, final assignment odf students, theses and dissertations. The metadata used in IDLN is dublin core. Besides IDLN, academic libraries in Indonesia are also many who began to develop digital libraries that lead to more institutional repository such as digital library Institut Pertanian Bogor which became the best first rank in Southeast Asia in July 2017 which can be accessed with url address.

Promotion of library through internet media can be done by making library website interesting and cointans information up to date not only with website only, library also can create social media account such as facebook, twitter, or even create instagram to promote the library. The importance of promotion for a library because now more and more commercial information centre popping uo, the emergence of these institutions can be a rival for the library as aprovider of information, other than that the media such as televison, magazines, newspaper, and even the internet increasingly crowded. All that can affect the community to not use the library. Facebook is the most common used to promote library for example is Gadjah Mada university library to promote the activities and also collection they have. Otherwise website of Gadjah Mada

University library is also one of the promotional media that s visited by not only the academic community of UGM but also from the academic community of other universities or general public (http://www.alexa.com/siteinfo/ugm.ac.id).

Reference service is one of the library services designed to help user in fulfilling the information needs. The reference service focused on being able to direct users to actually get the real information resources they want when accessing information. Reference service is a service that includes reference transactions and other activities including the creation. management, and assessment of information or resources equipment and sevices. Transaction conducted should be able to demonstrate the ability of librarians to recommeed, interpret, evaluate and find information resources in order to help the needs of users (Rusa, 2010). One example that uses the concept of reference services to be more actively present to the user in a new and innovative way is the universitas Indonesia (UI) library. UI librarians revealed that " in assence we passively become active, the concept so from refer to deliver" shows representation and symbols that in its development today that reference service is present no longer merely as a service as a passive service that visitors use. The new face of reference services is provided through several activities ie information retrieval services, electronics services, electronic delivery services (EDS), library website services, Information literacy services (IL), roadshow library services, Digital literacy service program (DLP), and K-ATM service (Rahmi, 2016).

#### Discussion

information The development of and communication technology plays an important role in he dissemination of information. At this time the world of librarianship is experiencing a period of great transition seen in the terms of collection, human resources, and library physical facilities. This change is an adjusment to the needs of the users because of the problems that occur at the The use of the internet in the moment. dissemination of information to users can not be separated from changes in human behavior that wants information quickly, precisely and easily accessible, this is in line with the theory of Social Construction Of Technology (SCOT) which explains that technology does not determine human actions, but the actions of humans themselves that make up the technology.

Web 2.0 and library 2.0 is a new media that evolves in the realm of libraries has changed many of the display for libraries and library ways in spreading the information. In communications theory explained about how to the role of media (which is the media is the means of delivery of massages) influential in spreading certain information both physically and psychologically. By using this theory one can see how the influence of a particular communication media to the listener or receiver, so that it can anticipate certain unwanted effects due the nature of communication media.

Library 2.0. asan interactive, collaborative and multi media web-based library collection and services (Mannes, 2006). According to Michael E. Casey (in Suryati, 2009) the main focus is cetered on users and requires active participation from and among its users by utilizing information technology. Use of OPAC and services that allow the reciprocity of its use is a library 2.0. application so OPAC is now accesible online wherever and whenever that called webOPAC.

In additon to web OPAC, with the internet and also library 2,0 then the distribution of information to users also experience changes so that existing information in this digital collection owned library can be accessed and used quickly by the user then introduced a new concept of digital library without wall. The development of libraries to digital libraries is actually not just ad just with the development of information technology, but more mainstream because of the demands of a change in the paradigm of higher education, which includes a paradigm shift in learning, with e-learning, changes scientific communication leading to eresearch, as well as the urgent need to create college information literacy (yuadi, 2010).

Digital libraries are collection of digitals objects, including text, vide, audio stored in electronic media equipped with ways to access and download, as well as, organozation of the collection maintenance. Fahmi (2004) defines digital libraries as a system consisting of hardware, software, electronic collection, management staff, users, organizations, working mechanisms, and service by utilizing various types of information technology. the contents of the digital library are in server computer that can be placed locally, or in a remote location, but can be accessed quickly and easily through computer networks. In informative theory it is explained that communication as a transmission of masseages and how transmitters use media in communicating, in this case, if the media signal used is good, then the communication

will run effectively, and vice verca. If the media signal is not good, then the communication will not run smoothly.

Web 2.0 technology is a second generation technology of internet services. This technology allows more participation from internet users. Such as wikipediaang blogs that allow internet users to actively participate. Social networking sites also fall into this category. Facebook, friendster, flickr and twitter adopt this technology. The characeristic of web 2.0 are the interactivity that allows users to participate in contributing, orginizing, and creat content. Some of the web 2.0 functions that arise, among others, to support activities such as (1) online publishing, ie by using blogs and wiki, (2) syndicating content, by using web feeds and podcast, (3) organizing information with social bookmarking and sharing & photos, (4) connecting people by using social networking sites like facebook and twitter, (5) linked data, the use of cloud computing docs application, and semantic web like (Shelly & Friden berg, 2011).

Web 2.0 increasingly popular today as the booming facebook in the last year (Mahmood, 2011). Blog is one of the most popular web 2.0 used by libraries both for promotion and communicate with the community other than instant massenger (Chua & Ghua, 2010), RSS feeds are also widely used by libraries to convey information about libraries to users (Harinarayana & Raju, 2010). In every traditional promotion activities are expecting users to use the library, in contrast to the concept of modern promotion that prioritizes are how libraries can adapt to the lives and needs of users (Matthews, 2009). So library promotion using web 2.0 is a promotional activity that utilizes 2.0 tools such as blogs, social networks, instant massenger, RSS. social bookmarking and wikis.

According to Tao (2009), the use of the physical library has shifted to the online format so that the impact on decline in transaction on the reference services, so that the library needs to bring reference services in the "grip" so that the reference service is not eft behind by the user. The development of important reference services is done primarily at the college libraries. Bunge and Chowdhury (200:258) explains that the types of reference services are provided in some form such as some information services, instruction library resource usage and user guidance. Luini in Syarikin (2013) states that however rapid development in technology has changed the way librarians think about reference services. Changing the way they think about the concept of reference

services to be more innovative and meet the needs of users affectively and afficiently. At this time the development of information available on the internet has made it easier for users to find the information they need. Consequently reference librarians are more likely to be present in the provision of guidance using available information resources through variety of tools rather than serving users as intermediaries between them and information.

The internet and technology changed the provision of library reference services, the conventional switching of services to digital forms is now a concern in service development. Reference services can also be presented through broader communication media, more than just face-to-face. This development also influences the librarian's and library's attitude in providing reference services in the college library. This is done in order to reach readers who may not able to come directly to the library due to distance and time (Restanti, 2015).

Virtual is something real but not concrete. Virtual service is a reference service that is done services performed electronically in which the users uses computer equipment and other technologies to communicate with reference librarian staff without physically (RUSA in Prasetywan, 2012). With this service the library is able to provide services seven days a week and 24 hours a day. The emergance of a more active virtual reference service can not be separated from the presence of library 2.0 leads to popularity, folksonomy, user as creator and participants, and users make recommendations (Le Deuff, 2011). Some of the 2.0 tools that are widely used in the library include blogs, ask librarian, social network, social bookmarking, dan wikis. (Le Deuff, 2011) . Ask librarian is one of form of reference service that uses internet help.

#### Conclusion

Information technology, especially the Internet will continue to grow and the library can not avoid it, and must be willing to use technology to provide information to its users. The development of library 2.0 and web 2.0 changed the face of university libraries in Indonesia. The first library that only mengindalkan building and print collections now brubah into a library without wall that allows users to interact with the collection and also pustawakannya virtually. Ease of access to information that will make users more comfortable using the library. Web 2.0 should be used by libraries to improve library services, such as reference services, promotions about activities and collections they have using social media. The Internet will never disappear instead will continue to grow so that libraries, especially librarians must be ready to deal with it by continuing to learn how the workings of the internet and how to use it for kesjj library and user satisfaction.

#### Bibliography

- \_\_\_\_\_. 2007. Undang-Undang No.43 Tahun 2007 Tentang Perpustakaan.
- Cervone, F. (2003). The open source option. Library Journal Net Connect, 8-12
- Chapman, Stephen and Anne R. Kenney. 1996. "Digital conversion of research library materials: A case for full information capture". *D-Lib Magazine*. October 1996.
- Chua, A.Y. K., Goh, D.H. (2010) A study of web 2.0 applications in library websites. *Library and Information Science Research* 32 (3)
- Faisal, Sanapiah. 2007. Format Format penelitian social, Jakarta : Raja Grafindo Persada
- Fahmi, I. (2004). Inovasi Jaringan Perpustakaan Digital: Network of Networks (NeONs). Seminar dan Workshop Sehari Perpustakaan dan Informasi Universitas Muhammadiyah. Malang, 4 Oktober.
- Georgas, H. (2013) Google vs. the library: student preferences and perceptions when doing research using google and a federated search tool. *Portal: Libraries and Academy* 13 (2). p. 165-185. <u>http://www.press.jhu.edu/journals/portal\_lib</u> <u>raries\_and\_the\_academy/</u> portal\_pre\_print/current/articles/13.2georgas
- .pdf Harinarayana, NS., Raju, NV (2010) Web 2.0 features in university library websites. *Elecronic Library* 28 (1).
- Hosny, H., Powell, J.P., Heller, R. (2008) Promoting library services at fintel library (Roanoke college). *Virginia Libraries July-September*, October-December 2008 (p.27) Retrieved from http://scholar.lib.vt.edu/ejournals/VALib/v5 4\_n3/hosny.pdf Internet world stats: internet usage in Asia 2012. <u>http://www.internetworldstats.com/stats3.ht</u> m
- Le deuff, O.(2011). The library 2.0: origins of the concept, evolutions, perceptions and realities. *Marketing libraries in a web 2.0 world*. Ed. Dinesh gupta, rejean savard.
- Mahmood, K (2011) Impact of web 2.0 technologies on US academic libraries.

Postdoctoral research at the department of information studies, graduate school of education and information studies, University of California, LA (UCLA). <u>http://www.academia.edu/1191162/Impact\_of\_Web\_2.0\_technologies\_on\_US\_academi</u>c\_libraries\_A\_study\_of\_ARL\_libraries

- Matthews, B. (2009). Marketing today's academic library: a bold new approach to communicating with students. *American Library Association*.
- Mannes, Jack M. 2006. *Library 2.0 Theory: Web* 2.0 and Its Implications for Libraries. Webology, Volume 3, Number 2, June <u>http://www.webology.ir/2006/v3n2/a25.html</u>
- Nove E. Variant Anna. 2015. The usage of web 2.0 as a media promotion in Indonesia university libraries. http://ejournal.unair.ac.id/index.php/RLJ/artic le/view/82/21 Vol 1, No. 1 Record and Library Journal
- NS, Sutarno. 2006. Perpustakaan Dan Masyarakat. Edisi Revisi. Jakarta :Sagung Seto.
- Palmer, Robert B. *The Internet: Technology and trends*. Speech delivered to the Spring Internet World '97, Los Angeles, California, 12 March 1997.
- Prasetyawan, Yanuar Yoga. 2012. "Wajah Masa Depan Layanan Referensi pada Perpustakaan Perguruan Tinggi Indonesia" dalam *Kepustakawanan Libraria*2(1): 63— 75.
- Priyanto, I. F. 2011. "Meningkatkan Peran dan Perpustakaan Fungsi sebagai Sumber Mutakhir untuk Rujukan Menemukan Kebaruan Hasil Penelitian (Research Novelty)" dalam Seminar Nasional dalam Rangka Hibah PHKI Tema A 2011 di Perpustakaan Universitas Negeri Semarang, Semarang, 12 Juli 2011.
- Rahmil, Lailatur. 2016. Di Balik Wajah Perkembangan Layanan Referensi pada Perpustakaan Perguruan Tinggi . Record And Library Journal Volume 2, Nomor 2, Juli-Desember 2016 http:// ejournal.unair.ac.id/index.php/RLJ/article/do wnload/3052/2219
- Restanti, Anisa Sri. 2015. Layanan Referensi Virtual: Sebuah Strategi Jasa Layanan Referensi Di Perpustakaan. Visi Pustaka Vol. 17 No. 1 April 2015
- Shields, Rob. 2011. Virtual: Sebuah Pengantar Komprehensif. Yogyakarta: Jalasutra.
- Shelly, C., Fridenberg. (2011). Web 2.0 concept and application. Evidence Based Library

and Information Practice 6 (4). http://ejournals.library.ualberta.ca/index.php /EBLIP/article/view/11625

- Siregar, A. Ridwan. 2004. Perpustakaan Energi Pembangunan Bangsa. Medan: Perpustakaan USU.
- Sriyati, Tutik. 2009. "Perkembangan Internet dan Strategi Pemanfaatannya di Perpustakaan Badan Penelitian dan Pengembangan Kehutanan". Visi Pustaka Vol. 11 No. 2 (Agustus 2009) Artikel diakses pada 22 Mei 2014 dari <u>http://www.pnri.go.id/MajalahOnlineAdd.as</u> px?id=123
- Sulistyo-Basuki. *Periodisasi perpustakaan Indonesia*. Bandung:Remadja Rosdakarya,1992.
- Sugiono, (2011). Metode Penelitian Pendidikan ( Pendekatan Kuantitatif, Kualitatif, dan R&D); Alfabeta. Bandung.
- Tao, Donghua, et.al. 2009. "The Mobile Reference Service: A Case Study of An Onsite Reference Service Program at The School of Public Health". Journal Medical Association 97(1): 34—40.
- Witten, I.H., Bainbridge, D., Nichols, D.M. (2010). *How to Build a Digital Library*. (Edisi Kedua). Burlington: Morgan Kauffman Publisher.
- Yaudi, Imam.2010. Perpustakaan Digital Paradigma, Konsep dan Teknologi Informasi yang Digunakan. www. journal.unair.ac.id/filerPDF/PERPUSTAKA AN%20 DIGITAL.pdf
- Zuntriana, A. 2010. "Peran Pustakawan di Era Library 2.0" dalam Visi Pustaka 1-5.
- http://www.indonesiadln.org/wiki/index.php/Main Page

http://kominfo.go.id/index.php/content/detail/3415/ Kominfo+%3A+Pengguna+Internet+di+Indonesia +63+Juta+Orang/0/berita\_satker#.Ve5RklLQ3Mw