

Working Paper 404

**From E-Governance to
Digitisation: Some
Reflections and Concerns**

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ISBN 978-81-7791-260-9

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The Institute for Social and Economic Change,
Bangalore

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Working Paper Series Editor: **Marchang Reimeingam**

FROM E-GOVERNANCE TO DIGITISATION: SOME REFLECTIONS AND CONCERNS*

Anil Kumar Vaddiraju¹ and S Manasi²

Abstract

The technological changes of twentieth and twenty-first centuries have fundamentally altered the way states govern and people respond. The growth of computer technologies, digital technologies and telecommunications has drastically changed the way the state conducts its functions. The same technological revolutions have also altered, whether or not they improved the welfare function of the state, the way international, national and regional governance organisations deliver their functions. Technology is no doubt driven by capitalism, that acknowledged, one should also accept that innovations in technology of the type above mentioned have already altered the function of governance and have enormous potentiality to change it further. Electronic governance or E-governance is one of them. This has many applications in governance and far-reaching implications. This article argues that increasing E-governance can centralise the powers of the state.

Key words: E-governance; governance; digitisation; capitalism; privacy laws; regulation

Introduction

The term governance is today substituted for the term public administration. This change has happened increasingly with the roll back of the state in its involvement in economy and delivery of services. As such, the term governance came to connote a thin government with a thick market and civil society sectors; wherein most functions of the state are carried out either by the market or by the civil society or such private entities. The word governance itself denotes a minimal neo-liberal state. The definition of governance denoting efficiency, economy and effectiveness comes from new public management (Sapru and Sapru. 2014). Therefore, it must be clarified at the very outset that governance reforms are considered by their ideological critics as neo-liberal (Steger, M.B and Roy, R.K. 2010) or at least that serving the neo-liberal agenda of the state. This criticism, however, is a blanket criticism and the same does not clearly mention whether technological reforms, such as the introduction of Electronic governance *per se*, would also be neo-liberal. We argue in this paper that technology *per se* is value neutral and can serve both a welfare state and a neo-liberal state.

Governance also means higher levels of efficiency, effectiveness and productivity by government and quasi-government institutions that are mandated with the function of public service delivery. The term governance increasingly came to be used in the 1990s. Governance means 'a pattern of rule' (Bevir, M. 2011). As the term is used in the present context it means a pattern of rule wherein non-state, quasi-state and market entities increasingly are used in it. By non-state and quasi-state

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* This is a working paper and hence represents research in progress. This paper represents the opinions of the authors and is the product of professional research.

We thank the two anonymous reviewers for their critical review and valuable suggestions that helped us improve the quality of our manuscript.

entities we mean civil society organisations, consultancy bodies such as World Bank and IMF; and by market entities we mean the corporate sector. Governance terminology has become co-terminus with combining government with privatisation, increasing use of civil society in the delivery of services and public sector and social sector functions (Bevir, M. 2011). Another definition of governance sees it as making the same more effective, efficient and economical by reducing bureaucracy, ensuring accountability, transparency and effectiveness (Chitlangi, B.M. 2008). The major outcome of these changes is that the rule by government becomes hybrid, plural and also acquires multi-jurisdictionality.

The technological revolution in the twentieth and early twenty-first century has helped the state to carry out the above type of changes. Particularly, the revolution in information and computer technologies, combined with the definition of governance as effectiveness, transparency and accountability have resulted in increasing computerisation and digitisation of governance functions.

Governance also is used to denote 'decline' of the centralised state with more delegation and decentralisation of powers. Both the horizontal partnership of the state with market and vertical delegation and decentralisation mean lessening the task of public service and welfare functions by the state. As such it means a slender state and increasing civil society and market players in such 'pattern of rule'.

There is also another concept of the state which came to be known as good governance and this means an accountable, accessible, less corrupt and effective state (Chitlangi, B.M. 2008). One should keep in mind all three definitions of governance a) as partnership b) vertical delegation of public service delivery to lower rungs and c) good governance, have come in the wake of the growth of market fundamentalism and decline in the role of the welfare state.

The technological changes mentioned above have fundamentally altered the scenario. The growth of computer technology, digital technologies and telecommunications has drastically changed the way the state conducts its functions. Technology is no doubt driven by capitalism, that acknowledged, one should also acknowledge that innovations in technology of the type above mentioned have already altered the function of governance and have enormous potentiality to alter it further. It is when these technological changes are introduced in governance that it comes to mean Electronic governance or E-governance. This has many applications in governance. This article argues that increasing E-governance is likely to centralise the powers of the state.

According to one definition,

'E-government is about a process of reform in the way governments work, share information and deliver services to internal and external clients. Specifically, e-government harnesses information and communication technologies (ICT), such as internet, the web, and mobile phones to deliver information and services to citizens and businesses' (Bhatnagar. 2008: 246-247).

Bhatnagar explains the significance of E-governance in the following words:

'Everything about information technology in India is characterised by both hype and substance; so is the case with e-government. E-government is at an early stage of

implementation with just three or four Indian states having built a few service delivery applications. However, e-government applications are expected to grow in scope and also to cover more states. E-government represents a win-win situation for all stake holders: the private sector gets new markets, governments increase efficiency and effectiveness and the citizens get more convenient services with greater transparency and less corruption. Some states have already reaped benefits'. (Bhatnagar. 2008: 246-247).

While another definition, by Dawes, (2009) says 'E-governance comprises the use of information and communication, technologies to support public services, government administration, democratic processes and relationships among citizens, civil society, the private sector and the state'.

E-governance also depends on the nature of the society. The more literate, aware and educated a society is, the better use of electronic governance can be made. If the users of e-governance are not aware of its consequences it can also be misused. E-governance offers both positive and negative dimensions to the society. Increasing use of technology does not mean that the basic normative considerations of society and the fundamental relations between state and citizen will alter. For example, providing welfare to the poor will continue to be the normative value from which the state will continue to be evaluated. Whether electronic means are used or not, the normative considerations from which welfare is provided to the poor will remain.

Historically, E-governance initiative in India began in the seventies with focus on, and evolved from, computerisation of government departments and then into varied initiatives. This started with the objective of speeding up e-Governance implementation across the various departments of the government at the national, state and local levels. For instance, the contribution of the National Informatics Centre (NIC) in connecting all district headquarters during the 1980s was remarkable. Since 1990s, e-governance has adopted Information Technology (IT) for wider sectoral applications with policy emphasis involving both private sector and NGOs too. It spread across sectors like telemedicine, e-commerce and community information centres besides promoting access to the internet in order to bring economic benefits to the people. All these fragmented initiatives (discussed below) were unified into a common vision and strategy provided by the National e-Governance Plan (NeGP) in 2006. The NeGP takes a holistic view of the e-Governance initiatives across the country, integrating them to have a vision. In this backdrop, a colossal countrywide infrastructure was planned to be installed to enable access to internet facilities. E-governance is seen as one among the main elements of the country's governance and administrative reform programme. The NeGP has the potential to facilitate huge savings in costs through the sharing of core and support infrastructure, and enabling improved governance. The ultimate objective is to bring public services nearer to citizens, as expressed in the NeGP Vision Statement. The NeGP includes 26 Mission Mode Projects and 8 support components to be implemented at the central, state and local government levels. The plan attempts to cover all the important areas relating to e-governance – policy, infrastructure, finances, project management, government process re-engineering, capacity building, training, assessment and awareness across the central and state governments.

Some examples of E-governance:

Some positive examples of the E-governance that have promoted effectiveness of government at the national level include:

- Introduction of voting machines
- Introduction of voter identity cards on a national scale
- Introduction of Aadhar cards
- Further digitisation of citizen financial data

Some very positive uses of E-governance, among many, introduced in at least two states of Karnataka and in the former united Andhra Pradesh (which continue even after division of the latter state) include:

- Bhoomi project of computerising land revenue records in Karnataka through National Land Record Management Programme (NLRMP) (See Box 1 and 2)
- Computerisation of registration of property and related processes in AP and Karnataka
- Computerisation of land revenue records in Telangana

Some examples of E-governance are provided below:

Box 1: Land Administration in Cities

The E-governance initiative for land administration has been a major shift in land administration system for providing government services and information to the public through ICT. In this context, the intervention of technology has aided in improving land records management and land administration and aids in resolving regulatory complexities. Experts have emphasised that, uncoordinated, disintegrated and outdated land related land records management compiled with improper legislations leads to critical situations in many developing countries. 'Urban Property Ownership Records' (UPOR) intends to ensure transparency in land administration procedures, simplify the process of registration, provide greater access to information, centralise land records data and thereby improve accountability. Thus, the core objective of UPOR is to issue ownership title to urban households and the creation of a fresh data base for urban mapping. It is expected that UPOR will result in the elimination of corruption and middlemen in the process and promote good governance. One of the primary aims of UPOR is also to create an approved land record system of documents by a statutory authority so as to enable other stakeholders to make use of this database.

A robust system of UPOR is created for every property with a view to documenting accurately both spatial characteristics of properties and record of rights data in respect of (i) land parcels (ii) structures/buildings (iii) roads etc. This property record will serve as an authentic record for all land related transactions. The property card thus, created under UPOR would serve as evidence for property ownership for regulatory and legal purposes. The property card issued will continue to remain valid and will not become obsolete or inaccurate. All the property record related transactions and services are intended to be fulfilled through this project (UPOR webpage)³

Source: Manasi, 'et al.' 2013.

³ UPOR objectives are listed out in City Survey Department-UPOR webpage www.upor.karnataka.gov.in.

- E-seva centres in both Karnataka and Andhra Pradesh to easily pay different taxes and for obtaining different certificates of the government etc.

Box 2: E-governance in Land Administration

The E-governance initiative in land administration has brought in a paradigm shift over the traditional practices through the usage of electronic systems. The new system of information availability has made service delivery and the governing process simpler and translucent. All the services are available in a single window to the citizens for better office and record management.

E-governance initiatives for land administration began with the computerisation of land records and registration for creating a system of spatial record followed by the establishment of linkages between different wings of land record management agencies. The first E-governance initiative undertaken is 'Bhoomi' followed by 'KAVERI', 'Mojini and Bhoomi-KAVERI-Mojini integration'. The Bhoomi-KAVERI-Mojini, regarded as 'three pillars' of Karnataka Land Revenue administration, reveals the intricacies involved in the policy formulation and implementation of these mechanisms.

- Bhoomi, implemented at the taluk level since the late 1990s, has enabled the availability of Record of Rights, Cropping and Tenancy (RTCs) in a digital form as against the physical format.
- KAVERI, an initiative undertaken in the Registration Department, in the year 2004-05, is intended for computerising land registration system with separate software. Along with this, the documents available in the Sub- Registrar's Office (SROs) have also been digitised.
- Mojini, initiated in 2008-09, aims to computerise the functioning of the Survey Department.
- Integration of Bhoomi, KAVERI and Mojini, since September, 2011, aims to bridge the crucial gap between the textual and spatial data in terms of addressing mismatches, if any, with regard to boundary disputes among joint owners or adjoining properties.
- 'Nemmadi Kendra' - kiosks is a public-private partnership initiative to support the dispensation of various services.

Key findings

Bhoomi: With respect to Bhoomi, disposal of applications were fast, there was significant improvement in the Bhoomi operation. Disposal of applications related to land transactions indicated an improved performance during post integration phase. It indicated that land administration system in the state showed a visible improvement in service delivery. Besides, there were Minimal Delays in Mutation Process. Bhoomi operator receives and processes a complete list of mutation details on a daily basis obtained from the Village Accountant. However, the processes need further streamlining in utilisation of Bhoomi/Nemmadi Kendra services. Consequent upon setting up of computerised land record kiosks - both Bhoomi and Nemmadi kendras, 80 to 83% of clients utilised the services. The present model of Bhoomi kiosk and method of operation are satisfactory in terms of accuracy, transparency, convenience besides time and cost saving. Also there was minimal time taken for issuing RTC and Mutation copies besides ensuring safety and transparency.

KAVERI: Computerised registration system is better than manual process and was evident. Majority of the clients managed to complete registration process with one visit. Further, registration of documents took less time as compared to obtaining Encumbrance Certificate (EC). However, there were some issues pertaining to outsourcing for maintaining quality control. With respect to availability of Kiosks and usage of services at SRO, more than 75% of clients were satisfied with services. However, there were complaints about lack of infrastructure, advanced computers, spacious buildings and basic facilities.

Mojini: Pendency status is a matter of concern. Demand for land has increased due to recent developments resulting in high sales transactions; hence, pendency level as a percentage of average monthly receipt of applications is higher. The notice-period for issuing 11-E sketches is limited to 45 days, about 58% of applicants could get their 11-E sketches within 1-2 months in Tiptur indicating fair service delivery while in Gulbarga and Navalgunda 47% of applicants waited for up to 3 months indicating insufficient number of licensed surveyors and well established infrastructure facilities. Survey and Work quality of licensed surveyors was good. Tatkal system aided in reducing pendency in respect of Phodi cases. At present, though digitisation of survey records data was in progress the level of achievements varied. Damaged original survey sketches and poor quality papers made it complex and varied across the districts and ranged from 20% to 50%. Also, inadequate Monitoring process caused pendency and delays in disposal of applications.

BKM Integration: 84% of the respondents reported faster service besides; enabling verification of property details easily, safety of documents and improvement in access. First-in-First-Out (FIFO) is working well and prevented misuse. However, integration process of Bhoomi and Mojini data needs improvements by better coordination between Bhoomi and KAVERI, improve data access problem during registration of documents. Speed money remains an issue as middlemen (50%) still play a major role in the processing of documents; however, the introduction of ID system for potential applicants has reduced their role considerably. To sum up, the extension of Bhoomi, Kaveri, Mojini Integration makes it further remarkable in putting the land records in place. To reach the stage of perfection, process constraints are to be addressed and evolved to make it more effective and efficient.

Source: Manasi, S. 'et al.' 2015.

All the above are successful and positive examples of introduction of electronic governance. Misra also provides such examples from the state of Punjab (Misra. 2014). These above positive views regarding E-governance are based on a study conducted by one of the present authors in Karnataka. During the study, a survey was conducted in four taluks in four districts, across four revenue divisions i.e., Tiptur in Tumkur district (Bangalore Division), Gulbarga in Gulbarga District (Gulbarga Division), Bantwal in Dakshina Kannada District (Mysore Division) and Navalgunda in Dharwad district (Belgaum Division). The criteria for selecting these four taluks were based on the Bhoomi data on land transactions, from among those registering the highest transactions. The study period covers the land transactions (since BKM integration) from September 2011 onwards. The villages were selected on the following criteria (i) Villages with high transactions of BKM integration cases (ii) Transaction cases identified include those who have gone through a complete property registration process. Besides, specific villages were selected on a random basis - Three villages located close to the taluk centre and two villages located far away from the centre. Among the selected villages, 50 village-level clients were identified on a ratio of 60:40 with details being as follows: 30 were identified as under BKM services and 20 clients availing other land-related services.

All these have been functioning well. In fact Bhatnagar⁴ says the following regarding E-government in India:

⁴ Bhatnagar (2008) elaborates on the A.P case of implementation of E-government policies. The irony of the Telugu Desam Party government that implemented these reforms is that while the policies are continued the government that 'pioneered' these policies was defeated in 2009 elections. Precisely on the grounds that the SMART governance that the then chief minister of AP Chandra Babu Naidu carried out was neo-liberal. On the contrary to

'India is a leader among the developing countries in e-government. Amongst the twenty-five cases on e-government on the World Bank website, thirteen are from India. These include those dealing with delivery of services to urban and rural citizens, tax collection from businesses, and websites focusing on promoting transparency and reducing corruption. E-government applications have been used in India for e-procurement, tax collection, processing license applications, sharing budget/ expenditure information, and sharing information across departments. Citizens have benefited in service delivery through convenient service delivery locations and significant reduction in service delivery time.' (Bhatnagar. 2008: 248-249).

Thus, electronics and communications and information technology in general has proven its critics wrong. With increasing use of computers and mobile telephony the basic nature of governance is fast changing; this is certainly true in some states which have adopted this technology as a governance measure.

Social impact of technology

However, technology is Janus-faced. The social impact of technology is both to improve cohesiveness and unity and to increase social disruption. As noted above, technology can make delivery of services easy; but it can also centralise information in the hands of the state. Technology can improve what the Constitution envisages as fundamental rights; technology can violate rights to privacy, and reduce the social and political space for individual citizen. Technology can create employment but it does not ensure that wealth, thus generated, is equally distributed in society. Technology can improve efficiency but it does not ensure for what aims or purposes this efficiency is used. Thus, technology is value-free. Any society, while using technology, also needs social, political and economic values. Thus, technology can certainly enhance democracy but technology can also centralise power in a few people.

In other words, to return to the point mentioned earlier, the more aware, literate and enlightened the citizens are, the better use can be made of technology (See Box 3). They can use it to enhance fundamental human values like equality, dignity, democracy and freedom of individual rights. Or else, the same technology can also turn out to be stifling. During the industrial revolution, when steam engine and spinning jenny were invented, they were revolutionary technologies. The same however, combined with military power, led to the devastation of colonialism and subjugation of large parts of Asia, Africa and Latin America. What is true of steam engine and spinning jenny is also true of all technologies. They can liberate humanity from excruciating labour but can also empower a few and enslave vast others.

According to Marx, humans are tool making animals (Avineri, S. 1968). By making tools, i.e., technology, they liberate themselves from labour. The free time thus gained from technology can be used for cultivating, what John Stuart Mill (Mill, J.S. 1912) calls, the nobler level of individual freedom.

the argument of Bhatnagar that E-government benefits the rural poor, the Naidu government was criticised precisely on the grounds that it neglected rural sector.

Thus, basically, the more the technology there should be more freedom. Marx's entire point about capitalism is that the economic system, even after allowing the technologies on which the productive forces are based, to develop fully, does not guarantee freedom. Thus, in a way the early twenty-first century is facing a paradox of highly-developed productive forces and at the same time persistence of various kinds of un-freedom. The point is that, in principle, technology should be used, and not shunned; and improvements in technology should be welcome.

However, the problem emanates in India with its spatial and regional imbalances. The regional imbalances are significant while discussing the role of technology in governance. Economic and technological development is more in urban areas than in rural areas in some states than in others. Therefore, the way out of this dilemma is for all states to develop their economic and technological level. For example, land records are computerised in one or two states, but are not computerised, or only in the process of being computerised, in many states. Likewise, while the rural, agricultural sector cannot become like the urban sector, many inequalities between rural and urban social communities can be bridged by computerisation and digital technologies.

Box 3: Akshaya e-literacy project in Kerala

The e-literacy project in Kerala is the only initiative that aims to make ordinary citizens e-literate in India. The project aimed at making at least one member in each of the families e-literate. The pilot project started in Mallapuram in 2002 and has been extended to other districts like Kollam, Kozhikode, Thrissur, Kasargodu. Total e-literacy was achieved in eight districts in Phase I and the project has been a great success. The Akshaya project has three distinct phases. The first phase enables the masses with the basic skill in computer operations and familiarising them with the internet, besides, hand on skill in operating a computer. The e-literacy initiative in Kerala have been recognised and appreciated globally.

Source: <http://www.akshaya.kerala.gov.in/index.php/e-literacy>, June 19th 2017

One definite dimension of technology in a liberal democracy is that it can enhance participation. In large democracies like India, where a substantial section of the society is still poor, and where there are large inequalities among states, technology can promote equality and participation. The applications of technology to democracy can result in more and more participation. Whether or not different social groups are economically equal, technology can enhance political equality. Unlike the West, India obtained democracy before industrialisation, that means a large section of the people are new to industrialisation, urbanisation and other forms of modernity. And also, we are a diverse democracy and hierarchical society undergoing rapid economic change. In that context, certain amount of equal access to technology can enhance political equality, even though this may not alter economic inequality. Political and social equality in a liberal democracy can be promoted with the equal and enabling access to technology. For example, computerisation of land revenue records is socially and politically neutral. Whoever has, or does not have, land can obtain information about land ownership. Likewise, e-governance can improve civic services; reduce the time consumed in directly approaching the offices of the government. Also, the most important dimension of E-governance is that it can promote transparency thereby reducing corruption and delay in governmental services.

E-governance is thus accepted at the state level by states that are actively participating in economic reforms. Governance reforms are often taking place together with economic reforms. The union government and the state governments are increasingly adopting single-window clearances, that is, all the necessary clearances by the state/government for investment are given by approaching a single office or through electronic means. There is also competition among the states to attract investments and this is leading to more and more introduction of electronic mechanisms to allow flow of capital. Free flow of investments on the other hand is creating more and more need for regulatory measures. However free the capital can flow, it still needs regulation even in a globalised environment and open economies. That is why multiple regulatory bodies are created. And when there are no regulatory mechanisms in place, large scale loss to the exchequer of the state or corruption have happened in the recent past in India. Thus, E-governance has crucially also to do with economic liberalisation, move away from relatively closed national economies to relatively open economies. This has both positive and negative dimensions.

Going by the above, governance also came to mean governance of economic reforms. In India since two-and-half decades the economic reform has been on, there is competition to provide favourable conditions for capital investments by all the states. In these conditions, E-governance assumes significance as 'ease of doing business' reports in the media often show. The voice of ordinary citizens too is now easily heard via social media or through increasingly competitive digital and print media. Particularly in India, the measures like the Right to Information have been compelling the state to make as many of its policies and decisions public. What goes on inside of the state is increasingly under question.

At present, even the governments and their ministries and departments are on the internet and social media. Thus, unless deliberately done, it is not possible to withhold information by the state/government. This also raises issues of cyber security, extent of internet freedom, and the necessity of privacy laws of internet use. Thus, in countries where there is market freedom but no regulation can also be problematic. Often for governance partners, such as markets and civil society, this creates a need for either state creating a regulatory authority or they themselves must constitute a regulatory authority. All the classic questions of politics, thus, come to the forefront. What should be the role of the state? Where should it limit its reach? What should be the freedom of civil society, markets or individual? What should be the limits of individual freedom and what should we do with normative social structures and values that a society of human beings needs etc. To what extent individuals owe obligation to the state and fellow human beings? These are the questions that political philosophy concerns itself (Wolff. 2006). These questions reappear time and again even in the information society.

Governance, multiple-jurisdictions and regulation

As mentioned in the beginning, governance by definition involves introduction of non-state or quasi-state, market and/ or civil society actors into a pattern of rule. This results in, besides hybridity and plurality, also multi-jurisdictionality (Bevir, M. 2011). That is to say the different actors involved in governance have or come under different jurisdictions. And therefore are either to be brought in under the jurisdiction of the state or should have their own regulatory authorities. Even if all the partnerships

are forged by the state, we need to understand that the state retains its primacy in them. For example, civil society in India. It is certainly unwilling to come under strict regulation of the state for many reasons of its own. In that case, partnerships of governance with civil society require the latter creating its own regulatory body.

Box: 4 Citizen Service Centres – ‘Bengaluru One’

‘Bangalore One’ or B1 is based on PPP and aims at delivering citizen-centric services to common people. It is a ‘One-Stop-Shop’ for all C2G (Citizen to Government) facility to ensure accountability, convenience, certainty and speed through easy access to a chain of computerised Integrated Citizen Service Centres and also multiple delivery channels like Electronic Kiosks, mobile phones and the Internet. B1 also aims to provide cost-effective methods of service provision to the department/agencies and efficient and real time MIS and EIS to the departments which would enable them to work on core functions and free them from routine operations.

‘Bangalore One’ is being implemented in a phased manner. The estimated number of these Centres required is about 100 G2B (Government to Business), G2C (Government to Citizens) and B2C (Business to Citizens) services in the city. Government of Karnataka has decided to establish 15 service centres and 24 basic services of 9 Government Departments in the B1 project. Eventually, they plan to bring all the G2C and G2B services within the purview of B1 project to see that citizens and business people could avail all services at the centres except for specialised services. Currently, there are 23 B1 centres and 82 Mini B1 centres. Services offered by B1 centres include both B2C (telephone bill payments, insurance premiums payments, government job notifications etc), G2C (Bengaluru Electricity Supply Company - BESCOM, Bruhat Bengaluru Mahanagara Palike (BBMP), Bengaluru Police Service (BPS), Regional Transport Office (RTO) etc) have integrated with the B1centres to provide various services to the citizens. B1 project will also be evaluated periodically through independent agencies to ensure its efficiency in attaining the set objectives.

Source: Manasi. S, 2015a.

For example, multi-national corporations which enter governance process with partnerships on competitive basis (See Box 4). In that their jurisdictionality is multi-national. How does the state manage its partnerships in that context? The point is that governance partnerships of state with quasi-state or non-state entities lead to questions of multiple-jurisdictions⁵. And therefore the state needs to create independent regulatory bodies to organise these partnerships. Governance and plurality and hybridity of the state therefore necessitate some kind of regulation. So far as E-governance is considered as a public service delivery mechanism, it has proven itself as beneficial. The efficiency, effectiveness transparency and economic nature of the services have certainly improved wherever E-governance is applied (See Box 5).

⁵ In the telecom spectrum allocation by the government, Vodafone case is a prominent example of how the Union government had to deal with a multi-national company operating in terms of multi-jurisdictionality.

Box 5: Upgrading Traffic Management

Bengaluru's vehicular population has grown immensely resulting in traffic congestion and reducing the average speed of vehicles to as low as 10 kmph during peak hours. 'Bengaluru Traffic Improvement Project' - B-TRAC 2010 was initiated to improve the traffic management systems with the aim to reduce traffic congestion by 30 per cent in central area, accidents by 30 per cent, pollution levels and improve compliance of Traffic laws and rules. It also set up an effective Trauma Care System. Many components are being incorporated in the plan like road markings, signage, enforcement cameras, surveillance cameras, upgradation of traffic signals including vehicle actuation and will be integrated into the Interim Traffic Management Centre. The information from traffic signal system, signal timings and traffic flow data will be real time data that will be processed instantly to ensure harmonised results.

Bengaluru Police has provided 612 Blackberry phones and wireless printers to traffic sub-inspectors and inspectors to levy spot fine collection and receipt. For those who cannot pay the fines on-the-spot, details are provided and will be put on the server. The system also aids in booking cases and it stores history of repeated offenders in the server. Registration data base from the transport department is linked to Automated Enforcement Centre. Currently, there are 175 surveillance cameras watching violation of various traffic rules. Besides this, the traffic violations have been recognised by the interceptor effectively. Interceptors are used for deployment of traffic violations by surprise since it is not possible to install enforcement/surveillance cameras at all junctions. For instance in 2014 the total number of cases recorded were 1,34,835, collecting a fine of Rs.3,72,11,600.

Source: Manasi. S, 2015a.

The major challenges to E-governance include:

Economic inequality: Economic inequality is a major barrier to access e-governance. Unless the equipment used in E-governance becomes cheaper, economic inequality can enable some to access e-governance better than others. This is partly also a problem of digital-divide. The inequality in access to economic resources also translates into digital divide and non-economic sources of inequality add to this.

Inequality other than economic: Inequality in India is complex and multi-dimensional. There is social inequality, educational inequality, inequality of literacy; inequality of regions and places and inequality among various socio-economic groups owing to all these which in turn affect equal access to E-governance. Ironically, information is supposed to level these inequalities so far as governance and delivery of public services is concerned. Information society is supposed to be a 'flat society' without the hierarchies of the social order coming in the way of reach of information to individuals. However, how far this is true in a society, like that of India, is open to question.

Resistance from traditional bureaucracy: There is often resistance from bureaucracy which does not appreciate transparency. In an unequal society information too is a privilege. Bureaucracy feels insecure with increasing digitisation and likely to fear either retrenchment or reduced recruitment. It is

indeed true that the governments want a thinner bureaucracy and less of state bureaucracy than earlier times.

Lack of regulation of electronic governance: Electronic governance also requires vigilance. Cyber crimes are a reality. With increasing online transactions, trade and commerce taking place via electronic means, the vulnerability of ordinary citizens to cyber crimes too has become a reality. This is the major reason why electronic governance needs cyber security.

Lack of privacy laws: When electronic governance is introduced, strict privacy laws for protecting individual from the overreach of the state and non-state entities too is necessary. Mostly, it appears that developing countries are introducing Electronic governance enthusiastically but commensurate privacy laws are either missing or still in the preparation. This dimension of governance is important as much as the protection of individual dignity and rights is concerned.

A surveillance society and polity?

As a result of the above mentioned challenges, E-governance and digitalisation of governance can easily lead to a surveillance society. This is particularly because the information about citizens gets placed in the hands of the state. This can increase the power of the state over citizens. Interestingly, with weak privacy laws, the electronic information can also be collected by non-state entities and may lead to the misuse or use by vested corporate interests.

In the context of rural governance, the above danger is more serious because the beneficiaries of schemes and programmes of the governments, and in fact, all the persons who enrol in digitisation are not only poor but are also likely to lack literacy, leave alone digital literacy. Therefore is the fear of surveillance state and society.

The above discussed are some of the benefits and concerns about e-governance and digitisation. It would be wrong to think that the power over individual in society, through collection of information and through use/misuse of it is done only by the state, in a world without strict privacy laws the misuse and wielding of power over the individual can be done by parallel societal forces as well. Such as for example, the corporate sector or corporate media. Therefore, as we mentioned, technology is Janus-faced and its use and misuse depends on the ethical foundation of society; as also on the democratic control that citizens can wield over state entities and parallel social forces.

From E-delivery of public services to digitisation of economy

While E- Governance is often criticised on the grounds of serving neo-liberal agenda of the state, digitisation is critiqued on the grounds that it serves the same agenda of 'LPG' (liberalisation, privatisation and globalisation). These are often sweeping criticisms without a nuanced view being taken of technology. Even Marxian point of view takes technology very seriously as a productive force. It is the dialectic between the productive forces and social relations that leads to social change. In this context, the criticism that technology only serves the interests of the state or the ruling classes is incorrect. What is missing in this point of view is the revolutionary role technology plays in bringing

about change. While technology revolutionises old social relations, it also creates conditions for new contradictions: such as, for example, digitisation hastens the progress of integration into global financial markets (Fulcher. 2004), at the same time, intensifies contradictions at national level. Therefore, the usual criticism that technology only serves 'LPG' should be taken with a pinch of salt. A more nuanced view of technology is necessary.

In the light of the previous discussion, what emerges is that there are two distinct dimensions to E-governance and digitisation. E-governance is supposed to limit itself only to delivery of public services. Whereas digitisation involves entire economic system; there is difference between the delivery of services by e-channels at the level of different state governments and digitisation of the entire economy. We began this paper mentioning the benefits of e-governance. Largely the picture available from the states which are implementing the same is positive.

Whether the same can be said of digitisation is, however, doubtful. When we digitise the economy we become vulnerable to the fluctuations of global economy. Indian economy was anyway integrated into the global economy, and if we add digitisation to that process, economy and private citizens become more and more vulnerable to the fluctuations of the global financial system. Both the E-governance as a matter of state functioning, and digitisation of the economy, warrant, more than any other, strict privacy and cyber laws -- If at all we are to avoid the overreach of the state *vis-à-vis* individual and overreach of the corporate and other social forces *vis-à-vis* individual human rights. In the absence of the latter, individual dignity and rights are at stake. By this we do mean that electronic overreach by the state and social forces on the individual can result in total control by these forces. This is not to invoke, by emphasising individual rights, 'bourgeois egotism' and bourgeois right to property alone; even property-less individuals need rights to privacy and dignity. In the absence of strict privacy laws the rights of the individual can be jeopardised. It is a serious question of political ethics and political philosophy as to whether the state should exceed its limits in encroaching into the rights of the individuals in economic data, medical data and all other types of 'data'. It is also extremely important whether the horizontal social forces created by capitalism such as multi-national firms and corporate media should have any access at all to individual information. And what of the classical question of political philosophy as to what extent the state is autonomous from these social forces? Therefore the entire question of individual privacy becomes even more important.

E-governance as implemented by different state governments at that level can help better delivery of services; whereas digitisation of entire economy and financial system strengthens the central state. And both the processes -- e-governance and digitisation -- are not completely foolproof. They are vulnerable to data-theft by parallel social forces and not just by the vertically ordered state. These could range from MNCs to terrorist organisations to any other type of cyber criminals. Because for all the data collection, individual is the unit, much like in the case of individual franchise, individual rights are at stake. Individual human rights can be jeopardised both by the centralising drive of the state as well as powerful parallel social forces.

In a situation where there is weak or no regulation, non-existent or non-enforcement of strict privacy laws, the digital world can become free-for-all. Who then in turn should protect the individual from the overweening state and marauding capitalist corporations?

Are we then ending up with pessimism, while we start this article with hope? Political philosophers have always suggested that while we should celebrate a revolution, even a bourgeois or technological revolution — bourgeois revolutions are often contingent *inter alia* upon technological revolutions — we should also cultivate a healthy scepticism towards the same. If technology is Janus-faced, as we argued in the above, so are bourgeois revolutions premised on the technological revolutions. To conclude, E-governance of public service delivery can be beneficial to the citizens, whereas it is doubtful whether the same can be said of the digitisation of the economy.

References

- Avineri, S (1968). *The Social and Political thought of Karl Marx*. Cambridge: Cambridge University Press.
- Bevir, M (ed) (2011). *The SAGE Handbook of Governance*. London: Sage.
- Bhatnagar, S (in Bidyut Chakrabarty and Mohit Bhattacharya, ed) (2008). E-Government: Building a SMART Administration for India's States. *The Governance Discourse: A Reader*. OUP.
- Chitlangi, B M (2008). The Concept of Good Governance: The World Bank Perspective. *Prashasnikā*, 35 (1): 44-50.
- Dawes, S S (2009). The Evolution and Continuing Challenges of E-governance. *Public Administration Review*, 68 (s1).
- Fulcher, J (2004). *Capitalism: A Very Short Introduction*. Oxford: Oxford University Press.
- Mishra, P (2014). Progressive Punjab: A Step towards E-Governance. *Indian Journal of Public Administration*, 60 (2): 341-49.
- Manasi, S, Smitha, K C, Nadadur, R G, Sivanna, N and Chengappa, P G (2013). Urban Property Ownership Records (UPOR) in Karnataka: Computerized Land Registration System for Urban Properties. *ISEC Working Paper No. 308*.
- Manasi, S, Hemalatha, B R, Sivanna, N, Chengappa, P G and Nadadur, R G (2015). Land Policy and Administration in Karnataka: Bhoomi-KAVERI-Mojini Integration – An Analysis. *ISEC Monograph No. 42* (ISBN 81-7791-141-4). Bangalore: ISEC.
- Manasi, S (2015a). Smart Technologies in Smart Cities – Insights into Bengaluru City's initiatives. *Journal of Development Management and Communication*, 2 (2), ISSN 2348-7739.
- Mill, J S (Ed. by Acton, H B) (1912). *Utilitarianism, on Liberty, and Considerations on Representative Government*. London: Everyman's Library.
- Sapru, R K and Y Sapru (2014). Good Governance through E-governance with Special Reference to India. *Indian Journal of Public Administration*, 60 (2): 313-31.
- Steger, M B and Roy R K (2010). *Neoliberalism: A Very Short Introduction*. Oxford: Oxford University Press.
- Wolff, J (2006). *An Introduction to Political Philosophy*. Oxford: Oxford University Press.

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