

Role of New Communication Technology Initiative (NCTI) in Bridging the Digital Divide: the case of a North Indian State

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The process of globalization in India, in last one decade, has generated many changes not only in the sphere of Indian economy but also created ample scope for the mass media communication to expend its network at global level. Recent advancements in the communication technology have not affected the functioning of cultural industry in India but also shaping the style of life of the people. One important consequence of the new communication technology is the tendency of globalization of mass media communication (Singh, V.P. 2006). The advent of satellite television in early nineties and internet technology in the later part of nineties shaped the process of globalization of mass media in Indian subcontinent in a significant manner. The internet is the key driving force responsible for the emergence of information society in India (Singh, V.P. 2004). The growth of computer education in last two decades and advancement in the field of information technology at the initiative of the government have opened new avenues in job market particularly opportunities for self-employment. Moreover, computerization of different private and government organizations has not only improved performance of these organizations but also helped in the growth of service sector in India (Singh, V.P. 2006:1). Communication technology includes the hardware equipment, organisational structure and social values by which individual collect, process and exchange information. The new communication technology (NCT) such as satellites, cable television, wireless telephony, the internet, computers, laptop, i-Pod, have certain characteristics that are similar in some respect of those of both interpersonal communication as well as mass communication. This NCT, also known as new media, integrates the characteristics of both interpersonal and of mass communication. Information exchange via the new media is interactive, meaning that the participants in a communication process have control over, and can exchange roles in their mutual discourse (Mc Quail, Dennis. 2000).

The number of internet users have increased tremendously in the recent past. The opening of cyber café even in small towns and accessibility of urban middle class youth to computer education is shaping a new form of society, i.e. information society in India in which the information technology has to play a significant role in different walks of social life (Singh and Roopa Rani 2005). It proposes to investigate the relationship between social background of laptop users, mass media exposure and patterns of using laptop by them. The present paper is aimed to explore the role of NCT in bridging the gap created by the forces of globalization in a developing society like India by focusing on a NCT initiative launched by the government of Uttar Pradesh i.e. Scheme of distributing laptop to every undergraduate student who took admission in the year 2012 or later in

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any college/university of the state irrespective of their social background. A cluster sample (N=250) drawn from 399 laptop receivers of a P.G. college of Western UP under the laptop Distribution Scheme of Govt. of Uttar Pradesh launched in 2012 to empower the youth of the state.

The data were collected by administering highly structured Questionnaire consists of the questions related to social background, mass media exposure and patterns of using laptop. The data were collected between October-November 2013.

The paper is divided into three sections: first section deals with social background of the laptop users, second section, analyses the patterns of mass media exposure of the respondents and third section, the patterns of using laptop by the respondents are analysed.

Social Background

Social background of the respondents may be analysed in terms of their Caste, Sex, religion, father's education, mother's education, father's occupation, mother's occupation, land ownership size and type of the family, place of living.

Caste

The study indicate that the highest percentage among the laptop beneficiaries was of other backward caste (OBC) students (44%) followed by SC students (31.6%) and General categories students (24.4%). Thus, OBC and SC students have relatively high representation in comparison to general category students. As far as the religion of beneficiaries is concerned, majority of beneficiaries are Hindu (93.6%). However, Muslim and Jain minorities have a low representation with 6% and 0.4% respectively.

Sex

Gender wise distribution indicates that more than two-third (66.8%) of the beneficiaries were female in comparison to their Male counterparts with 33.2% representation. Interestingly, all the respondents were having a mobile phone.

Parental Educational Background

Majority of respondent's father (79.6%) were engaged in agricultural activities. However, only a few of respondent's father were found in white collar occupations (4%); petty businessmen (1.2%); and manual labourers (8%). In case of their mothers, Most of them were housewives (97.2%). However only a few of them (2.8%), were engaged in some kind of economic activity.

Ownership of Land

As far as the ownership of land is concerned, more than one-third (38.8%) of the respondents come from landless families and a little less than one-third (29.6%) of beneficiaries come from families of marginal and small farmers (1-10 bighas of land), while a sizable number (14%) of respondents come from middle class peasantry (more than 10 bighas of land). More than half of these families (58%) use to do agriculture themselves while only a few of them (3.6%) use to give their land on lease. And very few of them (0.4%) use to take land on lease.

Rural-Urban Background

Majority of respondents (82.8%) come from rural background and remaining have (17.2%) urban background. They mainly belong to nearby small town (Bilsi).

Nature and Type of Family

Majority of respondents with (65.2%) live in a joint family while remaining about one-third (34.8%) of respondents live in a nuclear family. Majority of respondents (51.2%) have medium-sized family (6-10 members). About one-third (34%) of the respondents have small-sized family (1-5 members). About one-seventh (14.8%) of the respondents have large-sized family (more than 10 members).

On the basis of above facts, now we can summarize the social background of the laptop beneficiaries as follows: They are largely female from rural background, live in a medium-sized joint family. They largely come from marginal, small and middle class peasant background. The level of education of their parents is relatively low and they mainly have OBC and Schedule Caste background with sizeable number of upper caste category beneficiaries. Religion wise they are mainly Hindu but the representation of minority community is also there. All respondents are having a mobile phone.

Mass Media Exposure

The mass media can be classified into three categories, namely the broadcast media, the print media and the audio-visual media. (Singh, 1995:8). The broadcast media include mainly radio. Print media include mainly newspapers and magazines. Audio-visual media include mainly television.

Print media

The readership of newspaper among the respondents was very high (74%). Most of the respondents (61.2%) read newspaper at their home. However, some of the respondents read newspaper at other places as well, such as- college library (5.6%), the school and book stall (6%). As far as the frequency of newspaper reading is concerned, most of the respondents (42.4%) spent on newspaper reading less than one hour, while about one-third (32.4%) of them spent one-two hours on newspaper. Most of the respondents (55.2%) read newspaper regularly. Most of the respondents read local newspaper in vernacular language (Hindi). No one read English newspaper among the respondents. Majority of the respondents (90.4%) are not interested in reading magazine. Only about one-tenth (9.6%) respondents read magazines, either at their home or in their neighbour's house.

Broadcast Media

Radio has lost its importance in last two decades. Most of the respondents (76%) do not have radio sets. Only one-fourth (24%) respondents have radio. They usually listen programmes related to farmers and also FM channels only in few cases (2.4%). They are not very regular in listening radio. Only 14% of the respondents are regular radio listeners (more than 4 days in a week). About one-sixth (16.8%) of the respondents like news followed by film songs (3.6%).

Television

Television (TV) is watched by more than half (56.8%) of the respondents. Among them about one-third (32%) watch it daily, about one-tenth (8.4%) very frequently (4-6 days) and remaining (16.4%) have low frequency of watching TV. More than half of the respondents (54%) watch TV at home and only a few (2.8%) respondents watch TV at neighbour's house. More than two-fifth (43.2%) respondents watch TV up to one hour regularly, while remaining (13.6%) watch TV. more than one hour.

More than half (50.4%) of the respondents have cable connection. Only few (5.2%) of the respondents have DTH Connection, or DD set top box connection (1.2%). About one-third (34.4%) of the respondents like serials. However, less than one-fifth of them (17.6%) watch news and a few of them (4.8%) watch films. As far as popularity of channels is concerned, more than one-third (38%) of the respondents like DD News; DD national (17.6%); and only few respondents (1.2%) like ETV Uttar Pradesh.

Star plus (12.4%), Star Utsav (9.2%), Zee T.V. (6.4%), News 24, and Life is Ok and India News (5.6% each) are relatively more popular channels among the respondents. Mahabharat (8.4%), Diya, Baati aur Hum (5.6%), Jodha Akabar (4.4%), are relatively more popular programmes among the respondents.

It is clear from the above that most of the laptop beneficiaries read vernacular (Hindi) newspaper and only few of them read magazines. Radio listening is not very popular among them.

Only some of them listen programmes related to agriculture on their radio sets. The frequency of radio listening is also low among most of the respondents. T.V. has relatively better exposure among them. They watch news and serials on different channels and are more interested in mythological serials on T.V. It can now be said that most of them have low level of mass media exposure.

Patterns of Using Laptop

The chasm that exist between the technology haves and as technology have-nots has been termed the digital divide by many social scientists. The digital divide refers to the differential access to and use of Information and Communication Technologies (Khan, 2000). There is a need as well as challenge on the part of the society to fully exploit the computer network with Internet facilities to offer online programmes and to bridge the digital divide.

Bridging the digital divide in the field of education is a challenge for the society, which can be undertaken both by the governmental and non-governmental organisations as the immediate task to provide digital opportunities to its learners. When the disparity in the availability, access and use of communication technology facilities is removed, the large sections of people will have access to the communication network.

The new communication technology initiative (NCTI) started by Government of Uttar Pradesh in the form of Free Laptop Distribution Scheme to undergraduate students is an important step for the empowerment the youth of the state, on the one hand and also an effort to bridge the digital divide created by the forces of globalization in last two decades in the state, on the other. The empirical findings of the study regarding the patterns of using laptop by the beneficiaries of this state sponsored scheme are as follows:

1. Most of the respondents (94.8%) know to operate laptop.
2. A little less than four-fifth (77.2%) of the respondents use laptop for specific purposes. More than half (53.2%) of the respondents use laptop for educational purpose. A little less than one-fifth (18%) respondents use their laptop for entertainment. (0.4% for film; 2% for film song; and 3.6% for playing games). About (17.6%) respondents use laptop for all purpose. Remaining 5.2% of the respondents do not use laptop.
3. Most of the respondents (60%) do not have internet connectivity. Remaining (40%) respondents have internet connectivity. About (17.2%) respondents have internet connectivity through mobile phone and remaining (22.8%) respondents have internet connectivity through USB dongle/modem.
4. Most of the respondents (90.8%) do not have any other laptop/desktop at home. Only few (9.2%) respondents have another laptop/desktop at home. And generally use it for entertainment (1.6%), film (0.4%), film songs (0.4%), educational purpose (2%), playing games (0.4%) and for other purpose (4.4%).
5. Most of the respondents (95.2%) do not face any problem in operating laptop. Only few (4.8%) respondents face problem in operating laptop. Most of the respondents (2.4%) face electricity problem in operating laptop, while few respondents (1.2%) have service problem. About (1.2%) respondents face internet problem in operating laptop.
6. Most of the respondents (51.6%) says that laptop is not helpful in our study. About (48.4%) respondents says that laptop is helpful in our study particularly in typing (4.8%), Dictionary meaning (2.4%), educational improvement (2.4%), in getting reading material (5.6%) and for making notes (18.4%).
7. Most of the respondents (63.2%) do not use CD/DVD players, remaining (36.8%) use CD/DVD players.

8. Most of the respondents (57.6%) find change in their life as a result of laptop. Remaining (42.4%) respondents denied it.
9. Most of the respondents (57.2%) do not use social networking site. However, remaining (42.8%) respondents use social networking sites. Of these 24.6% use social working websites on laptop; 14.7% on mobile phone and 3.5% on both.
10. Most of the respondents (86%) find that this scheme very useful, 3.2% useful and 10.8% not useful.
11. Most of the respondents (88.4%) were of the view that this scheme be continued and remaining (11.6%) respondents expressed their opinion for discontinuation of the scheme.

The analysis of the above facts indicate that in this particular setting of Budaun district of Western Uttar Pradesh in college run by the government of Uttar Pradesh located at a distance of about 30 kms from the district town in a rural hinterland, the NCTI initiative of free laptop distribution has some positive impact on the youth. As most of the beneficiaries of the scheme come from OBC and SC background from nearby villages they use laptop for educational and entertainment purpose. Most of the respondents find it useful. But also a sizeable respondents express that it is not useful for them. Internet connectivity and electricity supply failure in rural areas are major impediments in the success of such a visionary scheme. Without internet connectivity such e-initiative may not be very useful in empowering the rural youth and in bridging the digital gap created by forces of globalization in the region in past two decades. One of the strength of the scheme is that most of the beneficiaries of this scheme are students which is a positive sign in the sense that this will also help in reducing gender inequality and will help in the empowerment of female youth of the rural areas of Uttar Pradesh.

Conclusion

The study indicates that the representation of females was relatively high in all social categories. About half of the respondents were having their own mobile phones. The tendency of keeping mobile phone was low among the students of upper castes. Thus this NCTI may be helpful not only in bridging the digital divide but also be a powerful instrument of women empowerment in rural and urban areas.

The scholars of modernization theory of development have emphasized on the role of communication in development process. Lerner & Schramm, Rogers propounded that in the developing societies mass media communication can be used or disseminating messages of development among the rural and urban masses. Lerner's view that if society has 30% literacy rate the mass media communication can act as magic multipliers and flow of information in the society may take place in a smooth manner. One of the limitation of the mass media communication is that it is more or less one way communication process. The development of NCT in last two decades have emerged as interactive media empowered by internet connectivity which is major driving force of the process of globalization. The globalization has created the digital divide in developing countries which has to be bridged through certain NCT initiatives laptop distribution scheme of government of Uttar Pradesh can be seen as one of such initiatives.

The major implications of the findings of the present study have same policy implications and suggestions are for the improvement of implement of development programme as well as in e-governance.

The laptop has an advantages in comparison to desktop computer because of its portability and operated by a battery. This can be used anywhere and in any condition. Looking into the crisis of the electricity supply it is an ideal device for rural areas. The tremendous growth of mobile telephony in rural areas of Uttar Pradesh suggest that portable devices have immense potential to

use has interactive media for various purposes. The findings of the present study suggest that without providing internet connectivity also most of the laptop beneficiary were satisfied with this scheme and find it useful for study and entertainment. Major default ness of this scheme are lack of internet connectivity and lack of proper electricity supply in rural areas. Thus if internet connectivity and electricity supply are ensured in rural areas this scheme can give very fruitful result for development and e-governance. In this regarding following suggestions may be useful in making a proper communication policy and development of the state.

1. In order to ensure internet connectivity to the laptop beneficiary a USB device or internet connectivity may be provided with state sponsored data package to these beneficiary at a subsidised rate. So that they can use internet facility on their laptop.
2. This scheme can also be linked with CSR Corporate. The Corporate working in state may be associated with PPP model for sponsoring this scheme both in the rural and urban areas as the recent policy of the government of India has made compulsory a particular amount of their profit is invest in corporate social responsibility in the area of their operation.
3. Some of the selected beneficiaries of these scheme can be employed as information worker (IW) in the village as well as in towns which may have a well connected network at Block level, at District level and at the State level. The state coordinator can be monitor at the state level.
4. This information network can be used by the state government under direct control of Chief Minister for e-governance. This will help not only in gathering information about the important events and data at the grass root level in a fraction of second but also help in disseminating the messages and other relevant information to the masses. Thus in the proper information network can take place between government and the people of each locality in the state.
5. This communication network can also be used for community surveillance by the state government.
6. There should be two information worker in each locality (one is male and one female) so that gender biased can be cheque.
7. An institute of communication network must be established at the state level in order to investigate the communication based of the people, to develop necessary communicative package for development and e-governance to conduct research study in this emerging area of research and to provide necessary training to the functionary involved in information and communication services in the state.

Note:

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