

Analysis of Integrated Microfinance Management (IMM) e-information based Search Engine analysis study of bibliographic search on IMM information management online web-based Google, Yahoo, and Indonesia Onsearch

Wina Erwina^{1*}, Yulianti², Sri Rakhmiyati³

¹Department of Information and Library Science, Faculty of Communication, Padjadjaran University, Indonesia

²Padjadjaran University Library, Indonesia

³Padjadjaran University Library, Indonesia

*Corresponding author: wina.erwina@unpad.ac.id

ABSTRACT

Technology communication and information provides convenience in searching information matters. Internet has become a necessity anyone. Every day thousands or millions of information uploaded to the internet and at the same time perhaps, hundreds, thousands or tens of thousands of people search and accessing information resources. Some search engines are used in searching information. However there are still a few people use diversity of search engine also have knowledge to use search engines effectively to meet specific topics.

The aim of this study was to document the information source of e-information on the topic of integrated microfinance management (IMM) web base. IMM as an interesting and important study to achieving the sustainable development goals (SDGs), will require documentation of existing studies for the development of science. Documentation taken from two popular search engines and research center database in Indonesia. The research method used survey with contents analysis of the search engines such as Google, Yahoo and Indonesia one search. The expected result is a list of bibliography on integrated microfinance management topics. The usefulness of this research is to provide resources to researchers in the field of integrated microfinance management. Also provide the right keywords in Integrated Microfinance Management e-information that exists in the field of science classification according to Dewey (DDC/dewey decimal classification).

Keywords—Interrated Microfinance, e-information, search engines, web-based searching

INTRODUCTION

The Internet has become one of the main media for information. Communications and information technology today has made it easier in such a way, so that the information could be produced in a very fast time. Various search engines (search engines) are also popping up. This search engine when used optimally will generate valid and quality information in a relatively short time. But not many people who understand and know the effectiveness of this search engine, so that the search engines that currently are not used optimally.

The discussion on Integrated Microfinance Management (IMM) as a new study in Indonesia within a period of 6 (six) years have become very attractive. There will be a lot of people doing searches related to information IMM. But it is certain, that ordinary people are not academics, or academics who do not understand the information search strategies will perform a search directly on the search engine 'Google' as it is.

Librarians interested in doing a study related to search e-information because it is the duty of the librarians to be able to provide appropriate information for user, and disseminate this information.

In addition to the above, it is associated with the theme Integrated Microfinance Management as one of the key studies to achieve the SDGs, the effectiveness of the search engine is needed to help the studies documenting the quality of the scientific development of this field of Integrated Microfinance Management.

This study aims to document the source of e-information from various research and studies related to both national and international web-based IMM. Documentation taken from two popular search engines, namely Google and Yahoo as well as one central data base research in Indonesia, namely Indonesia One Search (IOS).

METHOD

The research method used survey method with content analysis of two (2) search engine Google and Yahoo as well as a database of research that Indonesia One Search. How to search using Boolean Logic, which is one of the popular search strategy in information and library science. Technical search are:

1. Determine keywords
2. Perform a search is what the search engines that exist.
3. Perform searches the most appropriate information related IMM using the technique of Boolean logic, and there is no start page, how many in each of the search engines.

RESULTS

The results of this research is a bibliographic listing on topics IMM successfully searched using search engines and research databases. The list is very useful as a source of information for researchers in the field of IMM. The results also presents the key words the right in search of e-information IMM contained in the grouping of Science according to the Dewey Decimal Classification (DDC).

Microfinance vs. Integrated Microfinance Management (IMM)

Understanding microfinance in general can be seen in Cambridge online dictionary is the activity or business of providing financial services to poor people or new business in poor countries. (1)

Meanwhile, according to Widad Ali microfinance means of building inclusive financial systems integrate specified services tailored to serve the needs of the

poor and the make them part of the mainstream financial system. (2) Definition of microfinance in general revolves around the system or financial activity on a small scale that are intended for the poor.

When linked between microfinance and microfinance integrated, it can be said that the integrated microfinance involves many disciplines and approaches in a single title microfinance. IMM in general is a microfinance-related program as well, but it is unique because it comes from local institutions. This is an implementation of government strategies below. IMM program can help financial service delivery in health, education, communication, and social services for the poor, "(3)

Integrated Microfinance (IMM) has several major studies (4), namely:

1. Focus on poverty reduction among the poor.
2. Policy Strategy of development from bottom
3. Integrated of five community based services
4. Promotion of local people participation

Functionalization of indigenous institution

1. Focus on sustainable community development
2. Respect for intellectual Property Rights (IPRs)

From the main study, the researchers issued a seven (7) key words that will be examined are:

1. Ethno Economics
2. Community economy development
3. Local economics system
4. Ethno microfinance
5. Traditional economics system
6. Finance local institution
7. Sustainable economics development

Seventh keyword is examined through two engines and a research database by:

1. Write down the search results listed on the first page of each search engine as it is.
2. Write down the pages contained the appropriate resources related to that keyword.

This analysis clearly shows what the first look produced per search engine. It will also distinguish between search engines with each other on how many pages there are in each of the search engines right information related to that keyword.

Information Retrieval (IR)

Information search term has long been used in the context of information retrieval. There are a lot of special meaning related Information retrieval. Among these is the sense according to the Merriam Webster Dictionary, which wrote that the Information retrieval is: "techniques of storing and recovering and disseminating Often the data recorded especially through the use of a computerized system." (5).

Information retrieval itself is generally higher in rank than just a search away. In the concept of information retrieval, there have been specific strategies related to information retrieval. This is as stated by Huibers, namely: "In the which way relevant information can be distinguished from irrelevant information corresponding A Certain information need". Systems trying to solve this problem automatically are called information retrieval (IR) (6)

Searching for information on the Web is, for most people, a daily activity. Search and communication are by far the most popular uses of the computer. Gerard Salton, a pioneer in information retrieval and one of the leading figures from the 1960s to the 1990s, proposed the following definition in his classic 1968 textbook (Salton, 1968): Information retrieval is a field concerned with the structure, analysis, organization, storage, searching, and retrieval of information (7)

Search Engine

Search engines or search engine is a medium / tool for information. Generally found on the internet. There are many search engines, among which are (8):

1. Google
2. Bing
3. Yahoo
4. Ask
5. Aol
6. Wow
7. WebCrawler
8. MyWebSearch
9. Infospace
10. Info
11. DuckDuckGo
12. Contenko

13. Dogpile

14. Ixquick

Search engines come in a number of configurations that reflect the applications they are designed for Web search engines, such as Google and Yahoo, must be able to capture, or crawl, many terabytes of data and then provide sub-second response times to millions of queries submitted every day from around the world (9)

This research will use two of the most popular search engines are Google and Yahoo.

Indonesia One Search (IOS)

Indonesia One Search or abbreviated IOS is a new service feature that is issued by the National Library of the Republic of Indonesia. Indonesia OneSearch or IOS is a continuously evolving search portal for all materials from Indonesian public libraries, museums, and archives. IOS Also Provides access to the subscribed e-resources for all registered members. It is a featured program by the National Library of Indonesia. (10)

IOS accommodate all intellectual property in Indonesia, of various types of institutions, such as universities, colleges, high schools, museums libraries, documentation and information centers, etc.

Boolean Logic

Search In the world of information, there is an effective search strategy is to use Boolean Logic Engineering. Boolean The name comes from the fact that there only two possible outcomes for query evaluation (TRUE and FALSE) and Because The query is usually specified using from Boolean logic operators (AND, OR, NOT). (11)

Boolean Logic techniques will be used to combine with keyword-related keywords IMM in this study.

DISCUSSION

The initial thought is that the interest of the librarians of the IMM's friends must have led ordinary people or people who do not understand the search strategy to do what their searches on search engines. This was after, its search results were found to be biased.

Search results using keywords microfinance and IMM generate more financial institutions, non-governmental (NGO), especially abroad. Here are the search results to see what is possible at some examples of search results by the search engines using the keywords specified.

**Table 1. List BIBLIOGRAFI google
Ethno+economics Page 1**

**Table 2. List BIBLIOGRAFI google
Ethno+economics 10 topic**

Related keywords Ethno + economics, can only be found valid article on page 2, 3 to page 10, with the spread of only 1 or 2 in every page. While in every page that Google holds a maximum of 10 results listings.

**Table 3. List BIBLIOGRAFI google
local economic system Page 1**

Here is the result of accumulation based search engines Google, Yahoo and IOS database. Below is shown the keyword search results in Ethno + economics. From natural search results on Google and found that the Google results display 10 results on page 1, there are five (5) articles related to the keyword Ethno + economics. While at Yahoo only 1 (one) article on the first page. In IOS does not exist. This shows that Google search is showing optimal results, although not using the right search strategy (whatever they are), which is 5 articles. However when using Boolean strategies, resulted in 6 articles in 1 page. The results can be seen that the search using Boolean logic more profitable strategy.

**Table 4. List BIBLIOGRAFI google
Ethno+economics Page 1**

In the table below, the search-related topics 10 valid resources, then for Google, related keywords Ethno + new economics is on page 3, Yahoo on page 3, and IOS starting on page 2. Whereas when using Boolean strategies, on Google, the most valid results already found on page 2, Yahoo in pages 4 and IOS on page 6.

**Table 5. List BIBLIOGRAFI google
Ethno+economics 10 topics**

**Table 6. Comparison between Google, Yahii, and IOS
searh results**

CONCLUDING REMARK

Some conclusions of this study are:

- The program should be more IMM to introduce community

- Create specific keywords for information retrieval
- Creating articles created on Wikipedia. Writing in Wikipedia is becoming a promotional tool to the term new field.
- Related considerations IMM naming itself. Whether it is appropriate name IMM courses? Or is there any other name? The discussion between scientists this field.
- Further research is needed (advance research) in this regard.

ACKNOWLEDGEMENT

We would like to thank you to all those who have contributed to the completion of this study, the team Fikom Library and Knowledge Center Padjadjaran University, namely Karina Novyanti, Sukaeyin and Wiwin Widiawati..

REFERENCE

- 1) Cambridge Dictionary. Cambridge : Cambridge University Press, 2016
<http://dictionary.cambridge.org/dictionary/english/microfinance> [cited October 10, 2016]
- 2) Widad AA. An Overview of Microfinance: History and Evolution, Definition and Practice. Ahfad Journal [serial on the Internet]. (2010, Dec), [cited October 10, 2016]; 27(2): 3-20. Available from: Academic Search Complete.
- 3) Belajar Integrated Microfinance Management di Unpad. Okezone.com. 2010
<http://news.okezone.com/read/2010/09/08/373/371213/belajar-integrated-microfinance-management-di-unpad> [cited October 10, 2016]
- 4) Slikkerveer LJ. Workshop Program Studi IMM. Bandung : FEB. 2016 <http://icimm.unpad.ac.id/> [cited October 9, 2016]
- 5) Merriam Webster Dictionary
<http://www.merriamwebster.com/dictionary/information%20retrieval>
- 6) Huibers TWC; Lalmas M; and Rijsbergen C.J. van, Information Retrieval and Situation Theory, 1996
file:///C:/Users/USER/Downloads/huibers_96_information.pdf [cited October 10, 2016]

- 7) Croft WB, Metzler D, Strohman T. Search Engines Information Retrieval in Practice. New York : Pearson Education, 2015 : 1
(<http://ciir.cs.umass.edu/downloads/SEIRiP.pdf>)
[cited October 10, 2016]
- 8) Top 15 Most Popular Search Engines, October 2016
(<http://www.ebizmba.com/articles/search-engines>) [cited October 11, 2016]
- 9) Croft WB, Metzler D, Strohman T. Search Engines Information Retrieval in Practice. New York : Pearson Education, 2015 : 4
(<http://ciir.cs.umass.edu/downloads/SEIRiP.pdf>)
[cited October 10, 2016]
- 10) Indonesia One Search by Perpurnas
(<http://onesearch.id/Repositories/Ios>) [cited October 11, 2016]
- 11) Croft WB, Metzler D, Strohman T. Search Engines Information Retrieval in Practice. New York : Pearson Education, 2015 : 235
(<http://ciir.cs.umass.edu/downloads/SEIRiP.pdf>)
[cited October 10, 2016]

Table 1. List BIBLIOGRAFI google Ethno+economics Page 1

No	Type	Title	Author	Address
1	pdf	Finance for the Poor: Microfinance Development Strategy	Asian Development Bank	https://www.adb.org/sites/default/files/institutional-document/32094/financepolicy.pdf
2	pdf	New Indonesian 'Branchless Banking' and Microfinance Laws - a catalyst for microfinance growth?	KPMG Indonesia	http://www.kpmg.com/ID/en/IssuesAndInsights/ArticlesPublications/Documents/Financial%20Inclusion%20in%20Indonesia.pdf
3	pdf	Microfinance in Myanmar Sector Assessment	Eric Duflos, Paul Luchtenburg, Li Ren, and Li Yan Chen	://www.cgap.org/sites/default/files/Microfinance%20in%20Myanmar%20Sector%20Assessment.pdf
4	pdf	The Microfinance Promise	Jonathan Morduch	https://wagner.nyu.edu/files/faculty/publications/1999-12-Microfinance_Promise.pdf
5	pdf	Microfinance in europe	Helmut kraemer-eis Alessio conforti	http://www.eif.org/news_centre/publications/EIF_WP_2009_001_Microfinance.pdf
6	pdf	Microfinance, rural livelihoods, and women's empowerment in Uganda	Alfred Lakwo	http://www.ascleiden.nl/Pdf/rr85lakwo.pdf
7	pdf	Financial instruments working with microfinance	Fi compass	https://www.fi-compass.eu/sites/default/files/publications/Factsheet_Financial-instruments-working-with-microfinance.pdf
8	pdf	Migration ethnic relations and Chinese business 1st edition		https://s3.amazonaws.com/di56/migration%20ethnic%20relations%20and%20chinese%20business%201st%20edition.pdf
9	pdf	Micro Finance for Poverty Alleviation: A Commercialized View	Nikhil Chandra Shil	http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=9E1A4E7C151F6CF32A54BFAA58FB07F6?doi=10.1.1.673.7067&rep=rep1&type=pdf
10	pdf	Microfinance, its concepts and development, lessons to draw for Europe	Klaas Molenaar	http://www.microfinancegateway.org/sites/default/files/mfg-en-paper-microfinance-its-concepts-and-development-lessons-to-draw-for-europe-jan-2009_0.pdf

Table 2. List BIBLIOGRAFI google Ethno+economics 10 topic

No	Page	Title	Author	Link address
1	1	Ethno-Economics, Materiality and Participation: from theMarket to the Menu	Alan Chamberlain	http://www.academia.edu/1933517/Ethno-Economics_Materiality_and_Participation_from_the_Market_to_the_Menu
2	2	Ethno-economics in Japan	Murray Sayle	https://www.jstor.org/stable/42705312?seq=1#page_scan_tab_contents
3	3	Macro-ethno-economics	Enrique Mayer	http://www.tandfonline.com/doi/abs/10.1080/00988157.1987.9977833?journalCode=grva20
4	4	Bridging the Gap between Economics and Anthropology: The Use of Ethnoscience in Economic Analyses of Indigenous Economies	V. Mazzucato	http://ifsa.boku.ac.at/cms/fileadmin/Proceeding1996/1996_WS03_29_Mazzucato.pdf
5	5	Ethno economics	kinga	http://budapesttimes.hu/2012/02/13/ethno-economics/
6	6	Handbook of Economics and Ethics	Jan Peil, Irene van Staveren	https://books.google.co.id/books?id=YahcdBQ5nqQC&pg=PA99&lpg=PA99&dq=ethno%2Beconomics&source=bl&ots=Ud-AmSMjqh&sig=JnpcswOz4bwD5Y0Qsf-xmjhNtOA&hl=en&sa=X&ved=0ahUKEwj88ffFu5zPAhVCuI8KHapsD8IQ6AEIPzAF#v=onepage&q=ethno%2Beconomics&f=false
7	7	Ethnobotany		https://en.wikipedia.org/wiki/Ethnobotany
8	8	Macro-ethno-economics	Gudeman, Stephen	https://www.researchgate.net/publication/248935417_Macro-ethno-economics
9	9	The US Census Asks About Race and Ethnicity: 1980–2020View More	Bard College Levy Economics Institute of Bard College	http://www.levyinstitute.org/topics/ethno-racial-origin
10	10	Ethnic Economies	Ivan Light and Steven Gold	http://jpe.library.arizona.edu/volume_9/903mo basher.html

Table 3. List BIBLIOGRAFI google local economic system Page 1

No	Page	Type	Title	Author	Link address
1	1	pdf	Doctoral programme in Development Economics and Local Systems (DELoS)	School of Social Sciences - University of Trento Department of Economics and Management - University of Florence	http://web.unitn.it/files/download/35582/307_15_brochure_delos_15x15.pdf
2	1	pdf	Local Economic Local Economic Development	A.H.J. (Bert) Helmsing Institute of Social Studies, The Hague	http://www.enterprise-development.org/wp-content/uploads/New_generations_of_actors.pdf
3	1	pdf	Economic Systems	Gérard Duhaime, Université Laval, Québec City, Canada.	http://www.svs.is/static/files/images/pdf_files/ahdr/English_version/AHDR_chp_4.pdf
4	2	pdf	Understanding Local Growth	Department for Business, Innovation and Skills	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/32113/10-1226-understanding-local-growth.pdf
5	2	pdf	Combining Value Chain Development and Local Economic Development: value chain development	International Labour Organization	http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---ifp_seed/documents/publication/wcms_182600.pdf
6	3	pdf	Local economic development policies and tourism. an approach to sustainability and culture	Margherita PEDRANA	http://www.rsijournal.eu/ARTICLES/June_2013/5.pdf
7	4	pdf	Local and Nonlocal Comparative Static Analysis of Economic Systems	Robert Kalaba, Leigh Tesfatsion,! and JoneLin Wang	http://www2.econ.iastate.edu/tesfatsi/
8	5	pdf	Continental, national and sub-national innovation systems— complementarity and economic growth	Chris Freeman	file:///C:/Users/USER/Downloads/FR EEMAN.pdf
9	5	pdf	Local economic development and decentralization in Latin America	Francisco Albuquerque	http://municipios.unq.edu.ar/modules/mislibros/archivos/lcg2220iAlbuquerque.pdf
10	6	pdf	Promoting Local Economic Development through Strategic Planning	United Nations Human Settlements Programme	http://www.natcapsolutions.org/LASER/LASER_Ecoplan-Guide.pdf

Table 4. List BIBLIOGRAFI google Ethno+economics Page 1

PAGE 1	GOOGLE	YAHOO	IOS
ethno economi pdf	5 articles	1 article	No match for books
ethno+economics	6 articles	5 articles	5 articles

Table 5. List BIBLIOGRAFI google Ethno+economics 10 topics

10 Topics	GOOGLE	YAHOO	IOS
ethno economi pdf	Page 3rd	Page 3rd	Page 2nd
ethno+economics	Page 2nd	Page 4th	page6th

Table 6. Comparison between Google, Yahoo, and IOS search results

Google & Yahoo	IOS
<ul style="list-style-type: none"> ▪ Search with Boolean system produces faster articles findings, ▪ by finding more articles ▪ to be able to choose the articles related to integrated microfinance in need of understanding first of integrated microfinance. ▪ Because of keyword selection is not necessarily produce the content / topic appropriate 	<ul style="list-style-type: none"> ▪ Almost all of the keywords already appeared on page 1 ▪ Only two keywords that did not exist: economic and ethno-finance ethno ▪ maximum 2 until it can already be found with related keywords 5 keywords rest. ▪ The dominant source of information is the institutional repository PT. ▪ Weakness IOS many listings are written 2 times