
Studies on the scenario of Internet use pattern of Assam University Community and Local population of Barak valley : A survey

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Abstract

This paper describes about the usefulness and advantage of Internet in day-to-day life, impact of Internet on the library and information services etc. and explains the aims and objectives of the present survey on the usage of Internet in Barak Valley, methodology used etc. The author highlights the use of Internet in this region is in nascent stage and it has become important to make people of this valley aware for the use of Internet and regarding its potential for having enormous resources of information which can be search instantly provided the minimum facility for Internet access is available. The survey results also reveals the users communities of different strata, use of Internet from personal connectivity or from Internet café or office, or academic institutions, types of connectivity for Internet account subscription, place and time for Internet search, time slot for Internet connectivity, use of Internet tools and services, mostly used search engines for Internet access, use of browsers for Internet search, rate of Internet access from Internet café etc. Besides above aspects, the final part of the paper describes the role of Internet in library and information services, problems of getting Internet connectivity, and some suggestions for making people aware for the use of Internet and popularise the use of Internet among the users communities by arranging short term training programme by Computer Institutions, Regional Engineering College(REC), Assam University and other private Institutions

Keywords : University Library, Assam University Library, Internet Use Pattern, Barak Valley, User Study.

0. Introduction

Barak Valley comprises of four District of South Assam viz. Silchar, Hailakandi, Karimganj and N.C. Hills. It is very remote area although it is well connected by air; rail and road but surface communication takes lot of time, which results in low socio-economic development of the region. For the up-liftment of the backward society in terms of Higher Education, Socio-economic development, Assam University, a Central University was established by the Act of Parliament XIII of 1989. Then the long awaited university came into existence on 21st January 1994. At present Assam university has 26 academic departments, 3 study centres relating to Science & Technology, Social Sciences, Humanities and Language. Regional Engineering College and Medical College have been established two decades back for the development of Barak Valley.

1. Internet : A Network of Network

The Internet is one of the most important and complex innovations of mankind. It is a powerful means of communication, dissemination and retrieval of information. It is a network of network connecting thousands of smaller computer networks together so that other networks may share information present in one network. It is one of the powerful / effective tools or technologies ever produced for getting information on fingertips from any part of the world even sitting at ones own location. Internet has been described as a

system for allowing computers to communicate with each other. It is used by millions of people throughout the world for communication, business, research, recreation and browse information for higher studies.

There are various national, international / global networks systems, more than 40,000, readily accessible through the Internet. As network bandwidths increases it will become common to have video and animation over networks, thereby challenging the conventional analog media such as cable TV and videotapes. Now the facility of Internet has been increasingly used for educational course delivery.

1.1 Internet Scenario in India

In India also the use of Internet has been increasing since 1994 to present date. The National Association of Software and Services Company (NASSCOM) conducted a survey in June – July 2000 in 68 cities that constitutes the 92 percent of the total Internet users in India. According to NASSCOM's survey, 36 percent of the world's population access Internet today. In India, the Internet markets grew steadily in terms of subscribers, with the number of active subscribers projected to touch 1.5 million figures in March 2002. This represents an increase of 30 percent over 1.1 million figure in March 2001. In fact nearly 85 % PC owning households already have net connections. The same is true of business establishments with Internet penetration reaching nearly 40 per cent. There is still pending demand of Internet connections. It is expected that with the improvement in bandwidth, it is likely to grow 2.3 million users by December 2003.

1.2 Internet Services

The services available on Internet has been increasing day to day, which become channel for communication where text, sound and graphics are easily available. Library and information professionals cannot afford to miss the opportunity for acquiring the knowledge of handling Internet for their library users. Library users are now demanding the E-mail/Internet services which forces the professionals to learn more about the Internet services and tools so that better services can be provided to their clientele.

Internet is a storehouse of information, which is not organised properly for easy retrieval. Any person for getting instant and new information, recreation, educational purposes, research and development, business, health care etc can use it. This is possible through the followings major tools and services available on Internet for communication and searching of databases or desired information – electronic mail, Telnet, File Transfer Protocol (FTP), Bulletin Boards System (BBS) and World Wide Web (WWW) etc.

1.3 Need of Internet for University / Institutional Libraries

The Internet offers a wealth of information to the users. It is a sources of up-to-date information and assistance related to education - technical education, higher education, research in science & technology, social sciences and humanities, advances in medical sciences, engineering biotechnology, agriculture management and computer sciences.

Communication is another critical use that makes the Internet invaluable as a source. Many organisations also set up an "INTRANET" - this is the network used in the Internet to communicate and share Information across the organisation. In Universities or institution of higher learning, INTRANET can be useful for instant communication among the faculty member, research scholars, students, teachers, academician and administrator within the campus. Several commercial on-line services are available which provide connections to members who pay a monthly connect-time fee. Compu Serve America, On-Line, Prodigy, Genie, e-world and several others provide a tremendous range of information and services, including on-line conferencing, electronic mail, transfer program downloading, current weather, access to

encyclopedias and other reference works and electronic forum for specific user groups such as expert group on particular area, organising teleconference / seminar etc.

As listed by P.K. Suresh Kumar (2000) followings are some factors that led for the emergence of Internet in a university library system:

- ✍ Resource and Information Sharing
- ✍ Reduction in the cost of computers and other electronic gadgets;
- ✍ Huge volume of information with lesser cost;
- ✍ Increase in publication cost leads books and journals costlier;
- ✍ Decrease in budget allocation for subscription of foreign journals and books;
- ✍ Saving of precious time in communication;
- ✍ National and International library network connected to Internet making the searches faster;
- ✍ Avoid duplication of holdings of foreign journals;
- ✍ Provision of subscription of e-journals under consortia approach;
- ✍ Powerful tool of communication across the world making world borderless;
- ✍ As a reference tool; and
- ✍ Provide same information to a number of users simultaneously over Internet connected in campus or local area network.

2. University Community and Local Population of Barak Valley

2.1 Title of the Present Study

The title of the present study is "Scenario of Internet Use Pattern of the University Community and Local Population of Barak Valley". The present investigation has been carried out with an objective to know that how far the university community of Barak Valley are aware of the usage of new communication tool, the Internet and its application in the day to day life of academicians this region.

2.2 Objective of the Study

The present investigation has been carried out with the following objectives:

- ✍ To know about the awareness of Computer and Internet literacy among the university community of Barak Valley;
- ✍ To find out Accounts used for Internet Access;
- ✍ To examine the choice of place for Internet use and the preferred time slot for Internet /e-mail searches;
- ✍ To identify the preference of e-mail services used by the respondents;
- ✍ To know about the popularity of Internet Service Providers;
- ✍ To find out time slot for Internet connectivity and use of search engines for Internet Access / e-mail services;
- ✍ To examine the use of Operating System Platform and Browser for e-mail/Internet searches;
- ✍ To ascertain about the maximum use of Internet tools/ services;
- ✍ To know about the rate of e-mail services/ Internet access per week;
- ✍ To identify the characteristics of population such as professional status and organisational affiliation of the Internet users;
- ✍ To identify the purposes of using Internet;
- ✍ To find out the specifications such as type of account, service providers, type of connectivity, time slot etc. availed by the Internet subscribers / users;
- ✍ To ascertain the use of the various services of the Internet;

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- ✍ To find out frequency and search engines for Internet surfing;
 - ✍ To find out problems encountered by the users in surfing Internet;
 - ✍ To suggest the ways and means for popularizing the optimum use of Internet services; and
 - ✍ To find out the impact of Internet on the libraries and to understand the future role of library professionals.

2.2 Methodology

Survey method has been applied for the present investigation, which has been carried out by administering questionnaire to the respondents, and the responded questionnaire was analysed for data interpretation and conclusion. Following research tools have been employed in the survey to collect data

- ✍ Questionnaire
- ✍ Interview and
- ✍ Observation

During 1999 the facility of Internet was introduced in Silchar town by department of telecommunication through VSNL and NICNET. It was in very initial stage. The academic institutions located in this area like Assam University, Regional Engineering College, Medical College has started subscribing and using Internet. Other than that individual users have now started subscribing Internet connectivity through VSNL and businessman and students are approaching Internet Cafe whose numbers have been increasing day by day seeing the popularity of Internet for its immense potentials for communication and e-commerce etc.

2.2.1 Sample for Survey

For preliminary investigation it was decided to carry out a survey of 200 Internet users. The potential users either surf or access Internet either at libraries of academic institutions, at home at offices or at Internet cafe for e-mail services, chatting and e-commerce etc. The selected respondents have been identified / drawn from academic community such as teachers, research scholars, students, library and information professionals, and senior executives.

The selected respondents have been given pre-structured questionnaire irrespective of their status. And they were requested to fill up the questionnaire and send back to the investigator. Follow up persuasion has to be made to get the filled up questionnaire back. All the respondents have been interviewed regarding the use of Internet and author himself observed them while accessing the Internet facility at Assam University library.

2.2.2 Background of Study

The present survey was conducted during last part of June 1999 to July 2000. At that time, Internet subscribers including institutional, personal and Internet /Cyber Café were very few in number. People are very much curious about the new technologies of instant communication. It become popular due to e-mail service, which is, used maximum by the users. Therefore in order to know about the awareness and usage of Internet, the present study was carried out.

2.2.3 Characteristics of Internet Users/Subscribers

In the present study mainly faculty members, senior administrative executive, library and information professionals, research scholars and students of Assam University, Regional Engineering College, Medical College and few users from business organisations have been selected as a sample of study.

The faculty members and library professionals constitute the major proportion of Internet users followed Cyber café and business organisations (25 % each), research scholars and students (12.5%) and senior administrative executive represent only 7.5%.

2.2.4 Delimitation of Present Study

The present study was delimited to mainly small academic community of Silchar. Since the study was conducted on small population during 1999-2000 and during that period Internet was introduced in Silchar. Since then gradually the awareness and usage of Internet has been increasing day by day among the elite / academic community, and businessman of the society on account of being its potentials for vast instant communication which connects this remote area from the rest of the world.

3. Data Analysis, Interpretation and Discussion

The present preliminary study was carried out to ascertain the general awareness of usage of Internet among the Assam university community. For that purpose the structured questionnaire that, has been designed by the author himself, was administered to the selected population (sample of study) and filled up questionnaires were taken back from the respondents. The data were analysed and tabulated (Chart and Tables 1-23)

Background Characteristics of the Respondents

✍ No. of Questionnaire distributed and returned from the respondents

Chart and Tables -1 reveals that out of 200 respondents, only 120 (60 %) respondents have responded, it may be due to ignorance or lack of awareness of computer / Internet use.

✍ Classification of Respondents on the basis of Awareness of e-mail/ Internet facilities

The Chart and Tables –2 shows that out of 120 respondents who have returned questionnaire back, only 80 (66.66%) respondents have knowledge of using computer and Internet facilities.

✍ Classification of Respondents on the basis of Age Group

Chart and Tables –3 reveals the classification of respondents on the basis of age group. Out of 80 respondents, 27.5 % respondents are in between 31-40 years age group, which is maximum and followed by 22.5% (21-30 years), 20% (10-20 years and 41-50 years each group). Only 5% respondents each falls in between the age group of 51-60 and 61-70 years which is minimum

✍ Classification of Respondents on the basis of Sex

Chart and Tables - 4 shows that out of 80 respondents, 70% respondents are male and remaining 30% belongs to female group

✍ Classification of Respondents on the Basis of Educational Background

Survey result reveals that educational background of the respondents residing in Silchar is a major factor for accessing Internet. Result as shown in Chart and Tables –5 clearly indicates that out of 80 respondents, maximum 50% respondents are Ph.D. degree holders, followed by Post- Graduate (25%),

Technical / Professionals (12.5%), Graduate (7.5%) and minimum Under -Graduate (5%). One of the important finding is that awareness of Internet has been found maximum in academic community having higher degree and gradually decreases as per their qualification.

✍ Classification of Respondents on the basis of Occupation

The survey finding as depicted in Chart and Tables –6 reveals that out of 80 respondents, 70 % respondents belong to University faculty or community / Govt. service followed by student community (12.5%), Businessman (10%) and minimum 7.5 % who are in private service. Therefore it is concluded that Internet usage is popular among elite group with high income. Thus Internet usage and awareness may be linked with the occupation of the respondents.

✍ Classification of Respondents by Income Group

Income group is a variable dependent, which may also affect the result. The survey result as indicated in Chart and Tables –7 shows that out of 80 respondents, 32.5 % respondents are in income group between 10,001 to 15,000, followed by 20% who falls between 20,000 and above, 17.5 % in between 5001-10,000 and remaining 15 % each falls below 5000 and 15,000- and above.

✍ Classification of Respondents on the basis of Computer Literacy

Computer Literacy is one of the important factors for the present study. Chart and Tables -8 reveals that out of 80 respondents, only 20% respondents are expert in using computer, 35.5 % respondents are novice and remaining 45.5 % are having intermediate knowledge of using computer for accessing Internet based services.

✍ Classification of Respondents on the basis of Internet Literacy

The survey result as shown in Chart and Tables -9 reveals that only 20% respondents are expert in Internet literacy and 40 % each are novice and intermediate knowledge of Internet use. The survey result indicates that most of the respondents are in initial stage of Internet learning.

✍ Knowledge/ Information of Internet Facility

Internet is very recent in India. The facility of Internet has started in India few years back. Particularly in North Eastern Region it has been started during the year 1999-2000 and becoming very popular. Here Internet connectivity has been provided by the Department of Telecommunication through VSNL, which is taken over by now BSNL.

As per the findings as shown in Chart and Tables -10, it has been found that out of 80 respondents, 55 % respondents came across the term Internet and started using Internet facility available in the university or café during 1999-2000 which is followed by 22.5 % during 1996-98, 12 % and 10 % who have come across the facility of Internet during 1990-92 and 1993-95 respectively. From the result it is clear that the maximum number of respondents have heard the term Internet during 1999-2000 and maximum use of Internet facility has been started from 1999 onwards.

✍ Accounts used for Internet Access

Internet services are provided by the Internet Service Providers, which are either VSNL via Dept of Telecommunication or BSNL, NICNET or through private Internet Service Providers (ISPs). Particularly in Silchar, the services of Internet are being provided by the Department of Telecommunication through

VSNL (now BSNL) and NICNET, which offer two types of Internet accounts viz., Shell Account and TCP/IP Account. Shell Account is used for transmission of text (e-mail / data transmission without graphics) and TCP/IP Account is being used for all types of data transmission including graphics.

Most of the Internet users prefer to use TCP/IP Account for Internet access, which may be due to the facility of access graphics along with text. In present study, out of 80 respondents, maximum number respondents (70 %) have been using TCP/IP Account, which is followed by Shell account users (22.5%). The remaining 7.5 % respondents have shown their inability to respond this question that may be accessing Internet facility through Internet café (Chart and Tables -11)

✍ Place of Internet Access

VSNL (now BSNL) and NIC are two important Internet service Providers (ISPs) available in this region. The survey result as shown in Chart and Tables -12, it has been observed that out of 80 respondents, Table -12 shows the preferred place of Internet access by the respondents. Out of 80 respondents 25% each used to access Internet from office and cyber cafe followed by home (22.5%) and academic institutions (20%). Only few users (7.5%) access Internet from their friends' house.

Now e-commerce is becoming popular among the commercial organisation. In Silchar city Internet café are being set up in the different parts of the city to provide Internet facility to the people on payment basis. By and large Internet is being also used in educational institutions where Internet is considered as an invaluable source of current information for teaching, learning and research. Therefore it has much potential to explore knowledge resources available over Internet for academic, research & development and other purposes.

✍ Preferred Time for Accessing Internet

The respondents as per their convenience are accessing Internet. The preferred time of Internet access has been presented in Chart and Tables –13 which reveals that maximum number of respondents (27.5%) surf Internet during night which is followed by evening (22.5%), afternoon (20 %), late night (17.5%) and minimum 12.5 % access Internet during morning hours. Therefore night is suitable for maximum number of the respondents it may be due the fact that users may get connectivity easily during night of late night hours. Institutional and official users generally prefer to access Internet during morning and afternoon.

✍ Preference of Search Engine /Internet Service Providers for e-mail Service

The survey result as shown in Chart and Tables –14 reveals that Yahoo Mail is most popular e-mail service and preferred by maximum numbers (45 %) of respondents which is followed by Hotmail and Rediff Mail Service (15 % each), VSNL (now BSNL) through Dept of Telecommunication (10%). Only 5% respondents each are using e-mail service provided by NICNET and Satyam Online and very few respondents 2.5 % are using the facility of e-mail services provided by Indiatimes.com and Zeenext.com.

✍ Internet Service Providers

In Silchar there are only three Internet Service providers viz., VSNL (now BSNL) through Department of Telecommunication, and NICNET. Department of telecommunication, Govt. of India provides Internet/ e-mail facilities through ERNET (Education and Research Network), and VSNL (now BSNL) and National Informatics Centre (NIC) through RENNIC and provides access to Internet.

VSNL Internet Connectivity is available not only to Government, educational and research institutions; rather it is also to individuals and commercial agencies whereas NIC provides Internet connectivity to Govt. departments, academic institutions and public sector enterprises. ERNET restricts its connection to educational and research institutions in the country. It is to be noted that some of the institutions have connections of more than one ISP.

VSNL started providing Internet connectivity through DOT in 1999 and now Internet connection has increased to more than 1000 connections. In Silchar two educational institutions have Internet connectivity of VSNL (now BSNL) and NICNET. The survey result as shown in Chart and Tables –15 shows that VSNL or BSNL is the major Internet Service Provider having 87.5 % subscribers (70 subscribers) whereas 12.5 % (10 subscribers) subscribers are connected through NICNET. Assam University and REC libraries are connected to NICNET also for e-mail service since 1998. The limited numbers of NICNET connection may be due to its policy for popularising e-mail service only to the Governmental organisations. On account of the limited bandwidth / speed available with RENNIC, a full-fledged Internet service / operation is not be possible. The other ISPs like Satyam On-line, Rediff.Com have not yet provided Internet connectivity to this remote area of South Assam. VSNL (now BSNL) has provided Dial-up connectivity to the Internet subscribers.

Time Slot for Internet Connectivity

The VSNL provides Internet connectivity for 100 hours, 250 hours, 500hours and 1000 hours for which subscribers have to opt for time slot as per their convenience and requirement. The subscription is either till the expiry of prescribed hours or for one year, whichever is earlier. The annual subscription charges vary according to time slot. In the present study there are two types of respondents, one who are subscribing Internet connectivity and other Internet users either access Internet at office, academic institutions and cyber café.

The individual subscribers who have taken Internet connectivity has been shown in Chart and Tables – 16 which shows that out of 80 respondents, only 48 (60 %) respondents have subscribed Internet connectivity at their home, office, or organisations and remaining 32 (40 %) respondents access Internet from Internet or Cyber Café available in Barak Valley especially in Silchar city. Cyber café might have taken time slot for more than 1000 hours or for more hours. The respondents who have accessed Internet from Cyber Café mainly belong to Assam University, Regional Engineering College and Medical College.

Out of 48 (60%) respondents who have their own Internet Connectivity, 27.5 % have taken time slot for 100 hours, followed by 500 hours (20%), 1000 hours (7.5%) and 250 hours (5%). Recently Bharat Sanchar Nigam Limited has taken over the services of Internet and lowered the subscription rate and increased time slot, which will certainly popularise the use of Internet in this region.

Use of Search Engines for Internet Access

The survey result as shown in Chart and Tables –17 clearly indicates the use of search engines by the various categories of respondents while accessing or surfing the Internet. The result shows that 42.5% respondents are using www.yahoo.com followed by www.rediff.com (22.5 %), www.sataymonline.com (12.5 %), www.silchar.com (10%) and remaining search engines are used by only 2.5 % respondents.

Use of Browser for Internet Search

Survey result as shown in Chart and Tables - 18 reveals that out of 80 respondents, 82.5 % are using Internet Explorer browser for Internet Access or search which is followed by Netscape Navigator (17.5 %). It indicates that Internet Explorer is more popular than that of Netscape Navigator.

✍ Use of Operating Systems / Software for Internet Access

Windows, Linux and MS-DOS Operating system are being used for Internet access. Chart and Tables- 19 reveals that out of 40 respondents, 32(80 %) Internet users use Windows 95/98/ platform for Internet access, which were followed by MS-DOS (12.5%) and Linux (7.5%). Any respondents for Internet access at all use UNIX and Windows NT.

✍ Use of Internet Tools / Services

There is a number of Internet tools or services, which are available for users. On the basis of survey results it is clear that e-mail service is very much popular service which is used by Internet users and ranks at first place followed by On-line search, Chat, WWW or Web and remaining services viz., FTP, Gopher, Telnet, Archie, WAIS are not so much popular among the respondents as these tools are used by very few respondents only.

As shown in Chart and Tables –20, out of 80 respondents, e-mail service is used by all (100%) respondents followed by WWW (95 %), on line Search (90%), Chatting (75 %), FTP (25 %), Telnet (15 %), List Serve (12.5 %), Gopher (10%) and Archie (7.5 %).

Use of Internet tools/ services such as E-mail, World Wide Web and Chatting, on- line searching are very much popular among the respondents or Internet users of Barak Valley. Remaining tools / services are least in use for Internet search which may be due to the lack of awareness of other valuable services available over Internet.

✍ Rating of e-mail / Internet search per week

Chart and Tables -21 reveals the average number of Internet / e-mail searches carried out by the respondents in a week. Out of 80 respondents, 35 % users usually access internet / made searches/ send or receive e-mail up to 6-10 times per week while very few users have been making more than 40 searches in a week.

The owner of Internet café used to extend various types of services for their clients which includes browsing, sending / receiving e-mail, down loading of required information, chatting and games and other services. Internet café owner give some concession to those clients who are regular visitor of their café. There is a provision of Annual / Life Membership for Internet users who visit Cyber cafe regularly, access of Internet at concessional rate, provision of individual e-mail address, advance booking for time slot etc. In these days the now the number of Internet café is being increased day by day in comparison to 1999-2000, when survey was carried out.

✍ Charges of Internet Use/ E-mail Service

The academic institution like Assam University, REC, as such no charges is being collected from the faculty and students for Internet access. Internet café charges for Internet access and the rate are not uniform. Chart and Tables -22 shows that in beginning, most of the Internet café are charging Rs.40-60/ hour. Some charges even Rs.70 to 100 for an hour. The Internet access includes any type of Internet service like e-mail, On-line search, chatting etc.

✍ Problems of Internet Access

In Silchar Internet users face a number of problems in using Internet. Chart and Tables -23 shows the extent of problems faced by the Internet users or respondents while accessing Internet. Due to increasing number of Internet use, low bandwidth, most of the subscribers or users have complained for difficulty in getting connectivity while 90 % users complain about low speed. Other problems of inadequacy of ISP, inadequate infra structural facilities, lack of proper training and power failure. Some times it has been observed that line gets disconnected while access Internet. Despite of these problems people of this region are crazy about the use of Internet.

4. Important Findings

Followings are the important findings of the present study:

- ✍ Internet facility is new in Barak Valley and the awareness of Internet use has been limited to a particular group of the society. The awareness of Internet use among the university community and the local population of Barak Valley are not at par with the rest part of the country. The finding suggested that the awareness and use of Internet in this locality is still in the nascent stage.
- ✍ Faculty members, research scholars, students, library and information professionals constitute the major part of Internet users in Barak Valley. While the senior executives placed at Silchar have less interest in using Internet may be due to lack of computer literacy or busy office schedule.
- ✍ The Businessman and commercial organisations have also started using Internet for e-commerce. It might be due to enormous potential of Internet use for business and corporate sector.
- ✍ Maximum number of Internet users comes under the age group in between 21 years to 50 years.
- ✍ Comparatively the female Internet users are less in number. The ratio of male and female Internet users is 70:30.
- ✍ Internet usage is popular in elite group or academic group of the society only.
- ✍ At the same time Internet is also popular in high-income group of the society.
- ✍ Only 20 % respondents are expert in computer / Internet use.
- ✍ Most of the respondents have come across the term "Internet" and started using it during 1999-2000 onwards. Therefore the users are in novice stage.
- ✍ TCP/IP Account is popular and used by 70 % of the population whereas only 22.5% are exclusively using Shell Account and a small group of population (7.5%) are using both TCP/IP and Shell Account for accessing Internet / E-mail facilities.
- ✍ Majority of population (25 % each) access Internet from the office and cyber café, which is followed by academic institutions (20%) and at home (22.5%).
- ✍ VSNL (BSNL) is the major Internet Service provider in Barak Valley of South Assam while few subscribers are also connected through NICNET/ERNET.
- ✍ Maximum numbers of users (45 %) surf Internet during night and late night hours followed by evening (22.5%), afternoon (20%) and morning hours (12.5%). Night hour is suitable for Internet access for academicians, executives etc.
- ✍ E-mail is the most popular Internet Service availed by all the respondents which is followed by World Wide Web or Web or popularly WWW, On-line search of International databases, chatting, FTP, Telnet, List Serve /Discussion forum or List Gopher and Archie are used by very few users.
- ✍ Only 32.5 % users carry out up to 10 searches per week over the Internet. In Internet café, the Internet users are accessing Internet more than 40 searches per week. The frequency of searches depends on the clients visiting Internet or Cyber café.
- ✍ Yahoo mail service is most popular among the Internet users and ranks first which is followed by the Hotmail, Rediff mail, and VSNL mail service.

- ✍ Yahoo, Rediff, Silchar, Satyamonline, google search engines are most popular for Internet searches.
- ✍ About 40 % users access Internet from Cyber café.
- ✍ 27.5% respondents have taken time slot for 100 hours which is followed by 20 % for 250 hours and 7.5 % for 1000 hours respectively.
- ✍ Windows 95/98 Operating System is being used by most of the subscribers or users for Internet access, which is followed by MS-DOS. Other software like UNIX and Windows NT are not at all used for Internet access.
- ✍ Internet Explorer is used by most of the respondents (82.5%) which is followed by the Netscape Navigator.
- ✍ The charges taken by Internet café for Internet access or e-mail service vary from Rs.30/- to 60/- per hours in Silchar.
- ✍ Delay in getting connectivity, low speed of data transmission, power failure, inadequacy of the Internet Service Providers are the main problems faced by the subscribers or Internet users.
- ✍ Lack of experience in using Internet results in lesser use of Internet facilities.
- ✍ Formal Internet awareness training is necessary for popularising the maximum use of Internet

5. Conclusions & Recommendations

Internet has immense potential for the information society. It has proved to be a boon to the academic as well as business/ corporate sector of the society. It has boosted up the quality of research, academic activity for faculty and students or entire academic community and e-commerce for corporate sector/ business group and enables them to get instant information for their varied purposes.

In order to make more beneficial and effective, awareness programme for maximum use of Internet should be undertaken by the Information Technology Institutions, Libraries and Information Centres of Colleges and Universities. Short Term Training programme should be arranged for spreading the knowledge, tools, services, and products of Internet

Information available on Internet should be organised, classified, and indexed by library and information professionals keeping in view about the requirement of their users. Some times it is difficult to get information on Internet, as all relevant web sites are not available with the users. If you want to have information on particular topic, by searching many hundred or thousands web sites listed. Out of those web sites, which are relevant for our purpose, not known. Therefore Library and Information professionals should take lead role in making web directory of relevant resources available on net.

✍ Need of Formal Training for Internet Use

From the present study it has been observed that only 20 % Internet users are expert in using Internet and 40 % population each are either novice or intermediate in using Internet. As we know that Internet has much potential for providing any type of instant information, the usefulness of Internet can be exploited to a full extent only when Internet users are well aware and trained. In this direction commercial Computer Institutions like CMC, Aptac, NIIT and Academic Institutions like Assam University and Regional Engineering College, Silchar should take initiative for organising formal short-term training programme for awareness of Internet use.

- ✍ Need of High Bandwidth for Speedy data transmission;
- ✍ Lease line for Internet Access in Academic Institutions;
- ✍ Proper Infrastructure for Local area Network within the campus for Internet facility for academic purposes;
- ✍ Ensure Uninterrupted Power supply in Academic Institutions; and
- ✍ Other Internet Service Providers should come forward to give Internet facility.

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APPENDIX

Table- 1 : No of Questionnaire Distributed and Returned (N=100)

Category of Respondents	No. of Questionnaire Distributed	No. of Questionnaire Returned	Percentage of Returned Questionnaire
Students	20	08	6.66
Research Scholar	20	12	10.00
Professors	20	12	10.00
Readers	20	12	10.00
Lecturer	20	24	20.00
Library Professionals	10	10	8.33
I T Professionals	20	14	11.66
Administrator/ Executives	10	06	5.00
Cyber Cafe /Businessmen	40	22	18.33
Total	200	120	99.32 ~100.00

Tabel No. 2 : Classification of Respondents According to Status and Knowledge of Computer (N=40)

Category of Samle	No. Of Sample	Awareness Of Computer	Percentage
Students	08	04	5.0
Research Scholar	12	08	10.0
Professors	12	04	5.0
Readers	12	08	10.0
Lecturer	24	12	15.0

Library Professionals	10	08	10.0
I T Professionals	14	14	17.5
Administrator/ Executives	06	04	5.0
Businessmen	12	08	10.0
Cyber Cafe	10	10	12.5
Total	120	80	100.00

Table-3 : Age Group of Respondents (N=80)

Age Group	No. of Respondent	Percentage (%)
10- 20 Years	16	20.0
21-30 Years	18	22.5
31-40 Years	22	27.5
41-50 Years	16	20.0
51-60 Years	04	5.0
61-70 Years	04	5.0
Total Response	80	100.00

Table-4 : Categories of Sex of Respondatns (N= 80)

Sex of Respondents	No. of Respondents	Percentage (%)
Male	56	70.0
Female	24	30.0
Total	80	100.00

Table-5 : Educational Background of Respondents (N=80)

Qualification	No. of Respondents	Percentage (%)
Under Graduate	04	5.00
Graduate	06	7.50
Post-Graduate	20	25.0
Ph. D.	40	50.0
Technical/Professional	10	12.50
Total	80	100.00

Table-6 : Occupation of Respondents (N=80)

Occupation	No of Respondents	Percentage (%)
Study/Research	10	12.5
University / Govt. Service	56	70.0
Private Service	06	7.5
Businessmen	08	4.0
Total	80	100

Table-7 : Income Group of Respondants (N=80)

Income Groups (Rs.)	No. of Respondents	Percentage (%)
Below 5000	12	15.0
5001- 10,000	14	17.5
10,001- 15,000	26	32.5
15,001- 20,000	12	15.0
20,000 and above	16	20.0
Total	80	100.0

Table-8: Computer Literacy (N=80)

Computer Literacy	No. of respondents	Percentage (%)
Novice	28	35.0
Intermediate	36	45.0
Expert	16	20.0
Total	80	100.0

Table-9 : Internet Literacy (N=80)

Internet Literacy	No. of Respondents	Percentage (%)
Novice	32	40.0
Intermediate	32	40.0
Expert	16	20.0
Total	80	100.0

Table-10 : Knowledge/ Information of Internet Facility (N=80)

Year	No. of Respondents	Percentage (%)
1990-92	10	12.5
1993-95	08	10.0
1996-1998	18	22.5
1999-2000 Onwards	44	55.0
Total	80	100.0

Table-11: Accounts Used For Internet Access (N=80)

Accounts	No. of Respondents	Percentage (%)
Shell Account	18	22.5
TCP/IP Account	56	70.0
Don't Know	06	7.5
Total	80	100.0

Table-12 : Place of Access of Internet (N=80)

Place Of Access Of Internet	No. of Respondents	Percentage (%)
Home	09	22.5
Office	10	25.0
Academic Institution	08	20.0
Cyber Café	10	25.0
Friends Place	03	7.5
Total	40	100.0

Table-13 : Preferred Time of Internet Access (N=80)

Time of Internet Access	No. of Respondants	Percentage (%)
Morning	10	12.5
Afternoon	16	20.0
Evening	18	22.5
Night	22	27.5
Late Night	14	17.5
Total	80	100.0

Table- 14 : Preference Of Mail Service (N=80)

Mail Services	No. of Respondents	Percentage (%)
Hot mail	12	15.0
Yahoo	36	45.0
Rediff	12	15.0
Indiatimes	2	2.5
Zeenext	2	2.5
Satyam	2	5.1
VSNL (BSNL)	8	10.0
NICNET	4	5.0
TOTAL	80	100.0

Table-15 :Internet Service Provider (ISP) (N=80)

Internet Service Provider	No. of Respondents	Percentage (%)
DOT	2	2.5
NICNET	10	12.5
VSNL (BSNL)	68	85.0
TOTAL	80	100.0

Table-16 : Time Slot For Internet Connectivity (N=80)

Time Slot	No. of Respondents	Percentage (%)
100 Hours	22	27.5
250 Hours	04	5.0
500 Hours	16	20.0
1000 Hours	06	7.5
NA(Access from Cyber Café)	32	40.0
Total	80	100.0

Table-17 : Use of Search Engines For Internet Access (N=80)

Search Engines	No. of Respondents	Percentage (%)
www.yahoo.com	34	42.5
www.rediff.com	18	22.5
www.indya.com	02	2.5
www.msn.com	02	2.5
www.altavista.com	02	2.5
www.zeenext.com	02	10.0

www.silchar.com	08	12.5
www.satyamonline.com	10	5.0
www.indiatime.com	04	5.0
Total	80	100.0

Table-18 : Use Of Software For Internet Access (N=80)

Software Used	No. of Respondents	Percentage (%)
WINDOWS 95/98/200	50	62.5
UNIX	0.0	0.0
LINUX	06	7.5
MS-DOS	10	12.5
WINDOWS NT	0	0.0
NO RESPONSE	14	17.5
Total	80	100.0

Table – 19 :Use Of Browser For Internet Search (N=80)

Browser	No. of Respondents	Percentage (%)
Netscape Navigator	07	17.5
Internet Explorer	33	82.5
Total	40	100.0

Table–20 : Use Of Internet Tools / Services (N=80)

Internet Tool/ Services	No. of Respondents	Percentage (%)	Rank
E-Mail	40	100	1
Chat	30	75.0	4
WWW	38	95.0	2
FTP	10	25.0	5
On- Line Search	36	90.0	3
Gopher	04	10.0	8
Telnet	06	15.5	6
Archie	03	7.5.0	9
List Serve/ Discussion group	05	12.5	7

Table – 21 : Rate Of E- Mail Search Or Internet Access Per Week(N=40)

No. Of Search	No. of Respondents	Percentage (%)
1- 10	26	32.5
11- 20	24	30.0
21-30	16	20.0
31-40	08	10.0

41-50	02	2.5
51-60	02	2.5
61-70	02	2.5
TOTAL	80	100.0

Table-22 : Charges Of Internet Surfing/ E-Mail Service (N=80)

Charges paid per hour in Rs.	No. of Respondents	Percentage (%)
Rs.30- 40 /-	3	30
Rs.41-60/-	5	50
Rs.61-80/-	1	10
Rs.81-100/-	1	10

Table-23: Problems of Accessing Internet (N=80)

Problems Encountered While Accessing Internet	No. of Respondents	Percentage (%)
Low Bandwidth	80	100.0
Low Speed of the Systems	80	100.0
Inadequate Numbers of ISPs	60	75.0
Inadequate Infrastructure	70	87.5
Frequent Power Failure	80	100.0
Frequent Disconnection of Server	70	87.5
Lack of Awareness Training	80	100.0

About the Author



Dr. Manoj Kumar Sinha (b.1965) did Graduation, Post–Graduation in Zoology, Library and Information science and Ph.D. in Zoology from T.M. Bhagalpur University, Bhagalpur. He has also submitted Ph.D. thesis in Library and Information Science from same university. Presently he is working as Assistant Librarian in Assam University, Silchar since 1997. Prior to this he served as Librarian in Jawahar Navodaya Vidyalaya, Gorakhpur (Navodaya Vidyalaya Samiti, Lucknow Region, Dept He has keen interest in learning new skills in Information Technology. His area of interest is Library Automation and Networking, Quality Management, Knowledge Management, HRD issues, Users Study and Users Education, etc. He is life member of ILA, IASLIC, UPLA, AGLIS, ALA, FBAI, and actively associated with research and academic work.