Internet Usage in Rural Kerala: With Special Reference to Kadukutty (Rural) Grama Panchayat, Chalakudy

Abstract
We are in the very peak stage of IT revolution. IT revolution means the advancement of the ICT. Internet is an inevitable fact in ICT. Internet is a global network of network enabling millions of people to communicate and search for information as well as to sell and buy products. The most peculiar feature of internet is that people are able to access information or shop globally 24hrs a day without having to leave their home or work place. The advancement in the field of business, education, banking, IT, Communication, medicine, engineering, and tourism depends on the impact of internet. Kerala is one of the highest digital literacy states in India. This study focuses on how much internet is positioned in the rural areas of Kerala. Here 186 people are selected to make this study in a most effective way and suggests that what are the ways to assure the wide spread of Internet in the rural areas of Kerala.

Introduction
The Internet is a global network of network connecting millions of computers and accessible to general public (Maindomain, 2014). It is an International Network of several different interlinked networks relating to the business, government, academic and even smaller domestic network. The network enables it to be used for various important functions which include the several means of communications like the file transfer, the online chat and even the sharing of the documents and websites on the www. The internet has actually existed since 1969. But it came into limelight when
Tim Berners Lee invented the World Wide Web in 1989 (channel, 2014) and it was subsequently implemented in 1991. The information age has given a new dimension to knowledge sharing virtually. More than 100 countries are linked to exchange of data, news and opinions. Internet is international network. According to Internet World Stats, as of December 31, 2011 there was an estimated 2,267,233,742 Internet users worldwide. The number of Internet users represents 32.7 percent of the world's population (webopedia, 2014). India has about 120 million internet users and positioned the third largest in the world. (internet) Rural India internet penetration still hovers low at 6.7%. (Amitava & Rahul, 2005).

Internet is very famous nowadays for satisfying people with various services related to various fields. It helps in completing many tasks easily and conveniently with few clicks. It can be any work of daily usage or any specific service which needs a lot of research and formalities to be done beforehand. Almost everything is now available over internet in this age of advancement of technology. One can get information on any particular thing around the world using internet facility. Internet has revolutionized the area of communication by introducing email and chatting. People living across the world are immensely benefiting from this new age medium of communication (s & D, 2013). People can remotely connect to their friends online through social networking websites like Facebook and Orkut. It helps to download documents, files, images, videos, softwares, music etc very easily. Internet also provides real time services such as web radio and web casts that can be accessed from anywhere. In fact, the introduction of web conferencing has given a new dimension to face to face interactions. Meetings can now be held between individuals sitting at different parts of the globe through web-conferencing. Distance is no longer a factor today for the corporate world due to video conferencing. Web is a multimedia interface that facilitates broadcast of text, pictures, audio and video together. People came to know about the various happenings all over the world as soon as they take place. E-papers, e-magazines, blogs and may similar portals give the readers the latest scoop right on the screens of their PCs.

Internet has given a new outlook to the business and trade. Online business, online shopping, online advertisement, online marketing all are coming under internet. E-commerce is the inevitable fact in the modern business. It gives a global outlook to the business. The modern trend of the business is using websites and encouraging online trading thereby saving time and space. E-commerce became possible in 1991 when the internet was opened to commercial use. Since that time, thousands of customers and businesses have been making use of this facility. When the customers use online facilities in trading, they can save time and geographical space. They can contact directly with manufacturers and also access products and services globally. Internet provides new opportunities for students. They get international quality knowledge by browsing topics. Whenever they need to clear some doubts, they can now look up to the internet for help. Moreover, they can also contact their teachers and literally talk to them. Virtual classrooms, online tuitions can be made in internet. It is a blessing for research students to understand new inventions and updations and also to initiate literature review.

Online banking is another service of internet. Banking transactions are completed within seconds. There is no longer need to stand in queues for their requirements. Online banking also saves paper and hence conserves nature. It has brought the bank closer to those people who live in
remote places where a real bank has not been built. Banking services are available even on holidays through E-banking. Online banking can also be used to pay bills. One can also view one’s transactions and transfer money online. Internet in the form of E-Banking has made the financial lives of people much easier to deal with. In spite of the advantages of internet, there are a lot of disadvantages related with it. Hence it should be used ethically for the welfare of the society. It can be termed as ‘Engine Of Empowerment’ that possesses the power to create healthy virtual communities.

2. Statement Of The Problem

Internet is an inevitable fact in the modern world. There are a lot of advantages related with internet in every fields of life. In Kerala, more than 65% of the people lives in rural areas. The growth rate of computer literacy and internet awareness is less in rural areas of Kerala. Advancement of the rural area is easily achieved through accessing the facilities provided by the internet. it was important to know the internet awareness in rural areas of Kerala. No systematic study had been conducted so far in this regard in Kerala. Hence the present study was proposed.

3. Significance Of The Study

Our generation stands on very peak period of the greatest technological revolution that mankind has ever faced. The combination of information and communication technologies has created ICT, possibly one of the most powerful technologies devised by humanity. But, disparities exist in access to and use of ICT between countries and between groups within countries that is known as digital divide. (bridges.org, 2001). Digital divide covers a spectrum of socio-economic factors within countries and it reflects the existing inequalities in society. Income, geographical location, education, age, gender are some of the factors that put people at different ends of the divide. There is a drastic increase in the usage of internet during the last couple of years across the world. The reason can be attributed to the increased awareness of its various advantages by the people. Moreover the developments in the infrastructure, cost effectiveness and computer literacy helped the wide acceptance of the internet. (Francis, 2013)

Among all the states in India, Kerala has the highest penetration of computers and internet. Kerala was one of the first state of India to initiate free and compulsory computer education in high schools through IT@School project (Govtofkerala, 15 may 2010) which covers 1.6 million students every year. Computer literacy is one of the priorities of schools and colleges. There are sufficient computer labs and internet facilities in educational institutions. But in rural areas of Kerala, we could see that so many people were still reluctant to use internet. There could be various reasons such as lack of infrastructure, lack of speed, expensive devices, high cost of access, non-availability of content in local language, limited awareness of the value of internet, low digital literacy, online fraud, hacking, risk involvement, lack of knowledge, in secured websites, limited network bandwidth.

A proper and systematic study using primary and secondary data could reveal the actual problems in rural Kerala. With the help of this study, the barriers of the internet awareness in rural Kerala could be found out and also recommended the best solutions to be made for the growth of internet usage by people. The existing literature showed that there was a little previous research conducted to investigate the remedial measures to be taken to increase internet awareness in rural Kerala.
4. Scope Of Study
The study was confined to the people residing Kadukutty Grama Panchayat, Chalakudy, Thrissur in the month of May 2014. Kadukutty Grama Panchayat is under the rural areas of Kerala.

5. Objectives Of The Study
i.) To assess the demographic pattern of internet usage among members in Kadukutty Grama Panchayat.
ii.) To measure the satisfaction of online customers in Kerala.
iii.) To find out solutions to overcome the barriers of internet in Kerala.

6. Research Methodology
- **Population:** The population of the study was 5,347 families that includes 18,716 members in Kadukutty Grama Panchayat, Chalakudy. There was a total of 16 wards in this rural area.
- **Sample:** Multi stage sampling was selected for data collection. Firstly, Cluster sampling was adopted to select Ward I and In Ward I there were 334 families including 1,169 members. Secondly, it was chosen 44 families through convenience sampling and group data collected from 44 families and individual data collected from 186 members out of the above 44 families.
- **Data:** Both primary and secondary data was needed for the study. Primary data could be collected through structured questionnaires distributed among the members of Kadukutty Grama Panchayat. The secondary data could be collected from published documents, journals, newspapers, magazines, websites etc.
- **Tools for analysis:** The data collected would be suitably classified and analyzed keeping in view the objectives of the study. For the purpose of analysis appropriate statistical tools would be used.

7. Result Analysis
The following are the details of analysis and findings of data collected from the Kadukutty Grama Panchayat.

### 1. Age wise classification

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No of people</th>
<th>%</th>
<th>Internet accessed</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 18</td>
<td>46</td>
<td>25%</td>
<td>17</td>
<td>9%</td>
</tr>
<tr>
<td>18-40</td>
<td>58</td>
<td>31%</td>
<td>47</td>
<td>25%</td>
</tr>
<tr>
<td>Above 40</td>
<td>82</td>
<td>44%</td>
<td>9</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td>186</td>
<td>100%</td>
<td>73</td>
<td>39%</td>
</tr>
</tbody>
</table>

Out of the 186 members in Ward I of the Kadukutty Grama Panchayat, only 39% has accessed internet. It is included 25% of internet usage under the age category of 18-40 out of 39%. The least internet usage was under the age group of above 40 years.
2. Gender wise classification

<table>
<thead>
<tr>
<th>Gender</th>
<th>No of people</th>
<th>%</th>
<th>Internet accessed</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>80</td>
<td>43%</td>
<td>52</td>
<td>28%</td>
</tr>
<tr>
<td>Female</td>
<td>106</td>
<td>57%</td>
<td>21</td>
<td>11%</td>
</tr>
<tr>
<td>Total</td>
<td>186</td>
<td>100%</td>
<td>73</td>
<td>39%</td>
</tr>
</tbody>
</table>

Out of the 186 members Females used only 11% internet and 28% of the males has used internet. Females were reluctant to use café for internet browsing in rural areas.

3. Education wise classification

<table>
<thead>
<tr>
<th>Education</th>
<th>No of people</th>
<th>%</th>
<th>Internet accessed</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre school</td>
<td>16</td>
<td>9%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Illiterate</td>
<td>14</td>
<td>8%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>School level</td>
<td>65</td>
<td>35%</td>
<td>14</td>
<td>7%</td>
</tr>
<tr>
<td>College level</td>
<td>70</td>
<td>37%</td>
<td>48</td>
<td>26%</td>
</tr>
<tr>
<td>Professional level</td>
<td>21</td>
<td>11%</td>
<td>11</td>
<td>6%</td>
</tr>
<tr>
<td>Total</td>
<td>186</td>
<td>100%</td>
<td>73</td>
<td>39%</td>
</tr>
</tbody>
</table>

Out of 39% of Internet usage, 26% was consumed by college level educated people. Illiterate people could not access internet by all means.

4. Occupation wise classification

<table>
<thead>
<tr>
<th>Occupation</th>
<th>No of people</th>
<th>%</th>
<th>Internet accessed</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children (0-5 ages)</td>
<td>17</td>
<td>9%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Students</td>
<td>53</td>
<td>28%</td>
<td>35</td>
<td>19%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>12</td>
<td>7%</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>Business</td>
<td>18</td>
<td>10%</td>
<td>9</td>
<td>5%</td>
</tr>
<tr>
<td>Employment</td>
<td>41</td>
<td>22%</td>
<td>17</td>
<td>9%</td>
</tr>
<tr>
<td>Profession</td>
<td>3</td>
<td>2%</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>Retired</td>
<td>7</td>
<td>4%</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>No work</td>
<td>34</td>
<td>18%</td>
<td>6</td>
<td>3%</td>
</tr>
<tr>
<td>Total</td>
<td>186</td>
<td>100%</td>
<td>73</td>
<td>39%</td>
</tr>
</tbody>
</table>

19% students accessed internet for education, games and social networking purpose. 9% was used by employees and 5% was used by business men.
5. Family Income wise classification

29% of families accessed internet under the family income group of Rs 10,000-Rs 25,000. The families of below Rs 10,000 income could not access internet. It is noted that money is also a crucial factor of internet usage.

6. Family having computer with/without Internet.

32% of families have computer and out of this 40% has internet connection at home and 68% families have no computer at all.

7. Family having Mobiles with/without internet.

67% of members have mobile and out of this 19% has internet connection and 33% of members have no mobiles at all.
8. Internet Providers in Kadukutty

<table>
<thead>
<tr>
<th>Major Internet Providers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSNL</td>
<td>78%</td>
</tr>
<tr>
<td>Airtel</td>
<td>11%</td>
</tr>
<tr>
<td>Tata</td>
<td>8%</td>
</tr>
<tr>
<td>Others</td>
<td>3%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Figure 8: Internet Providers in Kadukutty

BSNL is the major internet provider in Kadukutty. The other internet providers are Airtel, Tata etc. the cheapest and quality internet provider is BSNL.

9. Frequency of internet usage

54% members used internet daily, 13% of members used weekly, 5% of members used monthly and rest of the members used occasionally.
10. Satisfaction level in ecommerce

![Satisfaction level in E-Commerce](image)

**Figure 10: Satisfaction Level in e-commerce**

93% members are satisfied in ecommerce dealings and rest of 7% is not satisfied due to delay of delivery. All are satisfied in quality of the products.

8. **Findings**

i.) Out of the 186 members in Ward I of the Kadukutt Grama Panchayat, only 39% has accessed internet. It is included 25% of internet usage under the age category of 18-40 out of 39%. The least internet usage was under the age group of above 40 years.

ii.) Out of the 186 members Females used only 11% internet and 28% of the males has used internet. Females were reluctant to use café for internet browsing in rural areas.

iii.) Out of 39% of Internet usage, 26% was consumed by college level educated people. Illiterate people could not access internet by all means.

iv.) 19% students accessed internet for education, games and social networking purpose. 9% was used by employees and 5% was used by business men.

v.) 29% of families accessed internet under the family income group of Rs 10,000-Rs 25,000. The families of below Rs 10,000 income could not access internet. It is noted that money is also a crucial factor of internet usage.

vi.) 32% of families have computer and out of this 40% has internet connection at home and 68% families have no computer at all.

vii.) 67% of members have mobile and out of this 19% has internet connection and 33% of members have no mobiles at all.

viii.) BSNL is the major internet provider in Kadukutt. The other internet providers are airtel, Tata etc. The cheapest and quality internet provider is BSNL.

ix.) Major sources of internet are home PC, Mobile, Institutions/Offices, Akshya centres, café etc.

x.) 54% members used internet daily, 13% of members used weekly, 5% of members used monthly and rest of the members used occasionally.
xi.) Purposes of Internet usage are emailing, chatting, social networking, browsing, e-governance, e-commerce etc

xii.) Electronic items, cosmetics, shoes etc were purchased through online by the members of Kadukutty.

xiii.) Major reasons for ecommerce are 24 hrs shopping, cost effective, discounts, place convenience, availability of international and variety products etc.

xiv.) Main mode of payment in ecommerce are cash on delivery, credit card, internet banking etc.

xv.) 93% members are satisfied in ecommerce dealings and rest of 7% is not satisfied due to delay of delivery. All are satisfied in quality of the products.

9. Suggestions

i.) Govt has to set up internet training programmes under the age group of above 40.

ii.) The government should provide affordable and high speed internet access to the people.

iii.) Females should be given comfortable facilities to browse internet.

iv.) More Akshaya centres should be opened for illiterate people.

v.) Government should set up government websites in Malayalam for illiterate persons.

vi.) Strict supervision is needed to control students in internet accessing as they use internet for entertainment like games, facebook etc.

vii.) Free internet facility should be provided to BPL families and should bring them in all fields by enjoying internet benefit. It is noted that money is also a crucial factor of internet usage.

viii.) Efforts should make to increase digital literacy rate at panchayat level.

ix.) Government should take initiate to cost effective plans in BSNL.

x.) Benefits of ecommerce should be convinced to members and also training should be given as rate of ecommerce in Kadukutty is very low.

xi.) 12. Give training classes for online billing, e-banking, e-district etc through akshya centres.

10. Conclusion

The internet is ‘anytime, anywhere’ media and the expanding power of the internet has brought forth a new generation of interaction platform between humans and computers. Internet is an inevitable fact in the modern life. Proper initiatives should be taken to make internet awareness in rural areas of Kerala. Under the age group of above 40 years, it needs awareness training programmes. Males browse internet more than that of females. Student’s access internet not only for education purpose but also major time is given to social networking. Digital literacy is important in internet. Purposes of Internet usage are emailing, chatting, social networking, browsing, e-governance, e-commerce etc. There is a scope for ecommerce in future in rural areas also. Proper awareness classes should be provided for ecommerce in rural areas. The growth of Our country is based on Knowledge that depends on internet.

References


Princy Francis, Dr Mathew Jose K.: Internet Usage in Rural Kerala: With Special Reference to Kadukutty (Rural) Grama Panchayat, Chalakudy