

EVALUATING DIGITAL INDIA THROUGH NATIONAL DIGITAL LITERACY MISSION  
IN KALLIYOOR PANCHAYATH.

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**1. Abstract**

Digital India is an ambitious program of the Government of India with a vision to transform India into a digitally empowered society. Digitalskill refers to somebody's ability to provide clear data through writing and alternative types of communication on numerous digital platforms. Digitalskill showcases somebody's synchronic linguistics, computer, writing, and writing skills on platforms, such as, social media sites and blog-like sites, such as, Medium. Digital skill conjointly includes alternative devices, such as, smartphones, tablets, laptops and desktop PCs. According to United Nations agency, "Governance refers to the exercise of political, economic and body authority within the management of a country's affairs, as well as citizens' articulation of their interests and exercise of their legal rights and obligations". The objective of study is to analyze whether NDLM course is beneficial to pass out students and to find out whether all Non-IT literates are digitally empowered from Kalliyoor Panchayath in Thiruvananthapuram district.

**Keywords:** - Digital India, Digital skill, Technology, Governance, Communication

**2. Introduction**

Digital Asian country program is an innovative program that's recently launched by government of India with a vision to form a digitally scoper society. The e-governance initiatives with a broader dimension started in Asian nation in middle 1990's for wider sectoral applications with stress on national centric services. Recently many state governments have taken several e-governance initiatives. The government of India has e-governance programmes at central, state and Native levels in might 2006. These programmes

supported national e-governance set up which have twenty seven mission comes during which instructional sector is already enclosed.

The computer acquirement rate in India is unquestionably over 6 June 1944. The quite IT boom e ticketing in railways, buses, flights in metropolitan cities even in native transports like buses in trains there is processed ticketing, bills in all the looking centers and even in little outlets the request is processed. Debit cards and credit cards are offered with nearly ever section of the society and atm's getting used by all. Cell phones offered with a minimum of seventieth of the voters of the country. With all this development basic cognitive process computer acquirement rate being as low as 6 June 1944 is impractical. The computer acquirement rate ought to a minimum of at a minimum of thirty five percentage to enhance laptop education and steps ought to be taken by the government to create positive a minimum of basic computer education reaches the students [21].

The study was conducted in kalliyoor panchayath, located in Trivandrum district in Kerala. At the present scenario all reputed organizations are employing citizens who are having at least basic computer literacy. Due to certain economic conditions especially in certain rural areas of Kerala Non-It literates are unable to get digitally empowered. In this sense National Digital Literacy Mission digitally empowers the Non-It literates as it is easily accessible to them. The focus of study is to analyze whether NDLM course is beneficial to pass out students and to find out whether all Non-IT literates are digitally educated from kalliyoor panchayath in Thiruvananthapuram district.

### 3. Review of Literature

According to United Nations agency, "Governance refers to the exercise of political, economic and body authority within the management of a country's affairs, as well as citizens' articulation of their interests and exercise of their legal rights and obligations' 'Governance for development comprises economic governance with growth promotion, accountability, transparency, and pro-poor growth, all facilitating higher incomes, and political governance with empowerment, participation, access, accountability and transparency, all facilitating service availability" (United Nations Department for Economic and Social Affairs, 2007). Organization for Economic Cooperation and Development (2003 on pp. 23)[1].

"Electronic government has four main definitions ; 1) service delivery through the support of internet and implication of government activities based on internet ; 2) purposeful utilization of information communication and technologies by government and; 3) public administration should be transform through ICT; and 4) considering and accepting ICT as tool for service delivery Increasingly, governance processes are supported by Information and Communication Technologies (ICTs), with new governance paradigms emerging due to progress in ICT, globalization and increasing influence of non-governmental organizations" (Coleman, 2008; Finger, 2005). Service transaction using ICT can be done in relationship between government to government, government to citizen and government to business (Estevez, Janowski, 2013)[1].

E-governance tend to outline it as one thing that's forever helpful a value-neutral perspective might interpret it as a brand new mode of governance that extensively uses advanced sorts of ICT in following public policies, maintaining structure relations, interacting with customers and delivering services[2]. E-governance can scale back prices and delays in delivering services, expand voters access to public sector information, reinforce innovation publicly agencies, increase transparency and public responsibility, weaken authoritarian tendencies and strengthen civil society and democracy[3]

Internally, within every society, the standard types of communication (print media, motion footage, radio, telephones, and records) are more and more being replaced with digital and wireless technologies like cellular telephones, satellites, and electronic mail and, above all, the web [4].

In response to the present transition within the context of governance, in nearly each country, the state has taken the required initiatives to reconstitute political and administrative establishments by adopting ICT so as to reinforce electronic interaction and repair delivery [5]. Recently, the Indian Government has set the target of delivering at least twenty five percentage of its dealings and services electronically [6].

During this regard, the Indian Government's major policy measures are outlined in terms of computer density, connectivity, content, and price and cyber laws [7]. One of the foremost necessary initiatives undertaken by the central government is that the Info Technology Act (2000), that is to manage Net and outline offences and penalties associated with information technology like meddling with computer supply documents, breach of confidentiality and privacy, publication of false digital signatures and then on [8]. A good example of local-level initiatives in e-governance could be a rural computer network project called Gyandoot that was adopted by the district council of Dhar district in Madhya Pradesh to increase its services, together with each e-governance and e-commerce, to rural areas in an exceedingly people-centered manner [9]. In Kerala, the questionable information Kerala Project was adopted to computerize and network regarding 1214 native bodies [10]. During this state, a locality panchayath referred to as Ernakulum has adopted a model of e-governance that has steered to a few village panchayaths within the district to make an information network covering info associated with land holdings, age structure, health, tax payments, so on [11].

Digital India project provides an enormous chance to use the newest technology to redefine India the paradigms of industry. It additionally recognized that a lot of projects could need some transformational method, reengineering, refinements to realize the required service level objectives [12]. Digital India may be an excellent plan to develop India for information future however its improper implementation because of inconvenience and inflexibility to requisite will result in its failure. Though digital India program is facing variety of challenges however if properly enforced it will create the simplest way forward for each subject. Therefore we tend to Indians ought to work along to form the information economy [13]. Prime Minister Modi envisions reworking our nation and making opportunities for all voters by harnessing digital technologies. Digital India is associate initiative of state of India to integrate the govt. departments and the people of nation. It aims at guaranteeing the govt. services created accessible to citizens electronically by reducing work. The initiative additionally includes arrange to connect rural areas with high-speed net networks [14]. Digital India has 3 core elements.

These include:

- the creation of digital infrastructure
- Delivering services digitally
- Digital literacy

Major initiatives of Digital India Program are Bharat, BSNL Next Generation Network BSNL Wifi Services, Digital Locker, National Scholarships Portal, e-Hospital/ORS, e-Sign, Digitize India Platform (DIP), Digital India Portal, Mobile App & Book, MyGov Mobile App, Swachh Bharat Mission App, National Centre for Flexible Electronics, Centre of Excellence for Internet of Things (IoT), e-Governance Policy Initiatives Under Digital India, Electronics

Development Fund (EDP) Policy, Indian Railway, E Ticket, SMS Service, E Catering, Online Reservation System, State Transport Service, Cab Service, BUS Ticket, Mobile Recharge[14]. Digital attainment has been printed as an umbrella framework for sort of advanced and integrated sub-disciplines – or “literacies” – comprised of talent, knowledge, ethics and ingenious outputs among the digital network atmosphere [15]. Digital literacy as associate integration of 5 separate however interrelating accomplishment skills: photo-visual literacy, copy literacy, information accomplishment, branching literacy; and socio-emotional literacy [16]. Implementation of Digital acquirement assessment at the secondary and post-secondary levels offers a purpose for classifying learners and for establishing a sensible entry point for instruction, and maybe for maintaining longitudinal chase of students throughout academic career for institutional analysis [17].

There are 3 stages of digital literacy

- Digital ability that's the talents, concepts, approaches and attitudes.
- Digital usage that refers to the applying of digital ability at intervals a selected context like a school; and
- Digital transformation that involves creativeness and innovation within the digital domain.

Digital literacy ought to be understood to mean the essential ability or ability to use a pc with confidence, safely and effectively, including: the power to use workplace software package like word processors, email and presentation software package, the power to make and edit pictures, audio and video, and also the ability to use an internet browser and net search engines. These are the abilities that lecturers of alternative subjects at school ought to be ready to assume that their pupils have, as associate analogue of having the ability to scan and write.”[18].

Digital literacy refers to the a lot of refined and situated practices related to having the ability to create, perceive and communicate which means and data during a world within which these processes are progressively mediate via digital technologies.”[19].

#### **4. Research Methodology**

##### **Research design**

Exploratory research design was used for study.

##### **Sampling procedure**

Purposive sampling method was used for study

##### **Sample population**

Interviews were conducted with 40 students who completed the NDLM training program. The study shows that 7.5 % of respondents belongs to the age bracket of eighteen, 15% of respondents belongs to age bracket of nineteen, twenty % belongs to Age bracket of twenty three, 37.5 % belongs to twenty four and 12.5 % of respondents belongs to twenty five, 7.5 % of respondents belongs to age of twenty six severally. The community standing shows that 37.5 % of cluster belongs to general class and sixty proportion of respondents belongs to the regular caste community.

##### **Objective**

- > To analyze whether NDLM course is beneficial to pass out students
- > To find out whether all non-IT literates are digitally empowered or not

#### **5. Pre study**

Telephonic Interviews were conducted with 40 students who have not completed the NDLM training program Pre study reveals that before deployment of national digital literacy mission NDLM students were Non-IT literate. The students doesn't know how to pay bills online. The

students were not able to operate computer. They are unable to access e-governance services. The students were facing difficulty in getting employment.

#### **Data analysis**

The educational qualification of respondents shows that a pair of 2.5 percentage have tenth level qualification, 22.5 proportion have passed twelfth standard and sixty seven percentage are graduates followed by 7.5 % of respondents are post graduates. The eighty five percentage of respondents are owning computers and fifteen percentage doesn't own computer.

67.5 % of respondents says that they are having poor skills in typing. 32.5 percentage says that they are poor in typing. 65 percentage of respondent says they are poor in searching internet.

60% of respondent's says that they are very poor in using computer, and 37.5 percentage says that they are poor in using computer.

52.5 % of respondents disagree that they're ready to perceive basic functions of computer elements, 52.5% disagree that that are ready to understand basic functions of hardware elements.

50 proportion of respondents strongly disagree that they're able to use keyboard shortcuts may be because of they are difficulty in remembering shortcuts, 47.5 % disagree that they're able to use keyboard shortcuts because of no knowledge.

52.5 proportion of samples disagree that they can use computer for learning purposes. Another 47.5 % of samples also strongly disagree that they can use computer for learning purposes.

55 proportion of samples disagree that they can learn something by reading it on computer screen. In the sense 42.5 % of samples strongly disagree that they can learn something by reading it on computer screen may be because they are not interested in reading.

47.5 percentage of samples disagree that they can learn something by watching on video display. Forty seven percentage of samples disagree that they can learn something by watching something on video display.

55 percentage of samples disagree that they are able to use social networking services. Only 10 proportion of samples neither agree nor disagree that they are using social networking services.

52.5 % of samples disagree that they can change computer screen display brightness and distinction. Only 7.5 proportion of samples neither agree nor disagree that they're able to adjust video display brightness and distinction may be because they have never done it before.

57.5 proportion of samples disagree that they can minimize, maximize and move windows on the computer screen. Only 2.5 % of samples neither agree nor disagree that they can minimize, maximize and move windows on the computer screen.

42.5 percentage of samples disagree that they can use a search command to locate a file. Only 52.5 percentage of samples strongly disagree that they can use a search command to locate a file may be because of no knowledge.

75% of samples strongly disagree that they are unable to create a Gmail account. But 25 percentage of samples disagree that they're able to create a Gmail account.

The study also shows that 50 percentage samples do not know in using word processing applications. Only 2.5percentage of samples say that they are poor in using word processing applications.

87.5 % of samples say that they do not know in using spreadsheet applications. 12.5 % of samples are having very poor skills in using spreadsheet applications.

90 proportion of samples do not know using presentation applications. 10 percentage of samples are very poor in using presentation applications because of not getting proper knowledge.

Only 92.5 % of samples do not know how to use communication applications. But 7.5 % of samples are very poor with their skills in using communication applications.

45 proportion of samples do not know how to use social networking services. But 47.5 % of samples says that they are very poor in using social networking services.

57.5 % of samples are having very poor skills in using video sharing sites. Forty percentage of samples do not know using video sharing sites.

35 percentage of samples do not know how to search internet and 55 percentage of samples are having very poor skills in searching internet.

92.5 % of samples do not how to pay online bills. 7.5 percentage of samples says they are very poor in paying bills.

75 percentage of samples never used word processor applications. Only 2.5 percentage of samples are rarely using word processor applications.

90 percentage of samples are using email sometimes. 10 percentage of samples are very rarely using email.

62.5 % of samples never used worldwide internet. 32.5 percentage of samples are very rarely using World Wide internet.

67.5 % of samples have never used Wikipedia. 67.5 % of samples are very rarely using Wikipedia.

But cent proportion of samples are ne'er using spreadsheet applications may be because of no usage.

32.5 % of samples strongly disagree that they enjoy using digital devices. 62 percentage of samples disagree that they enjoy using digital devices. 5 percentage of samples neither agree nor disagree that they enjoy using digital devices.

47.5 % of samples strongly disagree that they feel comfortable using digital devices. 47.5 percentage of samples disagree that they feel comfortable using digital devices.

40% of samples strongly disagree that they're conscious of numerous sorts of digital devices. Only 12.5 proportion of samples neither agree nor disagree that they're conscious of numerous sorts of digital devices.

22.5 % of samples strongly disagree that they understood what digital skill is.

42.5 % of samples neither agree nor disagree that they understood what digital skill is.

45 % of samples strongly agree that they're willing to be told a lot of regarding digital technologies. Twenty seven percentage of samples agree that they're willing to be told a lot of regarding digital technologies.

62.5 % of samples agree that they feel vulnerable once others say digital technologies. Twenty Five % of samples strongly agree that they feel vulnerable once others say digital technologies. 12.5 five proportion of samples neither agree nor disagree that they feel vulnerable once others say digital technologies.

45 % of samples strongly agree that it's necessary for them to enhance their digital skill. 42 percentage of samples agree that it's necessary for them to enhance their digital skill. 10 proportion of samples neither agree nor disagree that it's necessary for them to enhance their digital skill. 2.5 percentage of samples disagree that it's necessary for them to enhance their digital skill.

## 6. Post study

### Data Analysis

The educational qualification of respondents shows that a pair of 2.5 percentage have tenth level qualification, 22.5 proportion have passed twelfth standard and sixty seven percentage are graduates followed by 7.5 % of respondents are post graduates. The eighty five percentage of respondents are owning computers and fifteen percentage doesn't own computer.

7.5 % of respondents accepts typing skill. 25 percentage says that they are good in typing. 67.5 percentage of respondent says they are very good in typing. 92.5 percentage of respondent says they are very good in searching internet.

67.5 % of respondent's accepts that they know how to use the computer, and 7.5 percentage says that they are very good in using computer.

22.5 % of respondents strongly agree that they're ready to perceive basic functions of computer elements, 45% neither agree nor disagree that that are ready to understand basic functions of hardware elements.

Only 12.5 proportion of respondents strongly agree that they're ready to use keyboard shortcuts may be because of they are difficulty in remembering shortcuts, 62.5 % agree that they're ready to use keyboard shortcuts because they are having excellent skills in understanding computer.

.35 proportion of samples strongly agree that they can use computer for learning purposes. Another 35 % of samples also agree that they can use computer for learning purposes.

42.5 proportion of samples strongly agree that they can learn something by reading it on computer screen. Only 20 % of samples neither agree nor disagree that they can learn something by reading it on computer screen may be because they are not interested in reading.

40 percentage of samples agree that they can learn something by watching on video display. Twenty five percentage of samples neither agree nor disagree that they can learn something by watching something on video display.

62.5 percentage of samples strongly agree that they are able to use social networking services after joining NDLM training course. Only 37.5 proportion of samples agree that they are using social networking services may be because of they are having no interest in using social medias.

75 % of samples strongly agree that they can change computer screen display brightness and distinction. Five proportion of samples neither agree nor disagree that they're able to adjust video display brightness and distinction may be because they have never done it before.

75 proportion of samples strongly agree that they can minimize, maximize and move windows on the computer screen. 25 % of samples agree that they can minimize, maximize and move windows on the computer screen.

77.5 percentage of samples strongly agree that they can use a search command to locate a file. Only 22.5 percentage of samples agree that they can use a search command to locate a file may be because of no knowledge.

22.5% of samples strongly agree that they are good in creating a Gmail account. But 42.5 percentage of samples agree that they're good in creating a Gmail account may be because they are frequently using it.

The study also shows that 47.5 percentage samples are having excellent skills in using word processing applications because of regularly using it. Only 20 percentage of samples say that they are acceptable with their word processing applications.

67.5 % of samples say that they are acceptable with their skills in spreadsheet applications.

7.5 % of samples are having poor skills in spreadsheet applications may be because of not getting proper training in using it. 2.5 proportion of samples are very poor in using spreadsheet applications. 2.5 proportion of samples don't apprehend to use spreadsheet applications.

Fifty five proportion of samples are acceptable with their presentation applications. 2.5 percentage of samples are poor in using presentation applications because of not getting proper knowledge.

Only 2.5 % of samples are excellent with their skills in using communication applications. But 67.5 % of samples are acceptable with their skills in using communication applications.

85 proportion of samples are having excellent skills in using social networking services. But only 5 % of samples says that they accepts their skills in using social networking services may be because of not having interest in using social Medias.

75 % of samples are having excellent skills in using video sharing sites. Twenty five percentage of samples are having good skills in using video sharing sites.

92.5 percentage of samples are having excellent skills in searching internet because of regularly using internet and 7.5 percentage of samples are having good skills in searching internet.

27.5 % of samples are good with their skills in paying bills. Fifty percentage of samples says that accepts their skills in paying bills.

42.5 percentage of samples are occasionally using word processor applications. 5 percentage of samples are very rarely using word processor applications.

37.5 percentage of samples are using email sometimes. 15 percentage of samples are frequently using email.

77.5 % of samples are very frequently using worldwide internet. 22.5 percentage of samples are frequently using World Wide internet.

72.5 % of samples are very frequently using Wikipedia. 5 % of samples are sometimes using Wikipedia.

2.5 % of samples are rarely using spreadsheet applications. But 65 proportion of samples are ne'er using spreadsheet applications may be because of no usage.

100 % of samples says that internet camera is required to put in on their laptop so as to possess a video conference with their friends. 100 % of samples says that AVI and MP4 are samples of digital video file formats. 100 percentage of them says that Bluetooth could be a technology customary for the short vary wireless interconnection of mobile devices.

45 % of samples strongly agree that they enjoy using digital devices. 45 percentage of samples agree that they enjoy using digital devices. 10 percentage of samples neither agree nor disagree that they enjoy using digital devices.

50 % of samples strongly agree that they feel comfortable using digital devices. Ten percentage of samples neither agree nor disagree that they feel comfortable using digital devices.

5% of samples strongly agree that they're conscious of numerous sorts of digital devices. Sixty five proportion of samples neither agree nor disagree that they're conscious of numerous sorts of digital devices.

40 % of samples strongly agree that they understood what digital skill is.

25 % of samples neither agree nor disagree that they understood what digital skill is.

35% of samples strongly agree that they're willing to be told a lot of regarding digital technologies. Thirty percentage of samples agree that they're willing to be told a lot of regarding digital technologies.

2.5 % of samples strongly agree that they feel vulnerable once others say digital technologies. Five % of samples agree that they feel vulnerable once others say digital technologies. 47.5 five proportion of samples disagree that they feel vulnerable once others say digital technologies.

10 % of samples strongly agree that it's necessary for them to enhance their digital skill. 62.5 proportion of samples neither agree nor disagree that it's necessary for them to enhance their digital skill. 2.5 percentage of samples disagree that it's necessary for them to enhance their digital skill.

### **7. Discussion and Interpretation**

The National Digital literacy mission is being effectively functioning in kalliyoor panchayath located in Thiruvananthapuram district of Kerala. The forty students in kalliyoor panchayath were Non-IT literates. As per the study reveals that National digital literacy mission training course is mainly focused on five modules:-

- Learning Internet
- Communication applications
- E governance services
- Digital devices
- YouTube

#### **Before deployment of NDLM**

Before deployment of NDLM training course forty students were unable to use computer. They weren't knowing even the essential functions of computer, The twentypercentage of students were facing problem in obtaining employment as most of reputed organizations were recruiting citizens are IT literates. The students reveals that they lost job owing to being a Non-IT literate. The economic conditions of households among most of those IT illiterates were poor. Study reveals that 65 percentage of respondents are not able to use internet i.e. they don't know basic functions of internet like how to search internet and very poor in using web search engines. The study also reveals 60 percentage of students don't know how to use a computer. As per knowledge regarding communication skills study shows that 93 percentage of students were not able to use communication applications like skype. in the similar way 75 percentage of students strongly disagree that they are unable to create Gmail account. In case of electronic governance services 92 percentage of respondents were not knowing how to pay electricity bills, booking tickets, recharging online. 65 percentage of samples disagree that they were also feeling uncomfortable and was having knowledge in using smartphones while in case of knowledge regarding YouTube 57.5 percentage strongly disagree that they were unable to use YouTube.

#### **After deployment of NDLM**

After the deployment of NDLM course several students were placed in many IT level corporations, co-operative societies as data entry operators. Currently confidence level of the many students have exaggerated. They feel assured that they'll get higher employment in many IT departments. Basic standard of living has improved among 10 percentage of households. Study reveals that 92 percentage of respondents are not able to use internet i.e. they know basic functions of internet like how to search internet. The study also reveals 68 percentage of students were able to use a computer. As per knowledge regarding communication skills study

shows that 67 percentage of students were able to use communication applications like skype.in the similar way 42.5 percentage of students agree that they are able to create Gmail account. In case of electronic governance services 50 percentage of respondents learned how to pay electricity bills, booking tickets, recharging online, applying PAN card online..60 percentage of samples strongly agree that they were feeling comfortable and was having knowledge in using smartphones while in case of knowledge regarding YouTube 75 percentage strongly agree that they were able to use YouTube.

### 8. Conclusion

The mission of NDLM theme is to produce digital skill to each Indian. Creating one person in each family digitally literate is one amongst the integral parts of the Prime Minister's vision of "Digital India". At the present scenario still there are organizations and institutions willing to provide NDLM course however because of financial issues they are unable to provide NDLM course thus if a better financial support is provided from government level mission will be more effectively functioning. Local self-government institutions ought to be inspired by giving correct coaching so they're going to additionally get intended to require initiative of program. Currently National Digital Literacy Mission has transformed its name into Digital Saksharta Abhiyan (DISHA) and its functioning effectively.

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