

**JIMMA UNIVERSITY**  
**FACULTY OF BUSINESS**  
**DEPARTMENT OF MANAGMENT**

*The study on:*

**The utilization of Internet service in Jimma  
University and the potential of  
Expanding the service in the main campus.**

**BY: Esubalew Tenaw Birhanu**

**Advisor: Mr, Rogers P.Joseph**

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## **ABSTRACT**

*A study has been conducted in Jimma University main campus to assess the availability of the Internet access and utilization of the service in different faculties of Jimma University students and staff members.*

*Beginning from Feb. 1997 the university get the internet account from telecommunication corporation to facilitate some research works and other administrative as well as academic tasks of the university. Internet is the world's largest computer network, through Internet we can get a hall of information, about people, product, organization, research data, printed media, email service and others. All of those are made easily available to users of Internet by using programs (a series of instructions for computer). This study identify the type of application that the students and staff members mostly use internet service, the extent of knowledge about this technology in the students & staff members.*

*The attitude and perception of the respondents on Internet and its contribution to academic performance is also determined. The total number of units and interconnections on this Internet service with the average number of users in each unit is described in detail. The major problems faced during the last five years and the respondents suggestions and the researchers personal recommendations are included at the end of the study.*

## INTRODUCTION

Jimma University is an autonomous public higher educational institution established in Dec. 1999 by the amalgamation of Jimma College of Agriculture (founded in 1952), and Jimma institute of health sciences (established in 1983). It is Ethiopian's first innovative community oriented institution of higher learning located 335 km south west of Addis Ababa at Jimma town with an area of 167 hectares.

Jimma University is a center of academic excellence, research and service. The university trains higher caliber professionals at diploma, graduates and postgraduate levels through it are cherished and innovative community –based, team- based and research based educational approach. The University is a leader in addressing societal needs and promoting holistic and sustainable development in the country. An average of 850 graduates completes their studies every year. Thus, the University tries to meet the demand for skilled manpower required in the economic, social and other aspects of the nation. Teaching, research and service are the primary tasks of this university.

This study focuses on the availability and usability of Internet service in the campus. Internet is the world largest Computer net work, it is the net work of net works scattered all over the world (by computer networks again the inter connection of those smaller net works). It was created nearly 30 years ago as a project for the US department of defense to create a method for widely separated computers to transfer data ever the event of a nuclear attack. Today it has grown to thousands of regional networks that can be connected millions of users. This global network is not owned by a single industrial, company or county, instead regional net works are owned by some institutions or corporation (The Ethiopian telecommunication corporation for example, the sole internet

service provider in Ethiopia) and those net works are inter connected to create a global system,

Internet, which the developed countries are so crazy about it, and which it is getting started to grow in our country, help as the following way:

- Gets a hall of information: - about people, products, organizations, research data, printed media, etc.
- Provide information :- Mostly global advertising disseminates information e.g. Publishing, teaching
- Compile information: - e.g. Polling (readership of a magazine for example), conduct survey, etc.

All of those are made easily available to users of Internet by using programs (A series of the instructions for a computer) the most recent & successful one at presenting information being the *World Wide Web* (WWW). Users are attracted to WWW service because it is interactive; easily to use combines graphics, text, sound and animation making it a reach communication medium.

A dial-up connection to the Internet can be established using the following.

1. (An account with) an internet access provider
2. A telephone connection
3. A computer (PC) and modems
4. A communication soft ware

At present, in the information age, educational systems like Universities around the world are equipped with information technologies (it's) in order to aid the advancement of education for the accomplishments of such tasks, with this in view, Jimma University the main campus was connected to internet in Feb. 1997. The Internet connectivity adapted in Ethiopia is dial up connectivity using a normal telephone line, a high-speed modem and appropriate software. In

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contrast the other type of connectivity is dedicated line connectivity that allows users to access Internet with out time limitation. However the latter type of connectivity is much more expensive than the former one. The university subscribed to ETC for the provision of Internet services to aid in achieving its goals that mainly emphasize the improvement of teaching and research.

The University currently has 3 Internet lines (telephone line) for the main campus. Those Internet accounts give service for all staff members and graduating class students. Among of those 3 Internet accounts the only one, which is, Found in the main library is allowed for students and staff members of University. Those all internet accounts use for more comprehensive and sophisticated research, the need for quality research, the need for electronic mail service, the need for better dissemination of its results, and the need for Jimma university to make use of research results.

In general universities around the world should use global information's to improve the quality of education and to fabricate a competent and qualified scholars which are familiar with current findings /information's. If you have access to the Internet, you have access to:

- ◆ More than 4 million host computers: all of which are possible sources of  
◆ Information that could be useful to you in your work, your traveling, your academic research or your hobbies.
- ◆ More than 35 million people, any of alone could be future friends customers,  
◆ Problem solvers. There may well even be a few old friends out there already.
- ◆ Gigabytes of files: containing programs-including the software that you need  
◆ For working on the Internet, books, news, articles, pictures sounds and video-sounds and much else.

## **OBJECTIVE OF THE STUDY**

*The main objective of the study is to investigate the application of Internet for the promotion of education in the main campus of Jimma University. More specifically, the paper is intended to seek answers for the following questions*

- I. How many Internet connections/accounts are available in the main campus?*
- II. Which faculty/department/ office is connected to the Internet?*
- III. Who has the access to the Internet and who does not?*
- IV. Is the Internet used to enhance the improvement of education in practical terms? How?*
- V. What are the factors that limit the Internet services to only few user groups?*
- VI. How can the internet service be expanded in the university:*

*The survey includes all faculties, libraries and other offices that are connected to the Internet. Accordingly only three telephone lines (accounts) for the Internet connections (are) identified and surveyed in the university (MCH unit, Library and the president's office).*

## **LITERATURE REVIEW**

Most societies have now found it appropriate to switch from traditional instruction to information age teaching mainly due to the extensive application of information technologies.

Information age teaching entails heavily use of information technology and let students as the active participants of the process through out the curriculum. In the information age, the role of teachers is to empower students as thinkers and problem solvers (Harkness and Franklin, 1994). The traditional class room instruction method has been changed to the student centered instruction in which the teacher coaches and the students become active participants.

**INTERNET:** - is defined as a net work of networks based on the transmission control protocol/Internet protocol; a community of people who use and develop those net works and a collection of resources that can be reached from those net works (Gains, et 21,1997). The net work may have several dimensions that can be installed at the regional, national or institutional level. It refers to a computer network, which is traditionally divided in to local Area Networks (LANs) and wide area Networks (WANs). LANs constitute a small group of computers, usually limited to one institute or company, which are used for internal data exchange. WANs on the other hand, may cover wider geographical area and extend over long distances that can constitute several LANs. Internet is thus one of the biggest WANs to which groups of computers are linked together globally.

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The other network technology that can easily be built on LAN and uses the Internet tools to provide access to internal as well as external resources is Intranet. Intranets are Internal Corporate networks that use the internal structure and standards of Internet and the World Wide Web (Sawyer, Williams and Hutchinson, 1997). It is a mechanism for sharing local information as well as information through the Internet.

Intranet as one of the leading technological innovations of this era is said to contribute much to the advancement of education & research activities.

The community people could be governments, schools Universities, Libraries, Corporations, Individuals and others that are connected through the Internet.

The resources on such networks have multi-nature that includes all kinds of information ranging from relatively simple information to the scientific findings people, networks and resources are thus combined in such a way as to form the intranet system.

The Internet represents a highly cost-effective means for a country's educational community to access global data of all kinds. In effect bringing them in to the world community (Kibruyisfa, 1997). Internet is one of the products of the new technologies that play significant roles in disseminating education efficiently. It has grown rapidly and has come to play a major role in supporting the teaching/learning activities.

Like the birth of digital computers that is attributed to the needs and funding of the 1940's arising out of the second world war, the appearance of Internet can also be attributed to the needs and funding in the 1960's arising out of the cold war (Gains et al, 1997). The United States of America started the

project with in the development of Defense in the 1960's as Advanced Research Projects Agency (ARPA) in reaction to the former USSR launch of sputnik in 1957. ARPA net (later renamed as Internet) was built originally for military proposes. It was mainly used for sharing Information and for collaborative year arches among military, Industry and university sources in the USA.

The net work was also used to provide a system for sustaining communication among military units in the event of military attacks or any threats from the Eastern Block Nevertheless, doing those early days, only few education and research institutes of the USA were connected to the ARPA net. It was only in 1980's that several academic net works around the world were connected to the Internet (Igbino, 1997).

According to Igbino, among millions of computers connected to the internet world wide in 1995, about 48% of them were in research sector and 6% in education sector with an estimated conterminous growth rate of 10%, The number of connections in education area including universities and schools has shown tremendous increase since then.

### **Potential Use of Internet in Education & Research**

**Teaching/Learning:** - Uses of the Internet for this purpose have shown rapid growth since the appearance of Internet. Internet as a tool functions at all levels of education, some of the teaching learning use of internet includes access to the reference material limitations in text books & reference books can be easily substituted by this access.

**Reference material:** - On the Internet, huge source of information in all

Disciplines (studies) is available which can be accessible by different communities and individuals who are connected to it. We can obtain resources of any variety over the Internet that supports the teaching learning process including course outlines, course descriptions, curriculum, and programs of different universities.

The whole content of Journals, conference papers, proceedings and even that of books are available in electronic form for free or in some cases on charge basis.

**Discussions and Mail:-** (With groups or individual-any where)communicate

With other students in the same university or with students in other universities located anywhere around the globe.

They may also discuss about the lecture, or about specific topic with each other or with instructor Debating on some vital issues could also be very convenient through email exchange, say with numbers of discussion groups.

**Research:-** It is indicated in the earlier sections that the research community (ARP 4 net and the development of World Wide Web) developed Internet originally. Many of the Internet features that seem restricted to the average person have roots in the research applications in the universities (<http://www.ag.arizon@.edu/change/tut@a.html>)

**Some of the use of internet for research are:-**

- ↪ Information sharing (e.g. Model results): Research products, scientific findings and articles of any kind are available in journals or in other periodicals in electronic form that can be obtained using search engines on the web.
- ↪ Information discussions via electronic journals and discussion groups (e.g., on News)
- ↪ Collaborative research among academics of different universities using Internet communication facility is another interesting application of Internet. Collaboration among students' faculty, practitioners and other researches is important for advancement of education. Harkness and Franklin (1994) argue that, collaboration benefits every one because it promotes information sharing, quid's learning, and helps Internet experience. Stationers that call for collaboration efforts include collective problem solving, group decision making and collaborative design. The crucial point is that the core of Internet was and still is - government – founded research or academic organizations. It was not set up as a commercial proposition, and commercial activities on the Internet are recent innovation. There are still appropriate use rules that restrict the use of the Internet for profit.

## **METHODOLOGY**

In the attempt to analyze the extent of utilization of the internet to improve education the interview method & questionnaire was used for gathering data first, a brief survey was conducted to identify the offices & all locations of units that connected to the internet. Various related literatures on the Internet use on education and background information on Jimma University were reviewed.

The Interview method is chose for those administrative officials and other experts to gather information on the current situation of Internet service in the campus. The interview focuses on the size and type of users. The types of Internet services delivered, problems occurred during the past five years and problems that hinder the application of Internet service in the area of education. The questionnaire method is also used to collect data's from students of each faculty and from both academic & administrative staff members (above their personal Feeling or observations on Internet service). Before the questionnaire distributed to the respondents there is at least one visit for establishing initial communication, briefing the objectives of the study and for arranging appointments to administer the interview as well as to give an orientation about the questionnaire and then the next visit were obviously for administering the interview & to distribute the questionnaire. The questionnaire have some background information about each respondent for those students faculty and for those staff members year of experience is identified but the other questions are the some for both.

## SAMPLING

The participants of this study were 250 students randomly selected from each faculty and 50 staff members (both administrative & academic) In Jimma University ~~main campus~~, we have Business Faculty, Technology faculty, of Agriculture Faculty of Public Health & Faculty of medicine from each faculty 50 students were selected randomly. The sample includes all departments of each faculty. Those 50 staff members selected randomly but those all have at least diploma on any filed of study or profession we know that the main campus comprises the majority of population & staff members in the university then the researcher was prefer to focus on the respondents of the main cômpose.

## Data Analysis

The final step was the analysis and interpretation of the data. The collected data was not suitable for quantitative as well as qualitative analysis. However, some approach was devised to make a general assessment of the objective of the study qualitatively. Two conceptual tools were used in the investigation to assess the degree to which the application of Internet promotes education. The tools employed as a measure are "Utility" and "Usability" utility is defined as the degree to which technology is utilized, and usability is defined as the proportion of effective users. Here, the phrase effective user is ambiguous, as it is difficult to measure such attributes and as it's usage is relative.

In very crude terms, utility corresponds to the massive growth in users while usability emphasizes the gain from use.

At the end of this study the findings were compiled and recommendations are given as possible solutions by paying attentions to related problems.

## **FINDINGS**

Three Internet connections (or accounts) have been identified in the main campus of Jimma University. Those are located in the president's office, in the main library and in the MCH unit. By using those three accounts the university share the access to 17 computers connected with parallel line those 17 computers are found in Epidimology & Biostatics, population and family health service department, Health planning and Health service management department, Health education department, Environmental health unit, research and publication office, administration computer center, and main computer center.

The main campus of Jimma University uses Internet for three major purposes. Those are communication using e-mail facilities, web pages browsing and collaborative research the summary of the responses from questionnaire and direct observation (interview) are arranged and presented separately for each unit. The tables below show some of the details obtained in the main campus.

**Actual and Potential users of Internet by work unit of the main Campus of Jimma University.**

<b>No</b>	<b>Unit</b>	<b>Location of the account</b>	<b>Actual users</b>	<b>Potential users</b>	<b>Type of Application</b>
1	Community Health program and family health department	MCH unit	<ul style="list-style-type: none"> <li>- Epidimology &amp; Biostatics</li> <li>- Population and family health dept.</li> <li>- Health planning &amp; Health service mgt.</li> <li>- Health education department</li> <li>- Environmental health unit</li> <li>- Research and publication office</li> </ul>	25	<ul style="list-style-type: none"> <li>- Personal correspondence (e-mail)</li> <li>- Web search</li> <li>- Collaborative Research</li> </ul>
2	Main Library	Computer Lab.	Staff & graduating students	many	<ul style="list-style-type: none"> <li>- Email, web search</li> <li>- Collaborative Research</li> </ul>
3	Presidents Office	Presidents office and main computer center	Staff members of the computer center & the president of the University	5	<ul style="list-style-type: none"> <li>- Email</li> <li>- Web search</li> </ul>

### **The Presidents Office**

The president of the university and those staff members of the main computer center share this account (from one telephone line). Both the president of the university and the staff members of the computer center use Internet for web page browsing and communication purposes.

### **The Main Library**

The main library uses the internet for different purposes, namely electronic mail and web page searching the internet connection in this unit provides services to both staff (Academic & Administrative) and students specially for final year (graduating class) students of all faculties in the university. E-mail services are given to those academic & administrative staff only in addition to web page browsing but graduating students' only search services for information related to their field of study. Due to shortage of printer toner and papers, the students and staff are given the copy of searched materials on their diskettes and also the number of graduating students are very large in the university the shared time is very short and as a result they are forced to limit the email service to only to staff members.

Non graduating students are not allowed to use the Internet services due to the limited number of terminals. It is believed that, those students may use the resources on the web through their teachers in the form of lecture or from teaching materials distributed or loaned /borrowed from the library.

Users from this library account were strongly commenting on the under utilization of the Internet and suggested the use of LAN for increased services to

support the education system. Because now days the library only connect four computers by using one telephone line.

### **The MCH Unit**

There is one internet account in MCH unit, a total of eleven computers share one account using the telephone line by parallel connection /Epidimology & Biostatics, Health education department, population & Family health department Health Planning & Health service management department Environmental health unit, Research and publication office a total of 25 staff members use on this account and on those computers. There is the restriction on the number of users. In this unit has an access to it, the other staff and students are not allowed to use the service. The reason is this account is donated and any related expenses to this account are covered by independent external fund source (NGO). The objective of this unit is to give service to those special staff members, researchers on health and other teaching material on family planning, population, health & other references are prepared and studies on community and family health are supported by this unit. Those staff members of MCH unit mostly use the Internet for personal correspondence (email) & searching of web pages /collaborative research).

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**Data Collected from Individual Respondents**

<b>No</b>	<b>Questions</b>	<b>Students</b>		<b>Staff Members</b>	
		<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
1	Do you know where the internet service is available in the campus?	196	54	42	8
2	Have you ever used the service in the campus?	39	211	18	32
3	Do you think the current facility is adequate?	0	175	0	42
4	Does internet contribute any support towards you academic effort?	22	168	18	24
5	Do you use internet service out-side the campus?	0	250	16	31
6	Do you recommend expanding the service?	207	0	42	0
7	Have you ever tried to get currant information?	0	196	13	34

According to the above data the major problem of utility and accessibility of the Internet service in Jimma University is the following: -

There is little awareness by the majority of staff and students about Internet and how to use the vast resources in it. Most of them required Internet only as a tool for communication purposes. More over, they lack the skills and techniques of searching for the resources on the Internet. The majority of the

staff users prefer to rely on secretaries or intermediaries who have very limited skills to utilize the Internet.

There is limited or no access for the majority of the staff members and for all students even for the graduating classes. It is indicated that the Internet connections are very limited and only in specific places. Those staff and graduating classes who are permitted to use the internet service are not regular users as a result the computer lab have no any time schedule for those faculties or individuals. Some times because of a high traffic of users a person is asked to wait for few hours or days to get the service.

The main computer lab, which is found in the main library, is the only center for the students and other faculty heads to get the service in the campus. This computer lab has only one account and is connected to 4 computers, Among those computers only three are allowed for those staff and students the remain one have some basic programs which need high security b/c they can be damaged with minor technical error.

Almost all of the respondents of this study agree that the service in the university currently deliver is not adequate. This is not only because of the computer lab has limited terminals but also the number of skilled man power in this field is not enough in the university for example the computer lab has only one secretary who gives all technical support for those staff members and other user who have no knowledge about internet searching.

Even if there is no adequate service in the campus any of the students use those accesses that found out side the campus. This implies that the importance of Internet in the students' mind is only if there is no payment. Only few staff members tried to use the service in Jiffar computer center b/c they get much more adequate service and enough time to search and to gather more

information but the time they lost to get this service is greater than what they pay to the service. The place of their working area and the availability of those computer service centers are very far. They give their suggestion that they are willing to pay to the university if the access is improved and the time to search webs is increased.

## **DISCUSSION**

### **Utility and Usability**

The collected data is not suitable for quantitative as well as quantitative analysis. However, some approach was devised to make a general assessment of the objective of the study qualitatively.

Two conceptual tools were used in the investigation to assess the degree to which the applications of Internet improve education or to assess the potential use of Internet service in Jimma University. The tools employed as a measure are "Utility" and "Usability" based up on the definition of Gaines etal, (1997), an attempt has been made to make some infections and draw conclusions although it was difficult to measure information/service in this regard from the purpose of the objective of the study, utility is defined as the degree to which technology is utilized. Its emphasis is on quality rather than on how much information /knowledge is gained, accessibility of a system is one of the considerations of utility. Similarly; usability is defined as the high proportion of effective users. Here, the Phrase "effective users" is ambiguous, as it is difficult to measure.

Such attributes and this usage's are relative. In very crude terms, utility corresponds to the massive growth of users while usability emphasizes the gain from use.

There is high variation in the degree of utility from one connection to the other, when the number of the actual users is great and the service is more or less accessible to all potential users, the extent of utilization is high. On the other hand, the connections that entertain few individuals have low utility. Based on the definitions established to the tools, the degree of usability may increase with utility, but it does not necessarily base on it. The hard copy of a single document for instance, downloaded from a certain web site in a month by an instructor and distributed for students may be more usable than hundreds of different materials obtained from the web page during the same month and kept for none. On the other hand, some connections are highly utilized yet the service-dominated is electronic communication that may contribute little or nothing in promoting education. In this regard, the usability of Internet in enhancing the education processes is minimal. Those may be attributed to the fact that, measuring or evaluating information /service is very difficult as different peoples have different tests and different degree of satisfaction for a given service or information. Generally, it is difficult to standardize satisfaction. The other problems are lack of data on time internet is used in a given month; the number of the actual users and the respective time of utilization for each individual and the time utilized for each kind of service (email, document search etc...) none of the informants have replied to those questions, as they have no such records at all.

Therefore, due to problems in obtaining the relevant data, it is difficult to analyze quantitatively.

To sum up, by referring utility with the size of the actual users relative to the size of the potential users, it can be said that the internet service in Jimma

University is under utilized it may be because most of the actual users are utilizing the internet for communications that contributes Nothing or little to the advancement of education.

And the other fact is that the extent of utilization of internet services of Jimma University relative to the proportion of the actual users to that of potential irrespective of usability factors, were found to make little contribution for promoting academic effort of the students.

## **Summary**

The Internet service in Jimma University is commonly used for communication and web pages searches and collaborative researches. However, the impact of the application of the Internet in changing the over all teaching/learning cultures is very minimal due to the limited scope and usage of the services. In general, the contribution of Internet in enhancing the improvement of education in Jimma University is found unsatisfactory.

It is so important for Jimma University to reconsider its position in relation to the rest of the world (universities) and try hard to cope up with them with the current status of Jimma University, it can be said that with the world moving a head, Jimma University is not standstill rather stay behind in the exchange of information or this service or technology grow at decreasing rate.

## **Conclusion**

The university must optimize Internet use to promote education and research. If so, the focus should be on how to make available the Internet access for the university community in general and for the students in particular the other concern is to empower staff and students with computer literacy and information search skills on the Internet. Literacy helps to devise a search strategy and utilizes Internet for the advancement of education. To solve the Lack of textbooks reference materials, and current information's the university should tries to expand the service as much as possible. There are excess/huge amount of research data in every declines that can be easily search and utilize through internet service improve the extent of internet use by the university some recommendations are given below.

## ***Recommendations***

1. Building local area network (LAN): By building LAN's in faculties & departments all the respective members can easily access to the local information and databases. Moreover, by using a single Internet account, every PC's connected to the LAN are able to access information in the Internet simultaneously. By having a LAN in a faculty/department, the monopoly of Internet by an individual or by few could be eliminated. Recently Jimma University is on the process to prepare a proposal to build and launch the local area net work (Internet that covers the entire university). This potential if implemented will be a big jump for the university.
2. Building institutional Internet: is another mechanism for increasing user accessibility to the resources on the Internet with the given limited conditions using the Internet tools. It also enhances the campus wide information distribution. Internet is capable of providing access to databases with a minimum cost of linkage to the Internet. Intranet, therefore, provides users with the access to share local information as well as information through Internet and web browser.
3. Building LAN may be expensive which the university can not afford under the current budget allocation. As an immediate solution, facilitates or departments can use telephone line sharing techniques by using the existing three telephone lines. This can be achieved by connecting two or more modem together with PCs in parallel across a single telephone line to use the same Internet account. But there is limitation for this technique that the separate solutions (PCs) can not log in/use the Internet simultaneously.

4. Training staff and students to develop capacity building to utilize Internet. Such training should include hardware, software and information system in general. It is recommended that incorporating at least one introductory course on computers as compulsory in the curriculum will give back ground on information technology for the students. Improve their teaching style by connecting the course with the current situations and by giving an extra assignment to refer about the topic. Each internet service centers (units) should give those basic knowledge's about internet for those students and staff members by scheduling the time for each faculty. The training should also aim at changing the attitudes of heads/deans/instructors.
5. The best solution that covers the entire university is to subscribe for a leased (dedicated) line. The leased line has separate gate way (gateway allows two networked to 'talk' with each other) that links with the Internet. By using the dedicated line, there is no limit in time of service. Every member of the community could utilize as much as he/she needs to use the Internet ones the university has built LANS/internet.
6. Problems that result from narrow bandwidth, high traffic and in general problems associated with speed and capacity believed to be solved with development of the telecommunication inter structure of the country.
7. Both of the campuses of Jimma University are under the same administration and have similar trends. Therefore, the findings, and other associated problems are of the same nature. This implies that all the recommendation and suggestions are applicable for the two campuses.
8. There is a need of considering the costs incurred by increasing the number of terminals through parallel connectors. Those problems can be removed by setting some rules and regulations about How to use the service. Those researchers and students need current information's and other relevant notes can use the service with the given schedules but email (electronic mail

communication) that increase expenses should be restricted) that increase expenses should be restricted or this service should deliver with payment b/c email is not that much necessary to promote education.

## Bibliography

- ☛ *Gains B.R. et al. (1997). Modeling the Human factors of the scholarly communities supported through the Internet and the world wide web. Journal of the American Society for Information Science. 48 (11): 987 - 1003*
- ☛ *Harkness, T. C. and Franklin, C. (1994). The Internet: Educational Issues. Library Trends. 42 (4): 608 - 625.*
- ☛ *Igbinoba, M. E. (1992). The potentials of Internet for library services in Nigeria. African Journal of Library Archive & Information Science. 17 (2): 91 - 104.*
- ☛ *Kibruyisfa Achamyeleh (1997). Making Information on Ethiopia Available on the Internet: A case study of Tourism in Ethiopia.*
- ☛ *Sams net (1996). Discover the World Wide Web with your sportster, P3-24.*
- ☛ *Sawayer, W. and Hutchinson (1997). Using Information Technology A practical introduction to computers & communications.*
- ☛ *URL: [http://WWW. Ag Arizona. edu/ change /tut 22. html](http://WWW.Ag.Arizona.edu/change/tut22.html) (sited on April 2, 1999)*
- ☛ *URL: [Http:// WWW. net sen. com/ what is Intranet. html](Http://WWW.net.sen.com/whatisIntranet.html) (sited in May 1999).*
- ☛ *URL: [http://WWW. higher web. com /497/ html](http://WWW.higherweb.com/497/html) (sited in march 1999).*
- ☛ *Additional Bibliography at the back of this paper must be included.*

- ☞ *Computer Fundamentals concepts, systems & Application 1<sup>st</sup> editron sinha 1990.*
- ☞ *Computer Architecture and organization 2<sup>nd</sup> ed.*
- ☞ *Data base processing fundamentals, design, and implementation*
- ☞ *Systems analysis & design methods 3<sup>rd</sup> ed.*
- ☞ *The Internet for windows 3-1 made simple.*

APPENDIX

**JIMMA UNIVERSITY**  
**FACULTY OF BUSINESS**  
**DEPARTMENT OF MANAGEMENT**

**OBJECTIVE:-** *This Questionnaire is designed to collect information on utility & usability of internet service in Jimma University.*



Tick the appropriate boxes as applicable to you and Fill in the relevant information.

Staff

Student

Academic

Faculty \_\_\_\_\_

Administration

Year \_\_\_\_\_

\_\_\_ Year of service in JU

***Allowed for Jimma University Staff members & Students only***

1. Do you know where the internet service is available in the campus?  Yes  No
2. If yes, Have you ever used the service? Yes  No
3. If No, Reason  No access to the service  
 The access is too limited  
 There was no need so far  
 I use the facility out side the campus  
 I find it difficult to make effective use of the Internet.

4. If yes, How often do you use the campus service?

- occasionally       regularly       only if necessary

5. If you have used the service how long did you have to wait to get the service?

- a few hours       a few days       a few weeks

6. Do you think that the current facility provides service adequately?  Yes  No

7. If No, what do you think are the reasons for it?

- Limited number of terminals  
 No access /limited access  
 Lack of scheduled program  
 Other, please specify \_\_\_\_\_

8. Have you ever tried to get new informations/current Informations through

Internet \_\_\_\_\_  Yes  No

9. Do you think Internet can contribute substantially towards your academic

efforts/Advancement of Education \_\_\_\_\_  Yes  No

10. If yes, how important is the use of internet in higher learning?

- very important       less important  
 moderately important       do not know

11. Do you use internet service any where out side the campus?

Yes       No

12. If you use the service outside the campus, give reasons

- to get better service
- because the university provides inadequate service
- because the university does not allow to use the scenic
- other, specify \_\_\_\_\_

13. If you make use of the internet service for what purpose do you make use of it?

- For communicating with other universities & organization
- Web page browsing
- Collaborative research
- Sending & recelling mails
- Collecting information for academic purposes
- other, specify \_\_\_\_\_

14. Would you recommend to expand the service facility currently available?

- Yes  No

15. If yes, what kind of expansion do you suggest?

- increase the No of terminals
- increase the No of working hours
- both
- other, pleas specify \_\_\_\_\_



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