

Technology Availability in MNREGA Programme: An Analysis on Available ICT Services to The MNREGA Beneficiaries

Paper Submission: 16/09/2020, Date of Acceptance: 26/09/2020, Date of Publication: 27/09/2020

Abstract

Public policies were integrated with technology to achieve transparency and accountability in the delivery of services. India adopted ICT mechanism to execute its' largest guaranteed wage employment programme, MNREGA. Apart from web enabled assistance being provided by the centre and the states, beneficiaries interact with multiple sources of ICT devices to procure services. This paper analyses the basic ICT infrastructural facilities provided for the beneficiaries under MNREGA. It also explores the technological mechanism in implementation of the policy. Finally, the study examines the ways of ensuring transparency to the public in executing this programme. Workers accessibility to ICT services and enhancing their awareness is essential for the success of MNREGA policy. Though administrative reforms were initiated, much depends on the worker's insights to develop understanding of technical notions involved in the programme.

Keywords: ICT, MNREGA, Transparency, Information Kiosks, UHD

Introduction

Information and Communication Technology (ICT) is being utilized to integrate several stakeholders involved in implementing public policies. In a globalised society, departments, institutions, private organizations, Ngo's and citizens come together to form a network of actors. Automation provides the necessary coordination stimulus among the players. Today, technology not only binds but considered as an essential feature to bring transparency and accountability in delivery of goods and services. State began to combine policies with computerization to achieve efficiency in realizing its objectives.

One such policy in India allows technological intervention in executing a programme is Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA). The Act was passed on 5th September 2005 and the Policy was launched on 2nd February 2006 in 200 most backward districts of the nation (MoRD, 2013). It is a massive flagship policy addressed to eradicate poverty by providing 100 days of guaranteed wage employment to willing rural unskilled labours. The available bucolic human resource is diverted to generate productive assets and foster social equity.

Along with its inception, web enabled Management Information System (MIS) was created with the coordination of the Ministry of Rural Development (MoRD) and National Informatics Centre (NIC). Technology instituted a platform to combine the stakeholders who interact in executing this welfare policy. Several ICT initiatives are launched by the government to deliver better services to the workers. As time progressed, services cater to automation has become vital in policy implementation.

The key stakeholders in implementing ICT in the guaranteed wage employment programme are-

1. Central Government - MoRD
2. State Government- Rural Development Department
3. Panchayat Raj bodies
4. Specialized institutions- NIC, NIRD & ISRO-NRSC
5. MNREGA Workers

This paper analyses the basic ICT infrastructural facilities provided for the beneficiaries under MNREGA. It also explores the technological mechanism in implementation of the policy. Finally, the study



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examines the ways of ensuring transparency to the public in executing this programme. Available secondary sources are utilized to draw conclusions of the study. The sources constitute books, journals, official websites, MIS reports, Newspapers, magazines gazetteers and documentaries on YouTube.

Aim of the study

The objective of this paper is to evaluate the essential ICT services available to the beneficiaries under MNREGA programme. Technology became a major interface between the state and its subjects. It was adopted in public policies envisaging transparency and accountability in service delivery. Paper examines the technological mechanism being implemented in the programme.

Information and Communication Technology

ICT is the byproduct of globalization. It encompassed the welfare schemes implemented in nations across the world. States began to adopt technology as an alternative to manual services to achieve accuracy, authenticity and accessibility. Besides, the government came to be measured in automation application to estimate transparency and accountability of its services. Indeed, global competition that yearns for innovativeness also contributed to public authorities to shift for ICT services. In India, at the dawn of millennium technology became an integral part of public interaction with the authorities.

The term ICT is a convergence from Information Technology (IT) and communication (CT) (Akarowhe, 2017). The gamut of utilizing computers, laptops, electronic equipment (TV, Radio etc), mobiles, internet and digital devices etc., is known as ICT. It is defined as a diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information (Saqib Khan, Khan, U-din, Muhammad, Khattak & Jan, 2015). ICT assured flexible operational procedures and enhanced better communication between the responder and the receiver.

ICT services became synonymous to the ideals of good governance i.e, transparency and accountability. The ability to disseminate, retrieve and storage of information assisted by technical devices gained trust in automation. Joshi (2010) defined transparency as any attempts (by states or citizens) to place information or processes that were previously opaque in the public domain, accessible for use by citizen groups, providers or policymakers (Kuriyan, Bailur, Bjorn & Park, 2011). Technology facilitated for the unveiling of the knowledge to the public, hitherto be obscure by providers. Transparency in a public domain developed a knowledge based society.

Accountability is defined as the fact or condition of being required or expected to justify actions or decisions; responsibility (Han & Mehmet, 2016). The quality of vindicating official decisions can be traced with the assistance of ICT. Accountability, if enhanced, diminishes the mistrust of public over

authorities and erases the vacuum created between them. The web-based technologies facilitated for instituting transparency and accountability in public services. Besides creating a knowledge based society, assumptions prevailed across the nations is that ICT brings a reduction in administrative maladies, grafts and inefficiency. It develops efficiency, public participation and swift in making decisions.

MNREGA & ICT

Since its inception, India's largest guaranteed wage employment programme adopted web based MIS. NIC has developed NREGA Soft earlier and at present it is using NREGA Soft v 1.5 version. Website facilitates technology for e-learning, data storage, geotagging of worksites and yearly work and financial reports of all the states and union territories. The available ICT facilities are equipped in a phased manner. The emergence of technology in MNREGA can be equated to Gartner's four phase e-Government model.

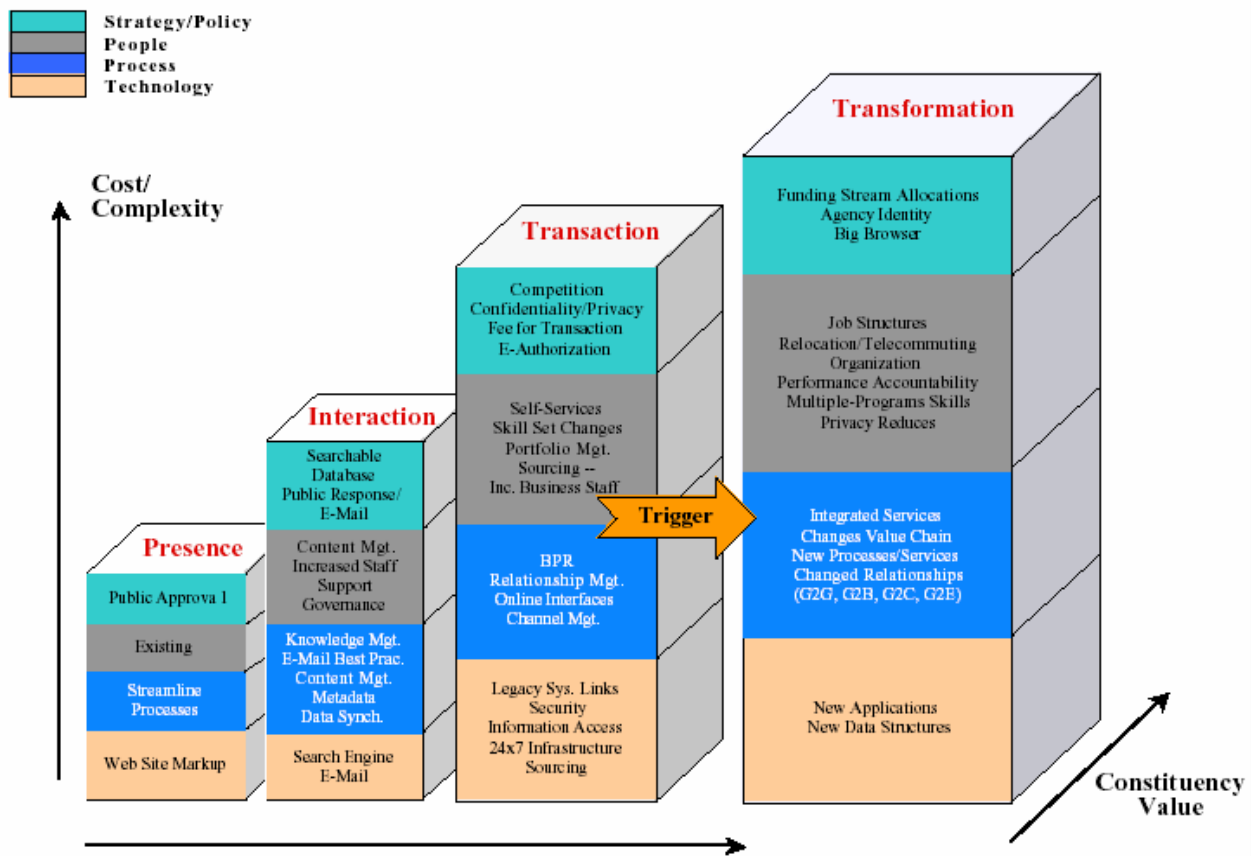
Gartner Group Inc in the year 2000, has devised a formula for progression of e-government models and strategies of available services in each phase. The model has four phases i.e., web Presence, Interaction, Transaction and Transformation. The first phase, Presence depicts the information provided on the web-enabled services. Here, it discloses the service being discharged. Phase second, Interaction establishes the basic communication among the authorities, public and business i.e, contact, email, feedback etc.

Third phase begins the transaction of business like fee payments, renewals, tender applications and project allotments. The last phase depicts the mature level where advanced initiatives are implemented. New applications, innovative equipment is added here (Noman & Hebbar, 2016). During the Presence phase, MNREGA website disseminated only basic features of NREGA act 2005, where it is launched and officials concerned. Interaction phase witnessed the official contacts, grievance redressal windows, email and other implementing agencies. Transaction phase began with wage transfer to worker's accounts, inviting online tenders and monitoring alerts. Transformation phase introduced geotagging of worksites and e-learning modules etc.

Worker technology interface is of two dimensions. First one is web-enabled available sources and second is the ICT support device services. Former is afforded by the MoRD website and latter is services administered while performing work at the sites. The paper is interested to analyze the accessible ICT services to the MNREGA workers in day to day life.

Beneficiaries' interactions with the ICT devices are:

1. Unified Hand Held Devices
2. Information Kiosks
3. Community Radio
4. Wage Payments
5. Mobile Telephony



Time Requirement of Legal Action

Source:As-Saber, Srivastava & Hossain (2006).

Unified Hand Held Devices (UHD)

UHD is a computing wireless electronic device, small enough to hold in a hand. The instruments are portable and have a touch screen, audio-visual interface, printing and internet connectivity features (IGI Global). Some devices having physical buttons fit enough to issue receipts that carry minimum activities and modern equipment has digital buttons and performs multiple functions. The devices can store, retrieve and manage information, facilitated the authorities to adopt them in administration. Technical utility lessened human intervention and administrative grafts while executing the programme. Accuracy and authenticity were ensured in the device-public interface.

On 2nd February 2011, MoRD has launched the UHD biometric device for the MNREGA workers (OWFI, 2011). A security coded and authentication instrument was pre-coded with a programme by registering the fingerprints of the beneficiaries. A Global Positioning System (GPS) verified device, it will be under Gram Rojgar Sahayak (GRS) who administers biometric attendance by a thumb impression of the worker. Besides, instrument disseminates the information of an individual worker about the number of days of work, remaining days, amount disbursed, work demand and period of work.

An audio-visual encrypted, an illiterate beneficiary can listen and opt his choice through the touch screen. Post preference of the work, the device prints a receipt. It can also function as a point of sale

to disburse wage payments at the end of a fortnight work. Instrument utility curtailed him of visiting panchayat office to procure any information. Earlier, a worker used to interact either with mate/official for individual information. Biometric attendance enhanced the authenticity of beneficiaries' attendance at the worksite. Once registered in a biometric device, attendance can hardly be manipulated.

Information Kiosks

Information Kiosks or Soochna Seva Kendra is a place which disseminates information about the programme/place to the person through touch screen facility. As a pilot project Kiosks were launched in 20 villages i.e., 10 each in Udaipur and Bhilwara districts of Rajasthan. One World Foundation India (OWFI) in association with MoRD and UNDP has initiated the installation of Kiosks. Kiosks offer simplified access to information to the people at the grassroots (OWFI, 2010).

The Kiosk will have a touch screen interface and offers greater transparency and quick delivery of services. They can be installed at the panchayat office or Bharath Nirman Seva Kendras with main server at the state headquarters. Soochana Seva Kendra's will offer accessibility to a similar and additional range of services to what a biometric device offers. In addition, Kiosk provides which UHD don't are registration of workers, Job card and Muster roll information, e-muster roll, works identified in gram panchayat etc (OWFI, 2011). Kiosk empowers the knowledge base of MNREGA workers.

The distinctions between the UHD and Kiosk are, UHD is handled by GRS and if the worker knows, Kiosk can be operated independently. Secondly, UHD is portable and can be utilized at the worksite. Kiosk shall be installed at nearby offices. A worker has to take the burden to visit the office to procure information. Thirdly, UHD offers limited services and Kiosks provides additional services to what UHD offers. Finally, Kiosk has a wider screen than UHD. Both the devices strengthen the workers' insights and cater transparency and accountability in the MNREGA scheme.

Community Radio

Community radio (CR) is a means of diffusing information which empowers and builds a knowledge based society. Radio services can be targeted to a wider group or a specific area of listeners. Community refers to a group of people with common characteristics or interests living together within a larger society (Khan, Khan, Hassan, Ahmed & Haque, 2017). The services provided will serve the interests of the citizens dwelling within the territory.

Eryl Price-Davies and Jo Tacchi defined CR as a non-profit distributing, designed to serve specific communities of location and/or interest, providing programming that is relevant to the community, and with management structures that are representative of the community the station serves (Fleming, 2002). CR can be established by public authorities, NGO's, corporate, individuals, educational institutions and civic bodies. CR carries success stories, news and information on specific issues (Agriculture, literacy, women, employment etc) debates, weather forecast and advertisements.

CR facilitates for carrying public policies to the remotest hamlets in less time. Addressing a huge number of the populace in their local language is possible by broadcasting the programme through radio (OWFI, 2019). Public advertisements, cautions during uneven circumstances, health awareness, provisions under government schemes and capacity building programmes can be broadcasted. Listeners can avail this broadcasting by radio or mobile devices.

MNREGA beneficiaries will be benefited by a CR in procuring information for this Right based work, where to register, whom to contact etc. CR empowers the rural folk to build a knowledge based hamlets. It integrates the remotest hamlets to the mainstream society and motivates public participation. CR encourages the public to share their thoughts, experiences and innovative practices over radio. Penetration of CR will bring significant developments in society.

Wage Payments

A smartcard is a chip encoded card, utilized to perform fiscal transactions. Since inception, MNREGA workers received payments from three procedures. When the scheme was launched, payments were done by cash. NREG Act 2005 stipulates that the wages under a Scheme may be paid either wholly in cash or in cash and kind provided that at least one-fourth of the wages shall be paid in cash only (The Gazette of India, 2005). The first procedure is to pay wages in cash for the duration of

a fortnight work. The workers will be given payslips and can encash at nearby post offices by depositing them.

Central government began to offer saving accounts to all deprived citizens of a safe fiscal institutional system under financial inclusion policy. Workers began to open accounts either in Post Offices or Scheduled Commercial Banks. These institutions offer secured place for saving one's wages. Posts/Banks, which is nearer to the village/hamlet, is identified and workers began to open accounts in either of them. Indian Posts and Payments Bank (IPPB) initiated a procedure where the postman acts as a teller to disburse cash to the workers at their doorsteps.

Dwellers from remote hamlets can't afford the accessibility to post offices. It is difficult for women, elderly and specially challenged MNREGA workers to visit the financial institutions. IPPB devised a scheme of disbursing their wages at their doorsteps. Postman will perform the teller functions of issuing their payments at their residences (PoTools, 2016). The workers need to send a message on the designated mobile device. Even saving accounts were opened by administering a biometric device and Aadhar card. IPPB facility has considerably reduced workers time.

The third procedure introduced was to pay through Business Correspondents (BC). A designated person being appointed or GRS will perform the function of a BC. Smartcards were issued to the workers and after administering it with a UHD by the BC, wages will be issued. The function will be performed at the worksite or at their residences. No need for workers to visit financial institutions. Banks will have MOU with the operating agencies who assign the work to the GRS or BC.

Three procedures are followed at different times till date in MNREGA scheme. The objective of financial institutions is to deliver timely wage payment without fund misappropriations. Worker preferred Posts/Banks over smartcards as the former has slight advantages over the latter. A smartcard will be operated only for wage withdrawal whereas a saving account can be linked to other public schemes. Secondly, UHD will disburse entire amount at a time and in accounts, one can save wages. Electronic wage disbursement will bring transparency and accountability. Transparency in wages deposited in the accounts and accountability in timely payments without delay.

Mobile Telephony

Mobile is a device that is portable, handheld and can be used for communication. Mobile telephones to MNREGA workers for the work will be helpful in three ways i.e., i) to communicate with the mates/officials for work related information, ii) to receive messages about the work and finally iii) to access official MNREGA website to know the details of the work. To empower MNREGA worker, under Bharath Mobile Scheme, United Progressive Alliance (UPA) II government planned to distribute free mobiles to the MNREGA workers (The Economic Times, 2013).

Official website of MNREGA is being maintained by both centre and respective state governments. With the help of a smartphone, workers can access the details of the ongoing work. Budget estimates, geotagged sites, grants released, number of households, ongoing works in their village etc available on the website. Progress of the work can also be viewed by them. Beneficiaries can access this information in their personal devices or at Block Computer Centre (BCC).

Assessment

Andhra Pradesh was the frontrunner in adopting ICT services in MNREGA (NISG, 2006). The software was developed by Tata Consultancy Services (TCS). Duplication of household registrations, improper allocation of work, delay in wages, deny in unemployment allowance and miscalculations in work measurements are a few identified limitations to be addressed by the technological implementation. Over a period, several states began to implement ICT in MNREGA.

India strives hard to achieve efficiency and effectiveness in implementing MNREGA programme. The success of any social safety scheme depends on public participation in decision making. Ample opportunity was facilitated by technology to engage workers to share, cooperate, monitor and enquire about the issues associated with the policy. In addition to the administrative reforms, the state needs to tackle specific challenges that retard the progress of the policy. The following are the shortcomings identified:

1. Illiteracy of the beneficiaries
2. Socio-cultural conditions of the workers
3. Inadequate infrastructure
4. Low worker-official interface

According to educational statistics, 2014 released by the Ministry of Human Resource Development (MHRD) in 2018, the rural literacy rate is 64.7%. There is a huge variation between rural male and female literacy rates i.e., 72.3% and 56.8% respectively (MHRD, 2018). Illiteracy of workers acts as a major handicap to understand the technical aspects of the programme. Beneficiaries are not aware of their rights assured. The statutory requirement of women participation is 1/3rd and 2018-19 financial year witnessed 53% of the workers (MoRD, 2018). As males are occupied with remunerative work outside, women are engaged in wage employment. Literacy levels retard them to understand and judge the modalities of the work.

Remote hamlets have vulnerable accessibility to education, transport and health. Any information needs to get from the panchayat office, which is far away from their villages. Besides, most women are engaged in cattle rearing and domestic chores find difficulty to visit the office. Rural transport connectivity is very poor and workers depend on either individual or local transport to commute. Procuring a daily newspaper is challenging in distant hamlets. Availing pure drinking water, sunshine and medical aid at the worksites is an onerous task.

BCC should have at least two computers and broadband facility. Most of the blocks are satisfied

with one computer and have irregular network connectivity. Digital communication at the panchayats and villages is yet to facilitate. Utilization of biometric devices at the remote hamlets with poor network connectivity is impractical (Das S.K., 2015). Though government took initiative to establish CR, states which have strong NGO's got benefited as the institutions distributed radio handsets to the villagers. NGO's even started CR stations. Accessibility to individual mobiles for female workers is difficult as most of them share the devices with their family members.

Inaccessibility to technology, Mate, GRS and panchayat officials are the sources of information to the workers. Practically, it is the mate who is nearer to the workers every day. He is considered as a skilled worker who manages and monitors the worksite on a daily basis. Official interaction with the workers is less and they depend on the mate to pass any information. Workers don't know where to lodge their grievances and whom to complain.

Conclusion

Administrative assumption is to initiate technological integration across various walks of life, to realize the ideals of good governance. Transparency and accountability are acknowledged as the one among many ideals of governance. Nations began to integrate automation with public policies to enable efficient and timely delivery of services. India's largest wage employment programme is no exception to introduce ICT enabled services.

Considering a public policy to be successful depends on the beneficiaries' insights about the programme. Several technical initiatives were introduced to empower the MNREGA workers. It provides an opportunity for them to participate in decision making. They can raise a voice when inappropriate actions were taken in administration by the authorities. Much depends on the workers' interest to enhance their ability in understanding the ICT functions in this flagship programme.

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