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Smart Cities in Asia

Understanding the governance implications of smart cities mission

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Abstract

Government of India plans to achieve transformation of India's urban scene through Smart Cities Mission (SCM). Critical perspectives on '*smart cities*' in academic literature paint the concept as a techno-utopian planning ideal with little citizen involvement, whose practice leads to exclusionary planning in cities. Using Howarth's (2009) approach (post-structuralist discourse theory) to policy studies, we critically examine the instrumentality through which the concept has gained political traction in India, paying attention to the discursive strategies at play in its emergence. Following the methodological considerations suggested by McCann and Ward (2012), we have interviewed smart cities experts and ethnographically observed their speaking spaces, by following them to conferences and seminars where policy knowledge is being mobilised. We discuss the initial findings from an on-going study in the form of discursive structures emerging from the political field - Technocratic Application versus Inclusive Political Practice; Citizen Participation versus Citizen Manipulation; Self-financing versus Public Financing for public services.

Keywords: smart cities, post-structuralist discourse theory, policy ethnography

Introduction

Transforming Urban India is a political project in which governments (Centre, States, and Urban Local Bodies), and a number of other actors including multinational corporations, individual experts, audit firms, think tanks, international organisations etc. are participating (Hoelscher, 2016). Pursuant to this goal of transforming urban spaces, the central government (in power after 2014 general elections) of India had promised to put in Rs 48,000 crore (US $ 7.5 billion) for 98 cities in the next five years as part of Smart Cities Mission (SCM). Almost two years down the road, the list of cities receiving funding under the mission has grown to 60, selected after a multi-phase competitive challenge.

There are three policy level developments in the urban sphere under SCM. One, it is the first instance of organising an expert mediated competition among cities to garner central funds for urban renewal in India (Tepa et al., 2015). The process started with application of a two-fold criteria of "urban population of State/UT" and "number of statutory towns in the State/UT" to arrive at distribution of 98 cities across the country[1] (Aijaz, 2016). Thereafter, in the first stage, the cities competed against each other within the State/UT, followed by a nation-wide competition as part of "Smart Cities Challenge" (second stage developed in partnership with Bloomberg Philanthropies) based on the smart city proposals (SCP) submitted[2] (MoUD, 2015).

[1] The list of 'smart city contenders' was expanded to 109 in order to include the one additional city each from J&K and UP, as well to include a set of capital cities that were not included earlier - Patna, Shimla, Itanagar, Bengaluru, Thiruvananthapuram, Naya Raipur, and the newest capital city of Hyderabad in Telangana. (ENS Economic Bureau - Indian Express, 25 May 2016)

[2] Initially 20 cities were declared as winners while the rest the cities which had submitted SCP, worked on improving their proposals and competed in subsequent rounds. The list of winners after round 2 is 60.

Two, SCM presents a significant shift in terms of relying on private consultant organisations and non-state hand-holding organisations in place of in-house bureaucratic capacity for urban planning functions[3] (Bhatia, 2016), reinforcing the trend which began under JNNURM (Mittal, 2014). Third, the central government has declared that it shall no longer be denying funds based on its own assessment of projects being (or not) associated with public benefit outcomes, implying that the programme funding would only be contingent on expert assessment of SCP submitted[4] (MoUD, 2015).

The mission has faced criticism with regards to the selection of cities under the programme which many argued proceeded in an unfair and inequitable manner. Also, a number of municipalities have interpreted the mission design as taking away their autonomy over decision-making of urban affairs - "the local bodies of Greater Mumbai, Navi Mumbai, Pune, Kochi and Nashik have indicated that the essence of 'local self-governance' will be defeated with focus on private sector driven SPVs (*special purpose vehicle*)" (Vaidyanathan and Bhattacharya, 2016). Further, in the context of current government's attempts to reverse the Land Acquisition, Rehabilitation and Resettlement (LARR) Act 2013, Hoelscher (2016) and Srivathsan (2015) suggest SCM as a strategy to overcome earlier failed efforts through stealth, wherein large tracts of land can be made available to private enterprises at low cost and the lesser hurdles of dealing with urban displacement, in the name of developing a techno-sophisticated area within the city.

[3] The smart city guidelines had come with a list of consultant organisations and hand-holding organisations which the cities could consult for making smart city proposal

[4] This departure becomes important in the context of preceding urban transformation programme JNNURM in which the ministry assumed the responsibility of evaluating projects on guidelines of public benefit and this impeded decentralisation (Pancholi, 2014)

In the face of above critique, there has been a frequent recourse to drawing upon the authority of international expertise and neoliberal rationality in order to defend the mission's design elements. The ministry had justified the need for assistance of experts to prepare the SCP, citing the exercise as a "complex technical challenge" (MoUD, 2015). The design elements such as private sector participation have been justified to attract private sector investments and make accessible private sector capacity to the smart city executive body. Lastly, any charge of political favouritism is countered by citing the delegation of the selection process to a committee comprising of experts with a global reputation[5].

Given the critique of the mission and reliance on expert authority to evade it, we inquire into the smart city concept's political uptake in urban India by analysing the discursive practices involving knowledge production over planning in cities. We use governance as an analytical construct to shift focus from concepts of policy cycle to the role played by actors other than government, multiple meanings and sources of authority as well as adopt an overall discursive orientation towards analysing policy process (Colebatch, 2009). We follow McCann and Ward (2012) in supplementing textual analysis of literature produced by corporations and government documents along with - interviews of key policy actors through following of people, policies and places; and that of ethnographic observations of the public speaking spaces of smart city experts, policy makers and municipal officials.

[5] http://timesofIndia.Indiatimes.com/India/Smart-cities-selection-not-discriminatory-Govt/articleshow/51240498.cms

In the first section, we have reviewed the claims and critique of the mission in popular writings. We follow it up with a brief review of the concept in academic literature establishing the need for documenting and theorising the enabling politics around the concept in specific contexts. In third section, we briefly discuss the post-structural discourse theory, followed by the method of data generation and analysis. In the next two sections we discuss our findings, starting with a genealogy of smart city from India's perspective. This is followed by delineating of discursive structures emerging from the field along which coalitions are seen to be developing - technocratic application versus inclusive political practice; Citizen Participation versus Manipulation; Market financing of projects versus Public Investment for municipal services.

Smart City in planning literature

The concept of 'smart city' relates to two major strands of urban imaginaries. The first set of imaginaries relate to 'New urbanism' in eighties of North American urban planning. It hinged on "improving the quality of life in cities by promoting communitarian ideas and by limiting urban sprawl, land consumption and private mobility" (Vanolo, 2016: p. 27). The insistence on improving urban design within 'New urbanism' graduated into the ideas of 'smart growth' - standing for planning compact and entrepreneurial cities. Second, smart city draws from the concept of 'intelligent city' which insist on using technology to engineer urban space and hence generate innovation in public administration, implement e-governance and promote social learning (Hollands, 2008; Vanolo, 2013).

Globally for a fairly long time, the concept was being developed and advocated by a small set of multinational corporations such as, CISCO, Microsoft and IBM (Hollands, 2008). The massive campaign of IBM, after global financial crises, had a story for municipal officials. It conceived the city as a system of systems which are functionally conceptualised, and interrelated pillars[6], and within them sub pillars[7] are identified. The story outlined a "techno utopian discourse exposing urban pathologies and (offering) their cure" (Söderström et. al, 2014: 308). In the context of demands for technical urban solutions for sustainability and resource efficiency, Söderström et al. (2014) argue that the concept was made an "obligatory passage point" towards solving urban management problems by the IT technology giants- IBM, Siemens and Cisco[8]. In this journey, the ideas of optimization and automation of urban infrastructures had their geographical rooting in Australian city of Adelaide, and twin cities in Malaysia - Cyberjaya and Putrajaya (Söderström, Paasche, and Klauser, 2014: p. 311). Thereafter, the notion of smart city continues to emphasize the overarching "goal of optimization which would benefit the larger whole of the city and which would make purposeness and meaning come together in the built form" (Steiner and Veel, 2014: p. 289).

Kitchin (2015) identifies the role of "academic, business and government literature" in construction of 'hegemonic discourse' on smart cities. First, academics from "sciences and

[6] Such as planning and management services and infrastructure services

[7] Such as Planning and management services' into public safety, smarter building sand urban planning

[8] "Townsend (2013, 63) puts it, 'Siemens and Cisco aim to be the electrician and the plumber [...] [and IBM] their choreographer, superintendent, and oracle rolled into one' " (Söderström et al., 2014: p. 316).

computational social sciences" background tend to "position their work as pragmatic and non-ideological" (p. 2). They uncritically accept the idea of optimising resource consumption through ICTs as leading to economic growth and even improving governance. Second, businesses and specifically publications from technology giants, present their smart solutions as ready to be deployed technologies. Through civil society they demand for further deregulation, public capital support for PPP (Public Private Partnerships) in order to secure efficient implementation (or building) of the smart cities from their perspective. Lastly, he finds that the municipal, national and supra-national governments (including European Union) largely "endorse the smart city concept as the path to socio-economic progress and more liveable, secure, functional and competitive and sustainable cities" (p. 2).

As a counter to the 'hegemonic discourse' of smart cities, Kitchin (2015) identifies the work of "critically oriented urban scholars" as part of alternative discourse which tends to expose the neoliberal ethos of smart city policies (cf. Hollands, 2008, Greenfield 2013; Vanolo 2013), and provides more inclusive alternative visions of smart city policy (cf. Townsend, 2013; Hollands, 2013). These perspectives find dominant imagery of smart city as a techno-utopian planning ideal with little citizen involvement and as a most recent manifestation of corporate driven exclusionary planning in cities (Hollands, 2008; Söderström et al., 2014; Vanolo, 2016). However, Kitchen (2014) critiques the work of these authors on account of not conducting "detailed genealogies" of the smart city concept, including the explanation of its political uptake in different concepts. He adjudges this an outcome of not pursuing an in-depth empirical case studies of specific smart city initiatives (Kitchin, 2014).

An inquiry into discursive practices of knowledge production would allow us to construct a detailed genealogy of smart cities in specific socio-political context. This would involve a post-structural theorisation of urban politics around smart cities mission in India.

Theoretical Approach

We are using Post-structuralist discourse theory (Howarth, 2010; Paul, 2009) to explain the emergence of smart city concept on the urban policy field of India. It is a socially constructivist approach to explain policy stabilisation, maintenance and change. By employing Foucault's post-structuralist conception of power and discourse, the approach is able to reveal the emerging political frontiers including their acts of inclusion and exclusion (Howarth, 2010).

While post-structuralist discourse theory pays attention to the motives, interests and arguments of policy actors as well as that of organisations, the approach stays away from ascribing any fixed essences to their agency, preferences, and interests. The interpretations of actors as well as that of researcher become meaningful only "within the contingent discourses that make them possible" (Paul, 2009: p. 245). This approach allows researchers "to historicise, scrutinize, and de-naturalize the seemingly fixed interests and identities assigned to subjects" (Paul, 2009: p. 243). Public policies are seen as social constructs, and any specific policy is the "contingent outcome of the political struggle between competing discourses" (Howarth and Griggs, 2015: p. 117). The objective of policy analysis is then to "critically explain why and how one particular

policy has been formulated, accepted, and implemented, rather than others" (Howarth and Griggs, 2012: p. 309).

Post-structuralist discourse theorist stress the "*radical contingency and structural undecidability* of discursive structures" (Howarth, 2010: p. 312). They work with the orientation that "all systems of meaning are in a fundamental sense lacking or incomplete, and this absence or negativity prevents the full constitution of discursive structures" (Howarth, 2010: p. 312). Discourse in this theoretical approach is understood as a "partially fixed system of rules, norms, resources, practices, (and) subjectivities, which (*is*) constituted politically by the construction of social antagonisms and the creation of political frontiers" (Howarth and Griggs, 2012: p. 307). Power is exercised through discourse and this exercise "*constitutes* and *produces* practices and social relations" (Howarth, 2010: p. 310). Therefore, the meaning associated with policy phenomena becomes significant only when seen as part of specific discourses (Howarth, 2010).

Discourses draw upon actors to form coalitions around certain policy issues. In Hajer's (1995) words, discourse coalitions are the "group of actors", sharing and invoking particular "storylines over a period of time", in the context of social practices associated with a policy. Storylines are the "discursive cement that keep the discourse-coalition together" (Hajer, 1995, p. 65). In any policy field, there may be multiple coalitions which can be identified through discovery of the positions of stakeholders and other actors as they argue their case by invoking the storylines, narratives and metaphors of the field. Though the major discourse-coalitions are identified

through their different respective story-lines, there can emerge in a policy field, an innovative story-line, which appeals to multiple coalitions and hence, brings a discursive policy change.

Howarth (2009) argues for using neo-Gramscian notion of *'hegemony'* to understand the policy process involving of "linking together disparate demands to forge projects or discourse coalitions". Hegemony thus enables establishing "a type of political relation that creates equivalences between disparate elements via the construction of political frontiers that divide social relations" (Howarth, 2009: p. 318). It works to "create analogical relations - forms of resemblance - between (*antagonistic*) demands, whilst articulating representational forms that can partially fix or condense such demands into a more universal unity" (Howarth, 2009: p. 320).

The incompleteness within a policy regime or practice implies "inconsistencies or tensions as well as various exclusions or negations, which cannot be captured by any essential set of rules or principles" (Howarth, 2009: p. 312). Here, Howarth (2009) brings in the Lacanian concept of fantasy to explain how subjects overcome these tension through "their identifications with certain signifiers and figures". He clarifies that "fantasy is not just an illusion or a form of false consciousness that comes between a subject and social reality. Instead it structures a subject's lived reality by concealing the radical contingency of social relations, and by naturalizing the various relations of domination within which a subject is enmeshed" (Howarth, 2009: p. 322). Howarth (2009) identifies the other face of hegemony, working to conceal from subjects of regime the radical contingency of their demands, enabled through a "complex range of strategies

and tactics of government that are imbued with various forms of knowledge and expertise" (Howarth, 2010: p. 321).

Method

McCann and Ward (2012) have guided us in formulating a concrete research design that is consistent with the emerging insights from post-structuralist geography and policy transfer literature. Geographers have now accepted the limitations of studying cities in a bounded manner when the policy within any city itself has acquired a highly relational and composite character (Massey, 1993). Cities from this perspective are “assemblages of materials and resources, knowledge and understandings from close by and far away, from the present and the past” (McCann and Ward, 2012: p. 43). "Cities are made coherent through the work of their inhabitants, through the efforts of actors located elsewhere, and through the power-laden and uneven relations among these various actors, all set within larger social and material contexts which tend to complicate straightforward assumptions about causality" (McCann and Ward, 2012: p. 43). Scholars working at the intersection of these fields (McCann, 2008; McCann and Ward, 2011) have exposed the global circuits of policy knowledge in which policy makers “under pressure to *deliver* successfully, quickly and at low cost, scan for policy models” across the globe and implement them hastily in their respective jurisdictions (McCann and Ward, 2012: p. 45).

McCann and Ward (2012) discuss in detail the need for two considerations - first is the researcher's’ physical movement to follow through with people, policies and places that are invoked or drawn upon in policy arguments; and two, they emphasize on pursuing a detailed

ethnographic study of situations in which “policy knowledge is mobilised and assembled” such as “conferences, seminars, work-shops, guest lectures, fact-finding field trips, site visits, walking tours, informal dinners and trips to cafes and bars, among many others”. The discursive practices of mobile policy actors (experts travelling for conferences, training, and presentations) can thus be analysed through this method.

In line with above considerations we are doing ethnographic observations of the smart city summits (or conferences) in the country. Through physical presence and participation in these forums either through speaker presentations or through posing questions/comments for other speakers, we have attempted to build networks with activists, concerned municipal bureaucrats, mayors, corporators, and private sector consultants. By following them through conversations in these places to which actors travel to, we have gathered their perspective on various aspect of smart cities mission. To a large extent we draw upon our technical knowledge of urban planning and transport planning in building social relations with policy actors involved in techno-sophisticated planning. However, we observe that our identity of researchers from an elite business school in India has been crucial in facilitating an access to some of these people and spaces. It has allowed us to reflect on our positon as viewed by other stakeholders within the discursive field of knowledge production and sharing over smart cities. We are not disclosing the identity of the city and associated officials in order to protect our access to the consultants and official machinery at the municipal level.

Genealogy of Indian Smart City

In this section, we attempt to historicise the development of smart cities mission in India. We attempt to draw continuities and contrasts between drivers of urban policy before and after the mission. In the following section, we outline discursive structures along which we see policy instability as a result of contestation and alignment with opposite policy discourses.

Urban Context before Smart Cities

The concern for urban issues or the role of cities in the national agenda was largely absent post-independence as the focus was on alleviating rural poverty and achieving economic growth along with balanced regional development (Batra, 2009). Till the dawn of era of liberalisation in 1990s, the concerns were restricted to managing the growing number of slums as cities were trying to fix problems though their spatial plans (the master plan approach) (Batra, 2009). From mid -1980s onwards, an advocacy for "greater devolution of funds (and hence power) to urban local bodies" is seen in five-year plans, in order to further community participation as well as "private initiative and investment in urban development" (Shaw 1996: p227). Alongside, a critique of subsidised and inequitable supply of various public services had also emerged in the eighth plan document (1992-1997) which reasoned for "strengthening the regulatory/organisational base of urban local bodies" (p227). Amidst these processes, constitutional status was granted to urban local bodies through the 74th (Constitution Amendment) Act, 1992, which gave constitutional backing to decentralised governance processes pushing devolution of essential functions to lowest level as well as the demands for self-financing mechanisms.

In the post liberalisation era, through publications such as India Infrastructure Report (1996), urban policy concerns started translating into the language of infrastructure centric deficits to be plugged through private investment (Batra, 2009: p21). The logic was to point out financing requirements of a scale that is beyond the capacity of government to mobilize and therefore the imperative to rely on "assumed efficiency" and "new-found capability of private sector" (Batra, 2009: p21). International Financial Institutions such as World Bank (WB) and Asian Development Bank (ADB) also played an ideological role - they have pushed governments in developing countries to create incentives for cities to draw upon capital from financial markets thereby reducing their dependence on higher level governments (Baindur and Kamath, 2009). These developments entailed a mandate to free up the land markets for private capital gains based on the logic of efficiency of private sector in providing affordable housing for the poor vis-a-vis the corrupt state organisations.

Urban policy adopted a sharp techno-managerial orientation under JNNURM (Gopakumar, 2015). The reforms underlying these management technologies of JNNURM made ULBs more accountable to investors and propertied urban middle class (Shatkin and Vidyarthi, 2014). The programme had provided significant opportunities for collaboration between public technocrats, new elite private professionals and middle classes leaving aside any voice of the poor. As an antecedent to smart cities mission, there have been cases of investing advanced technology in new towns such as Gurgaon and Electronic City of Bangalore, which allow to 'bypass urbanisation' ills in existing mega-cities and hence serve the "new economy of knowledge-based activities and business driven by global capital" (Bhattacharya and Sanyal, 2011).

Urban Question under Smart Cities

The initial takers for the label of *'smart city'* in above urban context, were real-estate developers as they were searching for investment opportunities in large-scale Greenfield projects. Dholera City and GIFT city are two places in state of Gujarat from where some of earliest claims of being smart city emerged. These towns share the legacy of manipulating 74th constitution amendment through creation of industrial townships under article 243Q. Enabled by this administrative provision they host a variety of regulatory and tax-regime relaxation to attract firms. In this light, Datta (2015) finds smart cities an urban utopia, motivated by nation-wide adoption of Gujarat model of economic development which places an entrepreneurial state in charge of the transformation process.

The smart cities mission (SCM) in its infancy was indeed conceived as a green-field programme advancing features such as "a centralised surveillance system, a digitally monitored water-supply programme, technology-enabled waste collection and other Information and Communications Technology (ICT) driven amenities" (Srivathsan, 2015). It changed over time to incorporate transformation of existing cities by upgrading physical, economic, social, legal and institutional infrastructure. Because of these shifts in the mission design, it started resonating like the urban development programmes before it, albeit accommodating following departures – mandatory ICT application in solutions, competition to receive funds (Srivathsan, 2015), and a parastatal body to execute the mission (MoUD, 2015). In light of above departures, Hoelscher (2016) interpreted that the essence of mission is an attack on urban informality encountered by the state planning regime in transforming the land-use.

The 74th (Constitution Amendment) Act, 1992, enabled State Governments to devolve functions (such as urban planning), funds and functionaries to the lowest tier of government. In this context the selection of cities for their transformation in the first stage of SCM has been projected as the political decision at the State level. The control over preparation and evaluation of preparedness of different cities rested with the state government machinery. The second stage of the process, however, is extensively projected as a neutral and objective process of ranking cities mediated by national and international experts from London School of Economics and alike[9] (MoUD, OM K-15016/61/2015-SC-1).

The mission design also presents a significant shift in terms of relying on private consultant organisations and non-state expert organisations, practically replacing in-house bureaucratic capacity for urban planning functions[10] (Bhatia, 2016), thus reinforcing the trend which began under JNNURM[11] (Mittal, 2014). While relying on the shoulders of non-state expertise, the central government has attempted to evade the charges of being partisan in selection of cities. It has repeatedly declared that funds are no longer contingent on ministry's assessment. Rather, they are being managed through an objective international experts mediated process.

[9] LSE also claimed to conduct a study praising India's smart city initiative for its transparency and participation of citizens (Sharma, 2nd june 2017 ET)

[10] The smart city guidelines had come with a list of consultant organisations and hand-holding organisations which the cities could consult for making smart city proposal

[11] Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was launched in December 2005, "to encourage reforms and fast track planned development of identified cities". There was emphasis on achieving "efficiency in urban infrastructure and service delivery mechanisms, community participation, and accountability of Urban Local Bodies (ULBs)/ Parastatal agencies towards citizens" (GOI, 2005).

Historically, the concept offers very little novelty with regards to emphasis on rationalist and scientific planning of cities, given the examples of scientifically planned cities (e.g. Chandigarh, Bhubaneshwar) by the likes of Le Corbusier and Königsberger. As a form of urbanism, smart city continues the tradition of identifying and gathering urban issues of the day (e.g. congestion) as metaphorical deficiencies or illnesses (Gunder and Hillier, 2007). Hollands (2008) in an early critique of the concept, pointed towards the self-congratulatory style of its proponents which propels a labelling process crucial to the concealment of the negative effects of "technological and networked infrastructures". Despite carrying unprecedented vagueness, the concept acquired discursive power within 'non-ideological' academic circles after it succeeded securing research funding from European Union (Söderström et. al, 2014). From there, it acquired space within mainstream discussions on sustainability associated with agenda of eco-cities - planning cities for adapting to and mitigating climate change.

Kitchin et al. (2017) use the lens of 'epistemic communities' (Haas, 1992) to mark the shared worldview and "a common set of normative beliefs, values and practices" driving the knowledge and policy network of smart cities. The rise of a plethora of institutional arrangements has been crucial to the development of the smart city epistemic community - Non-governmental organisation funding move towards data based governance (e.g. Bloomberg Philanthropies); international lobby groups and bodies (e.g. Smart City Council); International standard bodies working to produce so-called 'objective' ranking and distributing awards to cities (e.g. Smart City Expo World Congress) (Kitchin et al., 2017).

In India, we can observe the inward mobility of institutional paraphernalia identified by Kitchen et al. (2017). There is a rise of think tanks advocating for data based urban governance (Open Stats). These organisations learn from International NGOs such as Bloomberg Philanthropies whose operations are geared towards promoting data based urban governance. They had funded the second leg of competitive process in which selected cities prepared their proposals through aid of consultants and citizen inputs. Business World, a business focused reputed weekly magazine, extensively published views of technocrats under its campaign 'BW smart cities' and also organised events which drew participation from global experts together with business leaders, industry representatives and officials from urban development ministry.

Apart from the rise of business organisations, fitting the mould of various smart cities capacities elsewhere, we observe an important role being played by media companies in India that are interested in business of organising events on smart city related themes. One of the example of such organisations is Elets, a media company started in 2003. They used to publish general magazine articles on e-governance and ICT for development and were also involved in organising some media event around these themes. In 2010 they picked up the smart city theme, as was the trend for similar organisations in other contexts such as Europe and Korea. For smart cities, Elets frequently organises summits with a setting similar to a semi-trade event, funded by tech-giants and dependent on extensive participation from government officials and political office bearers for its success. These events are self-financed in a way that the exhibition spaces and

even speaker slots are funding slots for tech-companies. There is hardly any direct funding from public sector except for administrative facilitation for security related arrangements.

The conferences, workshops and seminars on smart cities in India can be differentiated on the scale of their political participation. Organisations such as PwC, Cisco, and Microsoft are identified as thought leaders and they are known to fund and organise relatively closed door event at luxury hotels with entry through invitation only. In these events there is lesser political rhetoric with the objective of forging the concept along the desires of common people. The secretaries and ministers who are invited to participate in these events, maintain focus around technical topics and motivate the industry to seek extensive collaboration with public sector. They usually have an award distribution ceremony over smart city categories. The organisations such as Exhibition India Group and Elets Techno Media Pvt. Ltd. takes this to another step where it involves political class but tends to structure the space as per the commercial interests. The organisers are usually applauded by most stakeholders publicly for enabling the exchange of ideas. Importantly, there is a celebration on the theme of contribution of such events towards India's growth story. There is paltry representation of individuals interested in furthering decentralisation of decision-making and giving agency to citizens for shaping the city.

Emerging Discursive Structures

Technocratic Enterprise and the inclusive political practice

We observe the first discursive structure emerging from the contestation on the nature of administrative practices under the mission. One set of stakeholders have actively architected the mission, and they lament the manner in which it is unfolding on the ground. The main problem with Smart Cities Mission for NSN Murthy (Smart Cities Leader, PwC) is that the SPVs in the city have been functioning as Ad-Hoc departments of Municipal Corporation. Upon probing this in a conversation, he explained that they are yet not functioning as companies in the manner that he had envisaged and for which he had pushed a lot of top official bureaucrats. We could also identify the people who are trying to induce multiple interpretations to smart cities label in specific contexts, by arguing for participation of elected representatives in decision-making over projects under smart cities mission.

This discursive structure also has nearly opposing stance on the focus on ICT technologies under the mission. While SCM has had a clear mandate on spending on ICT technologies for more efficient and optimised delivery of public services. Following the announcement of the mission, a number of commentators continue to question the need for investing heavily on ICT when most Indian cities even lack the basic infrastructure (Kalbag, 2015; Rajya Sabha TV, 2016; Varghese, 2016). Such a view has also been taken by not only social activist and urban scholars (Mukhopadhyay, 2016) but seasoned administrators of municipal governments as well. For example, Janardhan Reddy, Commissioner of Greater Hyderabad Municipal Corporation, was a

speaker on Mayor's conclave session in 3rd India Smart City Expo. He expressed scepticism regarding the technology solutions presented before him in the conference and argued for developing cost-effective, affordable solutions suitable to the Indian Context. Such arguments were responded by Mr Patrick Santillo (Minister-Counseler for Commercial Affairs, US embassy) through an appeal to the quality of solutions that we seek to make affordable solutions In Indian context. Soon enough he invoked India's supposed growth story for being visionary enough to implement advanced technological solutions.

Our conversations with a number of consultants revealed that the mission guidelines were developed in close consultation with the top leadership of PricewaterhouseCoopers (PwC), enabled through organising closed door conferences with participation from senior MoUD officials. Elets organises smart city summits in various parts of the country, with speaker sessions on various sectors of the smart city, conceived as technology sub-systems. In these sessions, apart from government officials sharing their achievements and challenges, presentations are made by representatives of tech-companies which are akin to sales pitch.

We observed the presence of elected representatives in some of these conferences. In a tier-2 city of eastern India, corporators (elected ULB representatives at the ward level) in the leadership of elected Mayor, openly protested the technocratic implementation of smart city concept in their city. A session in which Mayors from different cities of India participated mocked at the implementation of 74th Constitutional Amendment of Constitution. They specifically decried an absence of consultation with them during the proposal formulation stage and hence the lack of

understanding of smart city concept among people. To alleviate this, they appealed for creation of collaborative spaces in which citizens can lead the urban design projects at the mohalla (neighbourhood) level. However, a number of them also expressed satisfaction on how the central government in this new avatar of urban programmes has managed to energise all stakeholders. They find that such development within policy has increased the room for implementing innovative solutions at the municipal level.

The same conference also dealt with the challenge of speaking in the language of elected representatives. The local media ran the story after the first day of the conference that it failed to enhance the understanding of people and its representatives with regards to the concept as all talk used 'English' as the medium. The subsequent day witnessed a request to all speakers to speak in Hindi as much as possible. However, such responsiveness was observed as unprofessional by the technocrats who thought their primary audience is municipal commissioner and the SPV functionaries while the elected representatives should stick to decorative appeal of the setting.

Amidst such argumentation, the Central government deftly balances the contestation by speaking different things in different spaces. It is seen to combine the logic of both being affordable and technologically advanced by shifting through a set of progressive labels for smart city - such as Green City, Clean City, Safe City, Liveable City, and the City of Smart Citizens who participate in decision-making rather than reliance on smart technology (Naidu, 2015). We observe that the SCM was designed to work against the political society, its policy objectives, and

the method of operation. However, in its implementation, mission has constructed a moment of both crises and celebration within existing governance structures as there is demand to demonstrate successful application of global policy models and showcase the increased responsiveness of bureaucracy for its continued legitimacy.

Citizen Participation and Manipulation

The second discursive structure is observed on the issue of citizen participation. For a wide variety of stakeholders, SCM presents an unprecedented exercise of involving citizens in the planning of their cities. In this story, there are certain numbers that are often invoked. First, the figure of 16 %, which is the portion of the overall evaluation criteria that mission guidelines had assigned to citizen engagement. Second is 2.4 million, roughly number of inputs that were gathered through social media with smart cities tag. Third is 15 million, which is the official of number of unique people that were reached through the citizen consultation exercises.

A major challenge to this story comes from the ignorance and protest from the elected representatives about any such exercise being conducted in respective cities. They posited in the conversations off the dais to us that the above exercise are fraud, since as representatives when even they have not been consulted what sense can be made of above claims.

The Central Government has released official instructions for conduct of citizen engagement a number of times. One such official memorandum had specified activities for citizen engagement while cities were competing to be selected as smart cities. It called for activities such as "City-

level Talk by State Minister/Mayor/ Commissioner"; "Essay Contest" among school children and others on the "Mere sapno ka Shahr" (City of my dreams); preparation of "potential smart city solutions" to be placed in public domain followed by deliberation and polling; obtaining comments from citizen on draft Area based Development and draft pan-city proposal; placing final proposal in public domain supplemented by a talk over it. For the purposes of deliberation, polling and collecting comments, the cities were “encouraged” through official Memos to use the MyGov portal while they were “free to choose” any other traditional medium.

MyGov is a platform rolled out by the present central government under the broad agenda of citizen participation. It features a mix of marketing material about the present regime with information on government schemes and programmes. It invites ideas from citizen under specific topics, host blogs from invited people and has been claimed to be used to mediate a competition among citizens or organisations. The polling that happened through this medium and comments generated and other deliberations items were open for a short period of time as the entire exercise of preparation of smart city proposals happened over 4 months. This range of documents and associated data no longer is publicly accessible. Interestingly, PwC had signed an agreement with the central government for helping it in mining the data gathered from myGov[12] and the same firm is consultant to leading cities in the mission (e.g. Pune, Ahmedabad, raipur etc.).

[12] http://www.gadgetsnow.com/tech-news/PwC-to-help-PMO-mine-Mygovin-data/articleshow/45283887.cms

From our interviews with various citizen representatives in Tier-2 city, we learned that hardly any corporators and citizen groups had information about this consultation until it came in news that the city has been selected under the smart city mission. The essay contest did happen through myGov but these were largely restricted to elite schools. There is one particular respect in which the nature of citizen participation can be observed as changing. The agenda setters seem to have imbibed the technique of participation of the *docile* citizen without listening to their politically informed representatives.

In the implementation stage, the ministry reached out to governing bodies of the cities to engage citizens in a structured manner. It instructed the first 20 cities also known as “lighthouse cities” to host a competition in which citizen groups were invited to make proposals for redevelopment for a part of ABD zone. It instructed the competitive nature of it with details such as the number of cash prizes as well the necessary range for the prizes (MoUD, OM K-15016). This competition was required to be done through the myGov portal.

Examining the above exercise of citizen engagement from the lens of Arnstein’s (1969) ladder of participation reveals that the mission has hardly moved urban planning into participatory mode. Citizen engagement exercise on online portals where there is no specific method to even inform the elected representatives would fall into the lowest rung of participation in Arnstein’s ladder is Manipulation which "signifies the distortion of participation into a public relations vehicle by power holders" (Arnstein, 1969: p. 218).

Market financing of projects versus Public Investment

We have identified the tussle over financing model of urban local body projects as the third major discursive structure on smart cities policy field in India. Neoliberal reform advocates on one hand, decry the ability of municipalities to mop up own-revenues while on the other they celebrate financial models that do away reliance on ULB's own funds and decision-making. We observe that under smart cities there is a push for projects that are entirely financed out of project revenue stream and private sector funding, thereby removing the share of ULB funding from the equation. Upon enquiry the officials of one city justified such an approach as in their view it allows them to by-pass the general body of Municipal Corporation. Hence, the project structuring if more flexible and hence, greater cooperation is achieved from private sector.

A case for non-reliance on municipality's own funds can be interpreted from the smart city guidelines as well. The central government 'anticipate' that the scale of funds required for implementing smart city projects would be such that the public funds from the state and central governments would be "leveraged to attract funding from external and internal sources" (MoUD, 2015). In line with this, the guidelines have allowed for private sector holding (less than 50 %) of the SPV to attract private sector investments and make accessible private sector capacity to the smart city executive body. Through official memorandums, the cities have been instructed to maintain a "dedicated and substantial revenue stream" for the SPV so that it attains its own credit-worthiness "for raising additional resources from the market".

These developments can be seen in the overall global context where International Financial Institutions such as World Bank (WB) and Asian Development Bank (ADB) have been critiqued for autocratically pushing central governments in developing countries to create incentives for cities to draw upon capital from financial markets thereby reducing their dependence on higher level governments (Baindur and Kamath, 2009). Goldman (2011) has related the phenomena of capital movement triggered after global financial crises to risky destinations in India with the consequences of urban restructuring being pushed in order to integrate the city finances with global economy. In this context, the funding from World Bank for procurement of credit rating under smart cities as well as AMRUT under the Capacity Building for Urban Development (CBUD) project, is a crucial financial as well as discursive gain for the coalition trying to remove the reliance on municipal funds.

We observed voices opposing this development in some of the sessions which has major representations from elected representatives on the dais. One such example is the session organised by both Exhibitions India Group and Elets, called Mayor's conclave, where a mix of elected representatives and commissioners discuss governance issues in city planning. A number of mayors expressed on both these platforms the phenomena of drying up of municipality's own revenues as they see tax reforms getting implemented (rooted in taking away the liberty to have Octroi charges and tax restrictions imposed by GST). Some of these representatives complained in personal conversations that municipalities are being pushed to only implement projects in which there is no money invested by the State Government.

The private sector consultants for the pan-city component are pragmatic and optimistic about such development in the field of municipal finances. They argue that given the capacity of municipal officials in India, they do not want to risk the success of the projects on public funding which they believe would not come without extensive rent seeking and vested interest from both political office bearers and lower level bureaucracy. A conversation between PwC consultant and a COO of an SPV for smart city, involved discussing the financial model for public biking system. The consultant offered a modified version of public biking system where it is not even intended as public services for common users but rather an elite experience for health and entertainment because only that model is financially viable and the former one is doomed to fail given "Indian population conditions".

Though such envisioning of projects is being contested by people's representatives however they find their influence curtailed in the SPV model. They admit that existing municipal functionaries do seek rents while implementation of regular municipal services but they contend that the state of affairs can be improved. The attribute the problem to institutional mechanism for governance that still lacks transparency and allows bureaucracy to withhold project proposal details from the scrutiny of elected representatives.

Conclusion

We highlighted three antagonism among the policy community of smart cities. The technocrats and private-sector consultants see the company model under smart cities as a panacea to the "ills of fast urbanising India". We see hegemony of technocratic planning model under smart

cities mission where the implementation design allows establishing social relations between technocratic elite and private consultants to the exclusion of elected representatives at the municipal level. By imbibing manipulative modes of citizen participation, the hegemony overruns the diverse inclusive versions of smart city and the projects envisioned therein.

We observe that the spaces where policy knowledge is being mobilised, invites participation from municipal commissioners, state bureaucracy, smart city experts and representatives from other cities, to the exclusion of social activist, academia and other sections of civil society. Moreover, the programme tends to be structured as per the global-commercial interests due to exclusive funding from technology companies. This fosters reproduction of storylines in the events that present technocratic policy solution and are appreciative of manipulative citizen engagement. In this light we observe marginalisation of inclusive political practices under the broad architecture of smart cities mission. Therefore, we conclude this paper by highlighting the need for political intervention in knowledge-production spaces by civil society so that planners and policy-makers are drawn towards the alternative practices of deliberative and inclusive planning.

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