

Internet and Internet policy making in India

---Draft, in the works---

1. How do people think and talk about the Internet

What is the Internet to the Indian people

We asked people how did they relate to the Internet, as a person, and separately, as being in a certain profession. Regarding personal relations and experience we asked them to also freely think about and describe how other people they talk to think and speak about the Internet.

One of the most defining statement in this regard was “it is one thing that works, and is always on - tell me how many other things are like that?”. This statement describes quite aptly most people's personal relationship with the Internet. Internet is so extremely useful, provides so much, and its utility seemed to be ever improving. It seemed to be the only thing which provides you useful things that you could not even be expecting it to provide. The Internet presented an ever expanding world, full of newer and newer opportunities, to those who were really plugged in to it. And most of those who are less so plugged do already see its possibilities, and are nibbling at the margins to get into the 'Internet world', trying to get over different constraints of access, economic means, skills, behavioral patterns and so on.

The primary use of the Internet varied over four main areas; information access, communication and networking, entertainment and access to services. More professionals, especially those engaged in knowledge-intensive activities, seemed to mention information access as the top use. Communication and networking seemed to be most important for younger people. It is this group which also used the Internet a lot for entertainment. Older people, who have had a long life without the Internet, and were quite used to means of information and communication that did not centre on the Internet, tended to focus on access to various services, especially finance related, and ticketing, and to some degree, public services. Another category of people – certainly a niche group, who were either on a rebound from what they thought was too heavy (and time wasting) a use of the Internet, or otherwise preferred to downplay their informational and communicative dependence on the Internet, highlighted the access to services aspect as most useful, which benefit to them was undeniably high (and had little or no downsides). While this description may layout some shades or gradations of category-wise relative prominence of use, all regular users of the Internet seem to employ the Internet for all or most of the purposes listed above, and, mostly, extensively so.

Beyond what we do with the Internet, what it does to us is the next level of deeper discussion. Some tend to simply shrug off this question, at least initially, which perhaps represents the instinctive unease with the proposition that a technology can be doing something to us. However, on sustained inquiry, most people admit that technologies are having a deep impact on people and the society. There are two kinds of people who are quite comfortable with such deep personal impact. One kind, generally older people, with a lot of self-confidence in terms of their technology use, say that it is simply not a problem and that they are in absolute control. They employ ICTs to evolve in directions they would in any case very much like to – and which directions are merely strengthening of their normal selves. One

respondent said “older people think that they can use the Internet and then put it aside”. For instance, one respondent said that s/he used ICTs to cement her existing friendship circles, and to simply do better what her profession demanded her/ him to do – to think and write better. However, the person did mention later that one particular book s/he wrote could not have been written in the manner it got written but for the Internet. Technically proficient people, especially those who started to use the Internet early also exhibit such kind of confidence coming from a sense of control. One such respondent said, “Internet is a public place and I only say and do things on the Internet which I will say or do publicly. If you read the terms of service fine-prints of various service provider you would really know that you have no privacy, and I take that to be the default’.

Another kind of people very comfortable with Internet's growing personal and social impact are a set of younger users, who do see the Internet considerably change them, and perhaps co-constitute their evolving personal and social being. Unlike the earlier set of 'comfortable users' who could set technology as separate from them (and to a good extent derived their comfort from this separation), this group saw the Internet's deep inter-mixation with their selves and feel quite comfortable with it, even excited about it. They do not need to separate themselves from the technology to represent their comfort with it. Unlike the older 'comfort users' whose comfort came from a sense of distance and control, this younger set's came from a willful and easy surrender. One group saw the Internet more as a means, outside of them but very useful, while the other group saw the Internet as mixed with them, and espousing the values of freedoms, boundlessness and non-constraint, that they themselves mostly wanted to be associated with. However, it is still not that the individuals of this group have become or going towards being completely impersonal technology-dependent forms. One of the respondents who could perhaps be most identified with this group did pull back from extensive Internet use, which s/he thought was taking too much of his/ her time. He thought he was merely consuming the Internet rather than contributing to it, and withdrew for a year to a deep remote place with almost no Internet access. However, now he is again a heavy user but says that now he contributes as much as he consumes, through his blog and active Facebook page, both devoted a good deal to political satire.

While it is useful to understand a phenomenon employing categories, especially a phenomenon as vast and varied as the Internet, it should be obvious all these categories are not so exclusive. For instance, we were told by a older person, who associated her comfort with the Internet, for the sense of distance and control, how the Internet gives her a new level of 'intimacy and speed'. Apparently, very powerful new dimensions are being added to people's lived experience, and it is difficult to make simplistic distinctions between quantity and quality. Significantly, the same respondent said how Internet constantly triggered her mind, and kept it buzzing, which was a nice feeling. Such providing of constant stimulation by the Internet appears to be common experience, although not expressed in these terms by many. Internet did not just provide what you specifically sought from it, it also offers things and experiences on its own. Therefore, while the immense utility aspect of the Internet may dominate people's description of it, the cultural space and experience aspect of the Internet becomes easily evident, and is increasingly a big part of what the Internet is to people.

When probed for what they could be problematic with the Internet to people personally, even the above 'comfortable users' category could mention a few things, although they mostly seemed to take them in their stride. There were problems about authenticity of information, about intrusiveness of social networking spaces and fears of fraud with respect to online services involving financial transactions.

Another set of users considered these problems deep and pronounced enough to be rather careful about their Internet use, and accordingly see the Internet only as a mixed blessing.

Some people were rather concerned about the accuracy of the Information on the Internet. A few of those who are earlier described as being comfortable with the Internet and being in control however said that they have figured out ways to find out how and where to find trustworthy information. They consider it all a matter of personal skill and responsibility. Many others however remain deeply worried about harmful impact of the untrustworthy information all over the Internet. Others were very concerned about what Internet browsing did to ones faculties of attention span, deep reading, absorbing different points of view and critical thinking. Those who knew more about the Internet phenomenon were very bothered about the 'filter bubble' phenomenon, whereby the Internet keeps throwing back at us what 'it' thinks we want to read, and thus entraps us in a very dangerous self-echo chamber. In any case, as one respondent observed, "The Internet is transforming the way we think and express". That such profound changes in our person-hood are mediated by forces that can hardly be considered 'neutral' and attuned just to our personal interests was considered very bothersome. We heard expressions like "and even if they were just catering to our personal interest alone, how would they know what is that I want or even what is best for me!".

Most older people, putting the cut-off say at 35 years, still considered newspapers and TV as their main media. Most of the people – and here we are talking about urban professionals – increasingly got some stories and leads from their Internet-based networks, and the Internet was still a secondary medium for this in this regard. A respondent said; "Newspapers and TV are were I get my news from. However, if an important news is developing then I may occasionally look up the Internet for updates". A younger respondent said exactly the opposite, "I dont have a TV and almost all of my media consumption is through the Internet. However is an important news is unfolding I may look up a TV". This shows that while there may yet be a good amount of diversity in media consumption patterns, a significant convergence is shaping up. In a few years, Internet can be expected to become the chief site of media consumption for people who have good access to it. Already many young people routinely read their newspapers on the Internet. An increasing number view thier 'TV' on Youtube, and also rely on non-traditional media videos on Youtube for their news, informational and entertainment purposes.

Social networking is the big thing on the Internet, especially for most new users, which are increasingly the larger group on the Internet. People may or may not have a great appetite for information but everyone is into communication and network making. Older people taking to the Internet use it for strengthening and often revitalising extended family networks, which are rather strong in India. They often also reignite communication with friends that they may have got out of touch with, apart from reinforcing current friendships. The retiree's relationship with the Internet is also noted as a very significant phenomenon, with a lot of people with good access and adequate needed linguistic (Internet being still largely in English) and behavioral skills suddenly become rather intense users of the Internet. Some young respondents joked about how they have suddenly begun to be flooded with forwards and links from such retired relatives. A few young persons who grew up with the Internet relate an interesting shift from anonymous or at any rate strangers-oriented relationships of the early Internet (for instance, chat-rooms) to the mapping of the Internet onto ones relationships in the 'real world'. The Internet is having a huge impact on people's communication and relationship management, and for many it is impossible to stay out or drop out of the Internet based social networks. It is such

networking, and basically 'being on the Facebook', that was reported by one respondent, working with rural groups, to be the single biggest attraction of the Internet among the very young (13-18). Often the Internet is just Facebook for these people and they may only use the term 'Facebook' rather than the Internet to describe what they are accessing or are looking to access. They want to have a Facebook presence and as many Facebook friends as possible, with the total number mattering a lot.

On the other end, among those who have been early users of the Internet, more mixed attitudes to what many of them describe as the intrusiveness of the social networking services have begun to emerge. We found some people who, feeling that Internet based communication and networking was eating too much into their time, or were otherwise often superfluous, have begun to be more deliberate about using these applications. A few have gone entirely off Facebook – and Twitter, if they ever used it, or are now only casual and intermittent visitors to these sites. As has been witnessed with many other Internet based phenomenon, it may be that after some time and degree of use, the initial shine and promise of some of these applications may be wearing off. It is important to note that Internet so often thrown in people's lap such unimagined possibilities and functionalities that they trigger an early phase of very heavy usage. After some time, however, a better mapping of the Internet experience to people's 'real world' life and interests begins to take place, which could both moderate and create divergences in the usage of Internet services. This may be happening with early users of the Internet and social Internet services. A respondent observed in response to a question on privacy concerns; “It is a simple fact of life that some people are more open and sharing and others more private. This effect and could show in their online behavior too.” Therefore different responses to, and use of, the Internet may simply vary because there are indeed different kinds of people. This phenomenon among the early users may indicate a trend towards diversification of Internet use and attitudes as the Internet becomes mainstream. It is consequently possible that different kinds of social network services may in time be found necessary for different segments of the Indian market/ users.

All regular Internet users seemed increasingly reliant on online services like payment of bills, ticketing and banking. Some have begun online shopping as well. Although still not very common, within the last year or two online shopping seems to be catching up fast among the young, and a lot of online shopping sites have emerged recently. With the 'traditional' services – bill payments, ticketing and banking – a few months of online access to these services makes people consider going the offline route – actually visiting offices etc – almost unthinkable. Such is the sheer ease of doing these things through the Internet. As mentioned earlier, getting railway tickets on the Internet is one of the earliest and biggest Internet-based service in India. Air-ticking on the Internet is now as common among those who can afford to fly. Indian e-governance work has done quite a bit with regard to online bill payments, as is increasingly the norm with many utilities, private or public. Quite often ticketing and bill payments, as well as filling in application forms, is done as an assisted service at an Internet kiosk. This is especially so in semi-urban and rural areas, or the poorer districts of the cities.

Many people are cautious about possibilities of financial frauds on the Internet, but most just go ahead and make the transactions that are considered necessary to make, like for the core Internet based services mentioned above. Although none of people we talked to had a direct loss from any such fraud, neither they knew anyone firsthand anyone who lost money, there remains a feeling of caution mixed with some amount of helplessness. Such a feeling was more common and pronounced among older people. However, the only action people took in this regard was to limit online financial transactions to

the most essential purposes alone. A few took the precaution of making such transactions only through a specific account where they kept a limited amount of money.

A few young people who grew up with the Internet mentioned the anxieties that their parents has about the possibility of their exposure to 'inappropriate content'. Such concerns also came out strongly from parents of young children in our respondents group. Also, people whom we talked about the Internet behaviors and concerns of the other people they knew described this as a key and a very widespread concern. This was true both of parents directly, and those professionally associated with education. A school administrator in meeting called for Internet cafes designed specifically for children with their safety in mind. A respondent working in rural areas, on the other hand, spoke of how Internet kiosks were being specially designed to cater to school children's pornography consumption. Such concerns remains deep and largely unresolved among Indian parents of young children, although we heard some mention of responsible parenting requiring frequent discussions about these matters with kids, and some use of Internet filters. This area will require a specialized deeper study. We mention it here only because it not possible to scan the Internet thinking and behavior in India without mentioning this issue which is uppermost in many minds.

Internet in rural and semi-urban areas

We spoke to a very few people directly from this user segment, and much of our impressions are based on testimonies of people who work professionally on development projects in these areas. There are two elements with respect to use of the Internet in rural areas, which have very different contexts and dynamics. One is the personal uses, mostly, even perhaps entirely, among the very young, as the Internet reaches rural and semi-urban areas. This usage could be through public Internet kiosks or over mobile, although the latter is still quite expensive. The second element is associated with various government and NGO projects that take the Internet and Internet based services to these areas.

Due both to the costs involved and lack of relevant content for other purposes, earliest personal use of the Internet in these areas is made for educational purposes. The few people pursuing higher education in these areas are the first to invest in and make use of Internet, first for educational purposes, and then this use may also extend to social networking and entertainment. Many 'computer centres' offer computer courses for the very young, where basic acquaintance to the Internet may also be provided. The same centres may enable subsequent continued use of the Internet. The cost and limited skill and useful content/ services may, however, greatly constraint users. There nevertheless remains an extra-ordinary attraction for the Internet among the young. Internet is the in-thing. As mentioned earlier, Facebook is the big rage, and often the young just want Facebook. However, once on the Internet it often leads to at least some limited browsing. In un-controlled environments, pornography is often the first and a repeated stop. Following the word of mouth, mostly, forwards on the Internet by friends, the young may also begin to look at some informational sites. One respondent told us, "it is first Facebook, then entertainment, and then education, in these areas."

Two respondent said a similar thing. "To these people in remote areas, who feel themselves cut off from the 'mainstream', the Internet is seen as their link to the outside: something which can connect them to this denied and missed 'mainstream'." The positive intrigue and huge, almost irrational, hope and expectation from the Internet is shared across age groups in this area. Kids are on this bandwagon directly, or at any rate cannot wait to get on. Older people, often themselves shy and reticent, want their

kids not to miss computers and the Internet. At one NGO run centre, mothers wanted to learn a little about computers to be able to know what their kids did with them. (One may however wonder how much this 'instrumental reasoning' was just to cover up their traditionalist shyness about being seen as wanting to 'know' computers.)

One respondent said how when they (his organization) go even to conservative rural communities, they do not have to spend a huge time to make their case for setting computer centres. This work, of evangelizing the computers and the Internet, in its social image and role of a necessary 'modernizer', an important skill requirement for the merging world, and a window to the outside, has been ably done by hundreds of similar projects over the past 15 years, a point that was made in the first section. He said, that people now welcome us with open arms, and are ready to get on with the numerous new possibilities that we talk to them about.

Speaking in the context of an extremely conservative community, where they work, this respondent said that what was surprising even to them was the ease with which parents sent their girls to the centres. These communities otherwise have an extremely restrictive outlook vis a vis women's mobility and 'exposure'. Apparently, the computer and the Internet is associated primarily as a necessary skill and as opening positive opportunities and not as a cultural artefact, much less a medium of introducing alien cultural elements, which would have been seen as threatening to such a conservative community. (Even if these cultural elements bothered them somewhat, perhaps the positive values of the computers greatly overwhelmed the concerns.)

The relationship and expectations of adults from the Internet were two fold, exploring livelihood related information and opportunity, and government services and entitlements. One respondent said, "they directly ask, what can it do to help my livelihood?". Apparently, the computer-Internet is seen as a kind of all-powerful box with unlimited possibilities in every area. Since a lot of computers related projects came in the context of governance services, there is a great desire to be able to access governmental information otherwise not available, and, even more, to be able to contact government officials, who are notoriously inaccessible.

The social milieu for a rapid uptake of the Internet even in rural and semi-urban areas therefore seems ready. Given the availability and some degree of needed skill, it seems that the hunger for the Internet may even be higher among communities that feel dis-empowered and on the outside, than the mainstream or dominant ones, where the Internet till date has made the most inroads and impact. It appears now basically to be an issue of affordable access, followed by sufficient relevant content, applications and services. The latter can emerge only when (really) affordable access can begin to make Internet use relatively widespread in these areas, which creates a market, as well as incentive for non-profit or community-based groups, to develop relevant content, applications and services. While, (really) affordable connectivity is the first and necessary conditions, it must be remembered that the Internet in India is still overwhelming in English, a language which barely 10 percent or so of the Indians speak. Further, after the initial euphoria of new kinds of Internet possibilities wears thin, more locally relevant services and applications alone may be able to make for sustained use and impact of the Internet.

What social issues about the Internet get discussed

This section moves on from what people feel personally about the Internet to what kind of social issues get discussed vis a vis the Internet. The first formulation in this regard generally is of the Internet as an expressive space. Using the Internet for public expression of views is limited, and also perhaps follows 'the initial fascination and then wearing-off curve'. However, a good number of people value the Internet as the space for catching alternative viewpoints that could be marginalized by the organized media. As mentioned in the first section, some arrests have been made in India for people making posting just to their personal spaces to be shared with friends alone, and the postings subsequently going viral and becoming 'public'. This has hugely raised the fear of creeping legal encroachments on expression on the Internet, for which the Internet is considered such a natural vehicle. In these backgrounds, the question of the Internet as critical to freedom of expression and vice versa becomes an important point of discussion.

There are a number of people, more among the older, who think that the Internet is too open and people can do and say anything on it without accountability. One respondent, who himself is a strong advocate of freedom of expression, described this as one of the main sentiment vis a vis a social description of the Internet. All people whom we talked to however wanted stronger freedom of expression protections on the Internet, especially against harassment or action by police at the behest of powerful people. There was almost universal agreement that the current laws and their execution was extremely shoddy. The laws did not seem to understand well enough the new contexts brought in by the Internet. There is a strong urge for revisiting the law and its implementation procedures, giving due considerations to the nature of Internet as a seamless space for personal, social and political expression.

There indeed are a plenty of individuals and groups who still take the view that the Internet should remain unregulated. They admit that such an unregulated Internet could be subject to some abuses but they think that on the balance the benefit are by far greater. If one begins to regulate the Internet it is a slippery slope and soon the medium's essential, open and liberatory, nature will be transformed. They think that better user education should be able to minimize the problems of abuse of the Internet. The idea of user responsibility came up often in many discussions. These proponents of an unregulated Internet also believe that in the Internet age people have to relax their thresholds of 'acceptable content' whether considered defamatory or socially damaging. As put by one respondent, "it is like language which has evolved with social conventions, so will the acceptable uses of the technology evolve and establish itself with time."

There is a very strong sentiment in favour of freedom of expression in the Indian media space and among its organized civil society. This sentiment, often conveyed effectively through the social media itself, has tended to remain an effective check on excesses by the state in this area. As mentioned, there continues to be a strong demand in all these quarters for amending what are considered as inappropriate laws constraining freedom of expression on the Internet.

The groups who do seek some regulations of the Internet, vis a vis its content, come from two very different backgrounds. One is those who have strong progressive and human rights oriented views but are of the view that protection of freedoms on the Internet itself requires some protections, that are embodied in the law. Without such protections, it is the freedom of the jungle, which exists for the powerful but not the weaker sections. To them, the freedom of expression is most needed and important for the marginalised individuals and groups who are the ones who require legal protections on the

Internet.

Many women do express comfort with an unregulated and relatively unprotected Internet. Along with the use of some skills, they are ready to take the chaff with the grain in terms of Internet exchanges. It is also noted that in a society as deeply patriarchal as India's, where women's expression and mobility is closely controlled, the Internet provides an extra-ordinary 'escape'. Other women however find the Internet as a very women-unfriendly medium. Remoteness, even anonymity, and a patriarchal social structure allows people to hit at women much more easily than one can do to men. It is much easier to cause reputational damage to women, and sexism appears to be rampant on the Internet, especially when a woman expresses social or political views that may not be agreeable to some groups. Many women have been reported to restrain their Internet behavior in response to these threats. Such problems are expected to be faced also by other marginalized groups, especially as the Internet moves beyond a relatively homogeneous urban upper middle class to other classes, castes and regions in India.

We also found groups and organizations that do politically sensitive work, and thus in even greater need for freedom of expression protections, to be rather nuanced about freedom of expression and regulation on the Internet than those speaking largely about individual expression on the Internet. Such groups were wary of both state's possible role as well of that of private agents in terms of impacting their political work. Many of them looked at the supposedly free- and open-ness of the Internet space with great caution, and some suspicion. Freedom of expression as a part of a larger political agency for such groups was a complex and nuanced phenomenon which could not be reduced to just speaking out one's mind on the Internet, important in its own place though it was. Such groups maximized their political agency through complex multi-pronged negotiations in the offline space. The Internet was no different in this respect. Such groups were quite mindful of easy targeting by private agents on the Internet which could be as dangerous as the excesses of the state. They saw the need of appropriate laws to provide protection for online freedom of speech, which should be developed with great care, to be able to rein in all strong players, both the state and other groups that develop threatening dominance in the new social space of the Internet.

Another group which showed keenness for some kind of Internet regulation consist of those who have a traditional social values viewpoint and, in general, want some restraint and order vis a vis what goes on the Internet. Since it is only now that the Internet has in a meaningful way begin to go beyond the upper middle and professional classes, who seem to have a much more liberal view in this regard, the strength of this conservative sentiment and its possible political expression is yet not very clear. But there are some stark social and political questions that will be faced soon in the cultural realm as the Internet becomes the dominant media. Broadcast media has content regulation norms for it. How would they apply or not to the Internet? Would they simply be entirely done away with? On the other hand, the sheer task of applying content norms to the media of the Internet appears forbidding. Such questions will be explored further in the next section.

Internet as media

The Internet is so many different things that it is difficult to obtain a focused epistemic hold over it. Its identity as a media is a more obvious and strong aspect of it, and therefore we found it useful to discuss Internet as media in detail with some respondent working with media. Such a specific focus is especially important because a convergence of all media on to the Internet platform has already begun

and it appears to be a matter of time before such a convergence is largely complete.

Taking from the above discussion on freedom and expression, we asked respondents whether they thought there really was room for more dissent on the Internet. Their responses are partly reflected in the above discussion. Many, even most, more among the younger, and among those who were not involved with organized social work, felt that there was no doubt more dissent possible on the Internet than through traditional media. Others, especially older people and those from civil society organizations, gave a more nuanced view; yes, prima facie more dissent should be possible, but there are huge roadblocks to realizing that possibility. Some dominant strands of opinion on the Internet can push back very strongly, so much so that it could be difficult to sustain dissent. This is truer for marginalized sections like women. A media commentator said, “ The Internet tends to magnify and amplify voices of intolerant sections – who are otherwise in a small minority. So the fringe elements, the fundamentalist elements of the society – whether religious groups, ethnic or class ideology based, can be the winners”. The Internet can give a 'false illusion of a huge amount of plurality and heterogeneity” which can be dangerous, because from this illusion it seeks to take up a far larger legitimacy as 'people's voice' than may indeed be a fact.

One respondent, an ex-journalist, building on her own experience with TV, echoed this sentiment saying how “social media can bring back a new kind of elitism.” The relationship between the social media and the mainstream media – whether on the Internet platform or not – is an interesting and very powerful loop. The same respondent spoke of how TV journalists increasingly pick up the agenda and top news leads from the social media, not only because it is convenient to do so but also because the social media is an important constituency that needs to be indulged. Considering the very limited, and perhaps partisan, current social configuration on social media in India, one can understand the 'bringing back elitism' comment. In fact, the apparent bottom up and democratic nature of the social media in such circumstances can even become a potent smokescreen to capture the Indian public sphere, to which the Indian politicians and politics respond strongly. Further, getting such a strong constituency behind it, the respondent noted that the media seems to develop its own agency towards pre-mediated outcomes, moving on from its normal social role of just mediating and representing. In this regard, it is important to note that Internet-based media generally does not feel itself bound by typical media related norms and ethics that are supposed to bind traditional media. On the Internet platform, it is can be much more difficult to separate advocacy or plain partisan interest representation on one hand and appropriate media activity on the other. (In the same way as it is almost impossible to separate commercial content from other forms of content on the Internet.)

Our respondents however were clear that Internet does hold great promise for plurality, dissent and voice for the dis-empowered, if the presented possibilities can be used appropriately. Providing extensive connectivity and related skills was considered very important for this purpose. As an example, use of Internet based platforms by some community projects to develop a kind of community media was mentioned. We had discussion with two community media activists who described how they were using web platforms for bringing together community radio practitioners to exchange experience and content, and also for online capacity building. We posed the question about the future of community media when there are clear signs of media convergence over IP platforms. While these activists saw great potential with regard to community radio over the Internet as well, they were rather concerned about the very future of community media in an converged environment if net neutrality was

not maintained over the Internet.

Privacy in the post-Snowdon world

One may have expected the Snowden revelations to trigger a very animated privacy related debate in India. However the terms of any such discussion are yet not adequately formed in India. This is despite the fact that a national biometrics based identification system, called *Aadhar*, did attract a lot of adverse reactions last year from civil society groups on privacy considerations. Even after reading the gory details from Snowden revelations about the extent of techno-infiltrations into our personal lives, most people did not see much real impact on themselves. They did universally think of it as a very bad thing though. But privacy issue still appears to people as pertaining to things like someone looking into their drawers or computers without their knowledge. It is not a nice thing, but also not something that one gets too worked up about, especially when the concerned 'bad' agents are so remote, and even unreachable. (Probably, their remoteness gives certain security and comfort.) Most people seem to feel that they possess no information which is so important for it to be of much use to anyone, and to that extent consider themselves safe. Privacy therefore always looks to be someone else's problem. However, Snowden's revelations have made an unmistakably deep, although yet not fully internalised, impact on personal and social psyche vis a vis the Internet. When people see indications that a Facebook or Google is still trailing them even when they thought they were definitely logged out already used to give a creepy and uneasy feeling. Such feelings take much more sinister tones on reading all the news based on Snowden files. As a clear consequence, the innocence of the Internet has died in the eyes of a considerable number of people. But this is yet to really convert into any significant behavioral changes for most people. The message seem to have been stored somewhere in the back of the mind, till the time that its full import becomes clear.

Actors who are professionally involved with social causes however are quite concerned. They have begun to see what such pervasive surveillance means, and how it goes rather beyond the traditional 'state controlling political dissent' issue. In our discussions, we proposed the framework of 'pervasive social control' rather than just thinking of 'privacy violation' to understand the issue. And how such pervasive social controls clearly had far reaching implications, of liberty as well as socio-economic opportunity – at both personal and social levels. Such a formulation found significant traction among such social sector respondents, including as a basis for policy level thinking in this area.

The monopoly Internet companies

One thing on which there is undeniable agreement among Internet-enthusiasts and the more critical actors is that the Internet is increasingly a few large Internet corporations, almost all US-based, and monopolies in their respective segments. Many people see nothing wrong in this – these companies dominate the market and make money simply because they are the best of the lot. They serve exceptional products, which are all there for anyone to see and judge. And if people do not like them, they are free to leave patronizing these companies. If we do have some complaints here and there, that is only to be expected with regard to any big player. These companies have some systems to respond to such customer demands and complaints, while admittedly, these proponents argue, nothing is perfect. Better to focus on what all the Internet gives us, on an almost regular basis, which is largely owing to these very companies. Further, it certainly appears that the Internet windfall has just begun and there is so much to look forward to yet. It may not be the the best idea to begun to putting roadblocks in the path of the very agents who are such great benefactors of ours.

Other, less techno-utopic, people suspect that such concentration of social and economic power in the hands of a few monopolies is never a good thing. However, many among them would prefer to be shown the precise 'harm' that is being caused before they can begin considering a policy based or regulatory action.

A third kind frown upon ideas of techno-fatalism on one hand and simplistic personal responsibility on the other. The very fact that some private companies have become such significant determinants of important social structures and systems for these people makes a case for putting them under some kind of regulatory control. The situation is made rather worse by the fact that most of these companies do not have a legal presence in India and do not respond well to demands of the jurisdiction of the Indian state. This issue was referred to by many respondents, and is a point of considerable disquiet. People normally like to have such powerful organizations answerable to them in some form or the other.

One respondent was concerned over the growing convergence between the communication pipe owners and content providers. This trend makes a mockery of the claims of media plurality on the Internet. Another respondent, from a techno-activist background, spoke of how technical protocols for communication were converging in most areas which makes it so much easier to centrally control informational flows. Worse, proprietary protocols were increasingly replacing public ones, making such control even easier and concentrated in the hands of a few private players.

Most actors who were bothered about the future of the Internet felt that it is important to do something about the monopolisation of Internet by these few companies. The problem with various monopolies on the Internet is not simply at the level of possible market distortion which can result in higher prices and poorer products or services. Such monopolies can greatly skew the very architecture of the Internet, or of the larger socio-technical intermediary space, which is becoming so important to the rapid, widespread and deep re-engineering of most social systems. Significantly, the business model of these mega-corporates was not to supply the Internet, or its many key services. (Most Key Internet services are in fact free, and these companies are increasingly ready to subsidize the cost of access as well, see for instance services like Facebook Zero and Google Free Zone.) The business model is seek perpetual rents from controlling key aspects of these vital new digitally-enabled social systems. At the first level, control is sought over social systems represented in activities like, 'organizing global knowledge', and providing monopoly platform for global instant media, social networking, video-sharing and -watching, etc. At the next level, as all sectors of the society become 'informationalized', such control will also extend to sectors like education, health, agriculture, travel/tourism and so on. Such trends are considered very worrisome by many and they call for their urgent social and political consideration.

What do the techies think

The social and political views of the techies have been important in the area of social and political framing of the Internet, for obvious reasons. As aptly put by an observer, a technology becomes social when it is fully understood. While well on its way towards a social understanding and appropriation, Internet is still a technology to a considerable extent for most. Most public-spirited techies feel passionately about the technical, business and social opportunities that the Internet opens up. Still, it is difficult not to miss a significant sobering down of such feelings lately as the Internet has begun to be so dominated by a few multi-nationals. Most techies however seem happy to work in the new

controlled environments of an Android or Apple ecosystem, focusing on the opportunities that these semi-open environment provide.

Techies of an activist bent of mind, who earlier rallied around the ideas of free and open software, find themselves uncomfortably standing on a crossroads. One of our respondents regretted how the concepts like openness have been fully co-opted by a few monopolistic commercial actors. It is so much more difficult to practice techno-independence and -subversions in an age of networked digital system, where as one respondent said, 'the technologies we use are determined by our friends'. To make it worse, more of more hardware today comes locked in with software, reversing the trend of unbundling the software from hardware, which regulatory move triggered the software movement, and later opened the field for techie activist to build the free and open software movement.

The FOSS movement in India, very active till a few years ago, seem to have been driven to the back-foot. It is difficult to profess digital openness and then have no option but to use closed applications and hardware. There are some new moves to address the networked digital ecology through promotion of distributed architecture systems like the diaspora social networking application and freedom box but unlike with FOSS, this is far from becoming a movement. The ideological and practical anchors of a digital freedom movement in the networked digital age are yet to get formed.

A techno-utopian society?

This section on how does the Indian society feel and think about the Internet is best closed with the comments of a respondent who described Indian society to be so techno-utopian that it treated technology with a similar unquestioning reverence as it treated god or religion. The respondent cited what he described as largely uncritical acceptance of the national biometric identity system, and a recent legislation on bio-technology which actually criminalized criticism of bio-technology and its products! Whether or not such a conception about Indian attitude is somewhat exaggerated, it certainly is true that there is not even an elementary social and political discourse around the Internet in any kind of deeply reflective and critical way. This fact was discussed by considerable concern by many of our respondents who are involved in the social sector. It may indeed have something to do with the general attitude to technology of the Indian society. However, one historical fact here is certainly important. The IT industry gave India a kind of a global break, with India getting recognized as world-class in this area. Such recognition many think was a first for India in any sector, It has become symbolic of India emerging as a global economic power in the last decade and a half. This has invested a holy cow like status to the industry and its captains who retain a strong influence on the social and policy discursive spaces around IT in India. This may also be an important factor resulting in an nearly non-existent critical reflection on the role of technology in the society, and a need for deliberate social and personal choices in this regard. Internet policy is not at all seen as a domain where social expertise is of any significant importance.

2. What do people want to do about the Internet, and how

Leave the Internet alone

A good part of the Indian society, including among the thinking and articulate sections of it, remain

apathetic to any need for collective action by social actors with regard to the Internet, a special case of which is policy and law making. This group of people can be divided in two parts; one whose view could be considered generally naïve with regard to what is the Internet, and how it works, especially in social- structural terms. A second group consists of people who are relatively well-informed about the basics of the Internet but think that Internet represents the real *laissez faire* social space, and its benefit is maximized by doing nothing about it; letting the invisible hand(s) of millions of uncoordinated individual actions and the market take the Internet where it best belongs.

What we characterized above as the 'naïve view' vis-a-vis social or policy action requirement for the Internet arise due to reasons, like; (1) Its services seem to be free (other than the connectivity charges, which is taken as a telecom provider level issue), (2) it is so boundlessly beneficial in every which way, and new surprises in the form new services and possibilities keep appearing at a rapid pace, and (3) there is a complete lack of clarity about who provides and ensures these services, other than a feeling that these forces were quiet remote as well as rather powerful to be amenable to influence or persuasion. A lot of respondents told us that most people they knew hold such a view (or non view) on Internet policy issues. The three elements mentioned above seem to reinforce each other. The boundless benefits and services on the Internet coming free made people not care to know more about the Internet and what could be done to influence its working. Even some relatively well-read and articulate people, including those in the IT industry, show such an attitude. One respondent, who is an engineer working in an NGO told us that when he shared a presentation among his friends which raised many structural issues with regard to the Internet, one of them, working for a top IT company, retorted, 'how do you get time for these kinds of things'.

A consumer group we talked to confirmed that this is the main attitude of most people regarding Internet services (minus the connectivity part). However, the respondent did tell us that so many important services being made available completely free does leave considerable doubts about 'how and why' in people's mind. At a deeper level, a feeling does get registered that something may not be quite right here. On the other hand, on asking if they had any problems with the concerned Internet companies, a lot of people respond; how can we complain, when the services are free. Also the services are not forced on anyone, and one can leave if s/he does not like any service. The possibility that there may be other costs that are not immediately evident – loss of privacy and being subject to various social controls through access to personal data – is either not obvious, or even if brought up appears too esoteric and not related to their lives 'now and here'. Many people say, they do not understand the big scare about privacy invasion and such. If someone somewhere remote comes to know some facts about their life and social relationships so what! Often, they instinctively consider such 'knowledge' to be with some kind of technology rather than person, but even if the latter, the person is just too unconnected and remote to matter. On the other hand if a company employs some personal information to serve them more effectively, all the better. Neither do they understand/appreciate the issue of being locked-in with monopoly providers and there being too little 'real choice' to withdraw from any particular service. A good part of such apathy comes simply from not seeing any problem with most Internet services. In fact, the services mostly seem to keep improving, with exiting new offers being made all the time. Yes, there are at times some hiccups and disappointments, but that is true with any service. On the balance, the magnificent digital world that is opening up is certainly not something at all to be complaining about.

As mentioned, even a lot of people who otherwise hold well-considered political views on many/most topics, seem to belong to the group which is not eager about any policy 'interference' with the Internet. (This is especially odd for a country where people generally are quite vocal about 'how things should be run'.)

The immense benefits provided by the Internet, the free nature of many of its key services and the apparent diffusedness and remoteness of its principals, seem to induce social and political apathy even in sections otherwise inclined to a certain level of critical reflection and thinking. To these factors may also be added the issue of the considerably 'technical nature' the Internet phenomenon, and its newness, as well the fact of the rapid changes that it is going through. These factors do render the knowledge base required for critical thinking beyond most people. This 'knowledge deficit' problem also extends to the knowledge mediating institutions – like the media and academic organizations. In default, 'take what we get' and 'more the merrier' become the mainstream attitudes towards the Internet, and it is largely accepted uncritically as a welcome beneficent.

Queries about what may need to be done about the Internet, or more specifically Internet policies, still mostly draw blank faces. Even if one is nudged towards noting, say, the Snowden phenomenon that has dominated the Internet governance scene over the last year (2013-14), people still seem take it as someone else's problem rather than theirs. However, Snowden revelations could be the turning point in people's consciousness, although its full impact may still not be apparent. In some ways, the slur on the innocence of the Internet seems to have stuck. Media now more often picks up, and people note, with more critical interest the numerous outrages of the Internet majors that keep figuring in the newspapers (the latest, as this paper is being written, is the Facebook's emotional contagion experiment). While any kind of framework for critiquing the phenomenon, or even a vocabulary for any political action related discourse, may still not have formed, a reservoir of doubt and suspicion is rapidly accumulating in social consciousness that may be setting the scene for such developments in the near future.

A second group that is happy with a *laissez faire* approach to the Internet has a more deliberate and well-considered take on the phenomenon. Many among this group comes from a strong liberal individualist standpoint. Internet is the brash new bastion of free expression and association, and for developing new forms of 'being and doing'. The open possibilities of anyone connecting with anyone else, in all possible different configurations, being the undeniable base of the Internet paradigm, this group takes it to be the ultimate fulfillment of individualism: where individuals can express and maximise themselves without the tyrannies of the collectives that currently mediate much of their social experience, and invariably becomes stifling and corrupt. This phenomenon has been called as networked individualism.

To those of this ideology, Internet must just be left alone, except perhaps for some very basic hygiene-oriented interventions. One comes across a good number of politically conscious and articulate people, who think that Internet represents the shift to a new kind of (better) social systems, and whose immense potential can only be hindered by polices and politics. An extreme view would even consider the Internet as a kind of replacement for politics, as the space where the society dynamically negotiates the social order. In such a situation where, if in a somewhat symbolic way, the Internet is actually opposed to politics, it is very difficult to get a dialogue going on need for policies with regard to the Internet.

Another school of thought, whose proponents can be called as 'realists', tend towards a similar 'leave it alone' conclusion although following an entirely different path of reasoning. They think that the

Internet is backed by too powerful a set of forces, and they are also too effectively diffused while being extremely well-networked, whereby it is not worth the effort to bang one's head against them. Instead of crying hoarse against these very effective powers, it is better to make the best of what we get. India should focus on hooking on to the new global paradigms, of which the Internet is a central aspect, rather than confronting it with misplaced idealism, of seeking a better Internet, more in keeping in public interest, and so on. In any case, realists contend that national level policies are not going to be very effective with respect to what is essentially a global Internet. They contend that there is no real possibilities of effective global governance systems for the Internet, at least for a very long time to come. In the few very essential policy areas, like security, India should seek cooperation of the (global) powers-that-be on the Internet and thus manage the best it can.

The individualist-liberals and the realists are both largely content with market forces doing all the shaping of the Internet that is needed. They frequently cite how India is now one of the largest global markets of the Internet companies, and thus the Indian consumer wields considerable collective muscle. It is this strategic power that should be employed effectively to get what we want from the global Internet, rather than going the policy route, which would be unduly constraining or unrealistic, most likely both. There is considerable merit in using India's market heft for taming the Internet for India's benefit. Two caveats may, however, be in order here. First, we should not be deceived merely by the number of 'users' because what constitutes market heft is not sheer numbers but their total purchasing power. On this count, India's Internet market is big but still not comparable to that of the developed countries. Secondly, companies would react to those consumers alone who spend a large amount and not the petty-spender, which means that a very large part of Indian people would in any case never be able to exercise enough influence on the Internet companies. These points are apart from the fact that there is a huge amount of market concentration, network effect and service lock-in like factors that greatly diminish real consumer choice, which alone can be an effective lever of control in the hands of the consumers. The 'market as a lever of control over the Internet' argument, especially for a country like India, therefore has significant limitations. On the other hand, even as consumers, people will have to develop sufficient social consciousness about the Internet and its multifarious impacts before they can exercise agency, even if through the market, to shape the Internet to their choices. As per most of the respondents, such a consciousness about social issues like privacy, informational controls, etc, simply did not exist among most in India. Most respondents thought that raising social awareness about the Internet and its impact would be the right place to begin with if we were to seek a better Internet for all.

Social choices, community action and policy

By far, most of our respondents were clear that the Internet today needs some deliberate social choices to be made about it, and corresponding collective action, including some kinds of policies. The spectrum of such action ranged from creating social awareness about the Internet's role and impact in society, and developing institutions for undertaking deep and committed research with regard to the phenomenon of the Internet, on one side, to the need for direct community action to reclaim the Internet as a commons and developing necessary policies to ensure that the Internet is shaped in the best public interest, on the other. Below we examine these four areas one by one, although, it must be mentioned that the respondents did not *necessarily* put exclusive accent on one or the other. Many thought that they were all linked. For instance raising social awareness and doing deep research was considered a precursor to policy making. Community action and policy approaches were also

considered linked. Some respondents were more keen on awareness raising and undertaking research rather than jump into any kind of policy development right away. On the other hand, there were others who thought that it was already getting late, and if the Internet was to be reclaimed for its freedom giving and egalitarian purposes, urgent policy action is needed.

Creating awareness of the Internet as a social phenomenon

In an earlier section, we mentioned how the Indian society is considered by many to be largely techno-utopic, whereby looking at the Internet from a social and political lens does not come easily. To make matters worse, or consequently, over the last decade or so, Indian governance systems have shown strong technocratic inclinations. ICTs in such a context are taken as a given, to be applied in the form of solutions to various issues. There is almost a complete absence of examining how they work, in terms of their social construction and implications. Any such talk is apt to be dismissed as traditionalist luddite-ism. The only action or policy that is seen as needed in such a context is to make more and more ICTs available (an important objective no doubt) and integrate them in more and more activities. The latter effort is generally solution-oriented rather than systemic. Though perhaps a caricature, it would not be misleading to describe the current Indian scene of social and political awareness about ICTs in general, and Internet in specific, in this manner.

One respondent said that until people understand how the Internet worked, they cannot begin talking about its larger social impacts and what to do about them. Others rued the manner in which people take so unthinkingly to technologies which are apparently impacting their lives so deeply. Nothing so strong and intrusive can be taken to be completely innocent without understanding it.

Most respondent thought that we need to make deliberate efforts to promote awareness of the Internet and its social impacts, beginning with descriptions of what the Internet really is in social terms, and how it works. Even for people otherwise prone to social analysis of almost all phenomenon around them, Internet is treated as basically a 'technical subject' which excuses people from its social analysis. It is surprising how often one comes across socially and politically articulate people stammer something like, 'well, I am not technical person', the moment one attempts a socio-political discussion about the Internet. It is of course not just their fault. Discussions around the Internet, including in terms of its governance and policies, have been shrouded in a mystical language, full of technical jargon. The debate remains inaccessible in most parts even for those who may have spent considerable time trying to decipher it. The fact that there undoubtedly exists a lot of technical stuff on the 'back-end' and a good amount of skill is also needed at the 'front end' to develop and navigate the digital land is only a part of the story. It appears that the continued technical obfuscations are almost deliberate, and many respondents expressed great frustration about this fact. The command over the vocabulary of a policy space gives unique power to the incumbents which they may not want to share. The so called technical community around the Internet is considered by many to be guilty of such door keeping of the Internet governance discussions. To make the matters worse, the subject of Internet governance, its language and its debates, are almost a complete transplant from abroad into India. Even if the Internet itself is a transplant in many ways, little has been done to-date to indigenize the language and issues of Internet governance and policy. This needs to be achieved by connecting it to real concerns and hopes of the Indian society and people with regard to the Internet. In the circumstances, the few seminar circuit or media discussions that may take place in India look like cheap copies of global debates, relying almost entirely on points and arguments developed elsewhere.

Awareness raising about the social phenomenon of the Internet should therefore begin with developing easily understood social models of what is the Internet, how it works, how it organizes information and relationships, who determines what happens and what not, and what are the avenues for users to contribute, as well to obtain recourse when needed. The Internet should be completely claimed as a social phenomenon (beyond the technical details), one of the most powerful ones of our age, and seen and discussed in that form. It is foremost a pedagogic task of developing models and methodology for such 'teaching' and awareness building about the social phenomenon of the Internet..

Internet studies should move from science and technology to humanities. Internet should be a chapter in social science books since early stages, for children to grow up looking at it as a co-constructed social phenomenon rather than something that simply envelops them with various allurements with no relationship whatsoever with how its power is constructed and where does it reside. Internet studies should also be taught in higher classes, and should be developed as a specialized subject. For adequately understanding the emerging information age social systems around us, citizens need to develop an early orientation towards the social characteristics of the techno-social layer of the Internet which increasingly underpins these systems.

Almost all respondents were strongly in favor of the above proposals, and saw them as an important and urgent need. Such a learning will inculcate a sense of participation in the Internet phenomenon among young children rather than just being its passive consumers. This will further trigger a sense of need for social engagement with how this phenomenon gets shaped, and what kinds of policies may be required for it. Our public pedagogy spaces, media, seminars and intellectual discussion forums, must also begin forming a strong social conception of the Internet, which is indigenous. Development of such a discourse alone will enable the country to take its Internet-mediated future into its own hands.

Internet research

It must be admitted that it is not easy to break the talisman of understanding the Internet in terms of its social and political implications. Deliberate technical obfuscations and rapid rate of changes in this area is only a part of the problem. Our conceptual categories in social studies are built over some enduring aspects of our social structures and systems. Internet tends to have such a transformational impact at fundamental levels of these social structures that time tested concepts and categories can become inadequate, even misleading. Whether it is the ideas of privacy and publicness, jurisdiction and territoriality, the issue of personal sharing versus mass circulation of copyrighted material, nature of micro labour in the digital space and its (non)remuneration, or the very nature and dynamics of 'community', the digital space destroys and reconstructs so much that existing concepts fall short of building a good understanding of what is going on.

During our interactions with various respondents, we explored some such conceptual categories in terms of their limits in explaining the emergent digital phenomenon. Two such related categories that we discussed extensively were of privacy and publicness, especially in relation to application of current legal thinking to digitally mediated situations. We chose these two categories because of two significant policy contexts. One is perhaps the single most significant Internet related policy discussion in India, about online communication of political views which have landed some people in prison. Second was the very current controversy of the 'right to be forgotten' decision by an US court. Our discussions

explored at length how a private communication normally not subject to the same scrutiny by law as a public one could *inadvertently* become public through viral propagation which then makes it subject to laws pertaining to public order or defamation. It is significant to see how the digital phenomenon seamlessly conflated what were earlier rather distinct two realms of private and public, often subject to different kinds of legal treatments. Similarly, 'the right to be forgotten' made a curious distinction between a news item that is just posted on, say, a newspaper's website (which was not subject to this particular 'right to be forgotten' ruling) and when the same news item is searchable on the Google indexed web. Apparently, the latter was seen as possessing a much higher degree of publicness, or, is it, contemporariness, than the newspaper's website. Such a distinction also impacts the claim of Internet intermediaries to be 'neutral' mediators of content, and therefore being fully free of content related responsibilities, a principle that has been observed earlier in many a court decisions. All these complications are apart from the fact of the immense difficulty in practical implementation of the decision. Curiously as well, the agent to implement the court decision is to be Google itself, thus making what should be judicial decisions to keep or remove some content. This may easily result in possible transgressions from the intent of the judgment and thus causing interference with someone's freedom of expression, which in most places has constitutional protections. All this certainly appear to be the elements of a veritable Pandora box.

We also had intense discussions on the nature of privacy in the digital age. It was explored whether the phenomenon that the Snowden revelations uncovers, which is accentuated by near daily news of excesses by big Internet companies, is just about privacy or something much more and different. Is it more of a deep informational access based pervasive social control, and not just someone looking into our drawers when we are not around (the way most people in India still look at privacy)? Further, is personal data also a resource, and if so what are the economic aspects of the data theft/ exploitation problem? One respondent raised the issue of how in can of Internet services, the nature of exchange of value is not immediately evident, as is in most other economic transactions. The exploration seemed to bring up a near unlimited set of problems, implicating conceptual difficulties caused by the ongoing digital mutation of our social order. Basic ideas and concepts of jurisprudence are under strain; a few days ago a US court ordered a US based company to hand over data which was stored in the company's Dublin (Ireland) facilities. The company claimed that the court has no jurisdiction over that data, and the court order was akin to a US court ordering for the front door of a Dublin godown to be taken down. The court disagreed with the analogy and said it has full competence because the data is under the control of the company, and it can extract it from the US itself. This brings up an interesting question of whether jurisdiction, which hitherto was comfortably based on territorial application, would not be based on locus of control? If so, how would legitimate control be distinguished from an illegitimate one? Apparently, Internet governance and Internet policy making is not going to be an easy task, while the same cases point to the importance and urgency of this task.

It is evident that as a precursor to appropriate policy making, or at any rate accompanying such undertakings, we urgently need a good and extensive Internet research system in India. A research system that explores and expounds not Internet's technologies, which is a different task, but its social and political bearings and impact. India does not have even a rudimentary system of this kind. Worse, even an initial appreciation of the need of such a research system does not exist. Most of our respondents considered this to be almost the number one priority for India if it was to be able to successfully grapple with the immense challenges of governing the Internet.

We have discussed here how the needed Internet research system has to go deep into basic conceptual and category issues. We are therefore talking about deep fundamental research that require high competence and dedication. However such basic research should obviously be plugged into the fast-moving contemporary developments. It should also be able to produce policy oriented outputs, as quickly as they may be needed. The requirements from the proposed Internet research system are therefore complex. Such a system will need to be developed in an innovative manner.

Meanwhile, two basic issues are important with respect of setting up this Internet research system in India. One, it has to be publicly funded and completely devoted to public interest. Second, it should be indigenously rooted, although oriented to a global Internet. It is important to note that hegemony of language and concepts is one of the most powerful ways to rule or control society. The current social and political vocabulary of the industrial age society was entirely written in the western world, and latter adopted by the post-colonial countries, sometimes more usefully than at other times. Such vocabulary carries significant values that get intermixed with and often become indistinguishable in the social and political concepts that could be passed off, and accepted, as neutral ones. As the social concepts surrounding the digitally-mediated world, or an information society, are being developed, countries like India have the unprecedented opportunity to be more than passive recipients of new theories and practice. The proposed Internet research system/institution should aim sufficiently high in this regard, and also have global pretensions.

Added to the geo-political discursive hierarchy, as problematic is the fact of the current Internet discourse being led by the big business, of the North, chiefly US based. Such high domination of big business on social discourse of a sector is unprecedented. One would not want here to go deep into the current geo-eco-politics, and the its conjoint leadership by North- (largely US-) based political and economic formations, wherein the global corporatist world order and its new vocabulary is centred. Just to mention that nowhere is this phenomenon felt with greater acuteness then in the Internet governance space for the simple reason that this space got formed in the post Reaganomics/ Thatcherism world which has been witnessing a steady ascendancy of neoliberal ideology and practice.

The simple point being made here is that Internet governance, and along with it, the larger concepts and categories for the emerging digitally-mediated world, is an emerging area, where developing countries still have a chance to claim concepts, categories and policy language that match their contexts and interests. For this purpose, it is important that (1) the proposed Internet research system is publicly funded, and (2) it goes beyond the standard Internet governance ideas, concepts and language that are handed down by the North, and throughly examines the current social changes, from a public interest point of view. The idea is not to junk the existing dominant Internet governance vocabulary, but to contribute to it on equal terms; to provide ideas, concepts and policy prescriptions that are duly informed by Indian contexts.

One respondent sought urgent conceptual and policy responses to the direction in which the Internet was headed today, which was of concentration of power and control, economic exploitation and cultural homogenization. The respondent was worried that similarly as natural resource exploitation and destruction was normalized in discourse and politics as industrialization spread in the past two centuries, if quick action was not taken, the current problematic directions of the Internet and its social

impact would also get normalised. And once that happens, it is extremely difficult to do anything about it. Too many interests and social systems begin to work in a mutually reinforcing manner making it practically impossible to undertake any significant structural (in terms of the Internet, architectural) changes at such a late stage. Accordingly to him, since our digital landscape is still in a formative stage, we could still possibly take some serious collective action. (Some others whom we talked to were so disappointed as to conclude that it may already be too late!) Such action must be begun by deep and extensive public interest research, which build and keeps a close relationship with policy making spaces.

A very important issue that came up in our discussions is that the 10 percent or so Indians who are currently on the Internet, represents a relatively homogeneous, somewhat upper middle class, largely in urban areas, and who has close affinity with a global cosmopolitan culture. As necessary revenue models based on mass consumption are worked out by the infrastructure companies, a sudden explosion of the number of people who get on the Internet may be witnessed. And the Indian Internet then get composed of a very large mass of very heterogeneous groups, with very different and diverse cultures, as well as social locations and social power, we may soon face some very new social realities and corresponding policy challenges. As a respondent put it, “in the West, the Internet evolved in step with cultural realities and changes, but here, the impact of the Internet and ensuing cultural changes may suddenly get too squeezed”. Rather than be taken completely by surprise, a good working research system devoted to understanding the Indian Internet and helping shape it in public interest would be greatly useful, in fact is urgently required, in such an emergent context.

Community action for an empowering digital space

Coming to possibilities for collective action towards an empowering digital space, that follows deliberate choices of the society instead of forcing them on it, community or civil society level action was a great favorite among our respondents. Both, those who were circumspect about rushing into policy solutions and those who were eager for them, found great merit in pushing this kind of action.

Such community action can be seen at two levels: (1) at the level of Internet's or digital architecture, to ensure its openness, accessibility etc, and (2) at the community level, ensuring full digital enablement, which begins with access but goes much beyond to ensure working digitally-enabled social systems that deliver for people.

The antecedents of the needed work at level (1) above comes from the free and open source (FOSS) movement, whereby a lot of software and applications were developed by the FOSS community, which provided cheaper and freedom-enhancing alternatives to proprietary offerings. Public sector agencies also did considerable FOSS work, developing some useful software and applications. However, the tragedy of this space has been that the anarchist spirit of FOSS volunteers has made uneasy partners with the highly bureaucracy of public agencies. Consequently, the two sides have been unable to work together to build sustainable software and applications that could have real life large-scale application in development projects. Apart from saving costs, such software and application can ensure high degree of user control, and flexibility for contextual purposes. This lack of means to combine the resources and reach of public agencies with the capabilities and voluntary labour of the FOSS community represents one of the most crucial gaps in terms of ensuring public interest based digital architectures.

Meanwhile, FOSS advocacy and action has been overtaken by the digital networked ecology, where stand-alone FOSS products have little relevance. There is no really FOSS mobile operating system at present (Android tries to position itself so, but its drivers are proprietary) or any really FOSS search engine or social networking site. In fact, the spirit of FOSS needs a new articulation in the networked digital ecology, where the key 'openness' requirement migrates to other layers, of open search algorithms, open data sharing and portability and so on. Digital freedoms are no longer just the freedoms of a techie to code and freely share its outputs. Networked digital artifacts need much more than just voluntary and freely-shared coding, it requires social and economic, and in fact, policy, counterparts that techies are not in a position to provide. As a consequence, the otherwise powerful FOSS movement in India seem to be in a spot, and perhaps has declined somewhat. It is struggling to produce the right response to the new context, but that would require a different level of social and political motivation and networks, which do not appear to be forthcoming. These techies still meet and discuss options for popularizing alternative networked digital artefacts like Diaspora and DuckDuckGo, but that has not quite become a movement as FOSS had. Dealing with the Snowden aftermath, there have been suggestions at such meetings recently to adopt the personal server model, like the Freedom Box concept of Eben Moglen, or even have community servers in different habitations where people could store their personal data.

A progressive techies movement for developing community digital artefacts that promote open and egalitarian architectures may still shape up over the above incipient developments. However, it would need to build bridges and networks with non-techie progressive movements, and share wider social and political goals, to succeed. This will can achieve twin objectives; of building a larger movement for adoption of such alternative solutions in the society, and powerful advocacy for policy support for open digital architecture models, including committing public funds. Once policy support is made available in the form of opening up of the digital space to fair competition through enforcing pro-competition regulation, open standards, data portability and so on, these progressive techie groups should find ways to be able to work with public agencies, employing public funds, to develop open digital artefacts for common public use. Such working together of anarchic- minded techie activists and bureaucratic public agencies however is easier said than done. To make it possible, there is a need to develop new government-community partnership models that could ensure genuine freedom and respect for voluntary (and sometimes paid) community work of progressive techies and other digital workers. Creating such government -community partnership models is one of the biggest institutional challenges that is being faced in the context of shaping the needed digital architectures for our societies. In default, it will be left to the monopoly trans-national companies to continue organizing the free community digital labour and extract rent from it. This will keep skewing the digital spaces towards greater and greater economic, social, cultural and political control, as we already see happening.

At the community end, the requirements follow a similar pattern. A arms-length public funding support is required for groups that can organize the community for digital enablement. A lot of work has gone into this area for the last decade and a half. As mentioned earlier, this has paved the way for people to begin seeing the computer and the Internet in social and developmental contexts. A lot of groups currently run telecentres or other kinds of ICT based rural projects. While having developed a basic social identity and role of computers and Internet in people's minds, as well as having established many significant empowering digital social processes, the impact and footprint of initiatives have been limited by some key factors. Many of these projects are simple digitally-enabled transactions oriented

efforts which do provide some efficiency benefits but do not create openings for transformational empowerment possibilities. Most of these are fee per transaction models that put the cart before the horse by seeking revenues before establishing stable and enduring value propositions. A free and unlimited access to a relatively cheap infrastructure with multiple empowering values would kick start a new set of digital empowerments. Such empowerment and corresponding social systems, however, follow a process of discovery, which requires going through a period of initial hiccups where value will not match costs, if connectivity gets priced too high too early. The flagship e-governance program, Common Services Centres, also employs this problematic model. Most people involved with ICT related community level work that we interacted with were strongly of the view that if we need a paradigm shift in digital empowerment efforts at the community level, we need to present different models where providing connectivity, basic digital artefacts and capacity building, and triggering building of local contextual digital social systems, is seen as an social investment, and not a business proposition.

The 'business model first' approach, which was an unfortunate import as ICTD models developed in the North, has been the major culprit in terms of non-achievement of the potential of digital empowerment in India. However, it is not that such digital empowerment will be achieved just by putting connectivity and a few computers at some community centres in Indian villages,. A lot of publicly funded facilitation work, involving orchestration of community effort, will be needed. Fortunately, computers and Internet are exciting things and it is *relatively* easier to organise community effort around them (especially if one does not begin charging every time a computer is touched). Such a community-level model has partnership requirements similar to the earlier discussed model for developing open and enabling digital architectures, whereby public funds are needed for facilitation and proper organizing of community effort. Such new models of government- community partnership should be explored in the specific digital context.

The need for Internet policies

It may be useful here to first briefly discuss the views of a big group of people who while they normally quite recognises the important role of policy and law in different areas feel very circumspect about rushing into policy development in the area of the Internet. The single biggest issue with them is the fact that we were dealing here with society's informational space in which the state itself has an extra-ordinary control- oriented interest. This single factor sets Internet polices as a domain very different from most other policy areas. The extent and rapidity with which the Internet is disturbing various status quo orders renders state's fear of the Internet even more pronounced. Under the circumstances, it is difficult for most to easily trust that the states' policy, law and enforcement systems would really follow the public interest, and not of those who were entrenched in state protected status quos. This is one of the most significant paradoxes of the Internet age. The new social order is being built at a time when there is a unique possibility to embed deliberate social designs into it which best serve the public interest. However, it is difficult to trust the established policy mechanisms to be adequate to this difficult task, and that it will not make costly mistakes due to lack of knowledge and foresight, or worse, just out of keenness to protect status quo systems that the Internet often tend to challenge. To be able to control the digital informational space is too alluring a possibility for a state used to current models of statecraft to be foregone easily.

Our discussions also revealed some other key issues peculiar to Internet policy making. Internet

induced social changes are simply too rapid for most policy systems to be able to cope with them well. It is feared that policies will lag so much with regard to these rapid changes that they are likely to shackle positive change rather than be its enablers.

Another condition somewhat unique to Internet policies is that they deeply touch so many different domains that the real policy expertise in any particular case may lie with the concerned domain rather than with those focusing specifically on Internet policies. Internet policies developed without sufficient collaborative work could, in the circumstances, end up having a negative impact on the specific domain rather than a positive one. The sheer range of the required expertise and understanding of interests, including the nature of the public interest, in case of Internet policy making is so vast and cross-cutting that existing silos based policy making systems, split vertically across different domains, are often found simply not adequate.

One concern has been about implementation of policy and legal regimes on the Internet which consists of so many rather new kinds of social interactions and transactions. Not only the sheer number is simply mind-boggling, they are so very diffused – spatially and temporally, and take place in deep, somewhat private and difficult to access and 'monitor', recesses of the digital sphere. Consequently, implementation invariably seems to call for 'private policing' employing the Internet intermediaries, which is a highly problematic concept for obvious reasons. State's legitimate monopoly over coercive power of law implementation cannot be outsourced to private parties and left to their good judgment.

A further point about the uniqueness and the difficulty of configuring an appropriate Internet policy domain is the fact that in some fundamental ways, the Internet is inherently global. As a consequence, national level policies done without taking this global context sufficiently into account could have a limited effect.

Internet policy making mechanism would therefore need to address all these unique contexts and concerns. One can put such requirements over the following elements.

- (1) The policy making processes should be build over a solid knowledge system;
- (2) The processes should be open and participative, whereby, apart from contributing current knowledge, they ensure that policies are not oriented to protecting entrenched vested interests, and genuinely serve public interest;
- (3) In all policy making and implementation work, the state's problematic relationship with society's digital informational space has to be specifically accounted for, by maintaining all possible checks and balances;
- (4) It is best to rely on setting our larger policy and legal principles, which can be flexibly applied to different situations, rather than micro-legislating for everything, which could quickly result in outdated polices and laws;
- (5) A clear mechanism delineating expertise and competence, on one hand, and enabling collaborative output, on the other, must be set up between the Internet centered policy domain and sectoral domains;
- (6) Policy and legal provisions for the digital realm should also provide for the necessary implementation mechanisms, which are adequate to the new digital context, and do not rely on private agents for carrying out state's legitimate role of implementation;

(7) National policy making much be in keeping with global realities.

We will try to briefly address all these key concerns one by one to explore and suggest what policy mechanisms are best suited for Internet policy making in India.

Policy knowledge base: This issue has been addressed in a previous section on Internet research. A new national institution devoted to basic and policy research on Internet should coordinate this task. It should undertake social research on existing, emerging and futuristic Internet issues, both at a basic research level, building a knowledge system on this subject across India, and keep a close connection with policy spaces. To ensure sufficient plurality of research and perspectives, independent think tanks must also be supported by diversified sources of public funds for undertaking Internet research.

An open and participative policy process: One fortunate aspect of a largely imported discourse of Internet governance has been the prominent rejection of closed policy making processes that governments typically employ. The concept of multistakeholder participation in policy making has become very key in this space of Internet governance, perhaps even the central concept. Its need arises from the above mentioned conditions, especially of the state's extra-ordinary, and not necessarily benign, interest in digital informational space, but also of deep need for continuous availability of current expertise from so many different sectors.

Internet is too basic to a large swathe of social activities and the state has too keen a default interest in protecting status quos and in controlling informational space opened up by the Internet, for people to trust typical governmental policy making processes. Internet governance and policy making today is mostly done in the manner of 'governance by crisis'¹, as policy makers rush to patch up legal or social 'gaps' or 'inconsistencies' that the Internet's rapid enmeshing with existing social structures and systems keep throwing up. Evidently, such is not the best way to make Internet policies.

Internet policy making should be especially open and participative. It must follow a deliberate process of extended discussions and consultations, picking up issues well in advance, and looking at all aspects of it (in the case of Internet policies there are always more aspects that immediately evident), involving all sections of the society and all stakeholders most effected by any policy domain. Even if any urgent policy or legal measure is required, it should be temporary and just adequate for the purpose. Proper policy and law development should follow a full process of thorough public consultations, discussions across stakeholders and between different domains of the government itself. Policy drafts should be published based on these discussions, with elaborate explanations. A few rounds of inputs should be taken before policy finalization. It will be most appropriate to formalize such a process of policy development through law, which may also provide for dealing with exceptional situations as discussed.

In this regard, the global institution of UN Internet Governance Forum is a good one to look at. Although it has had a mixed success because the status quo-ists have often sought to use it for ensuring policy paralysis rather than as a means of policy development. During our discussions we found a lot of disappointment about such a role of the UN IGF and its consequent failures. Most were however eager to invest in improving the UN IGF. Modeled on the UN IGF, Indian government has now instituted an

1 As this paper is being written, the DRIP legislation in the UK is an excellent example of such 'governance by crisis'

India IGF which will be held for the first time in 2014. It should be ensured that India IGF is a policy enabling institution and not one devoted to policy paralysis. Prognosis for such participative institutions is much better within national systems, especially if such an institution is formally established and, very importantly, backed by public funds. This is the case with India IGF. A very good precedent is the Brazilian Internet Steering Committee which meets these conditions and was instrumental in triggering the Marco Civil legislation in Brazil, which is a kind of civil rights framework for Internet policies. Institutionalizing similar consultative processes like the one followed by Marco Civil for Internet policy making can help ensure that such policies genuinely pursue larger public interest, and are also informed by all the required perspectives.

State and the digital informational space: The state's almost inherent desire to control the digital informational space constitutes one of the biggest issues in determining appropriate means of Internet policy making. Apart from the obvious problems of such control *per se*, a justifiable suspicion of the state in terms of Internet policy matters has resulted in severe gaps in public interest regulation of the Internet, which in the long run will be very detrimental to our societies.

To deal with this vexed issue, we should treat the state's role with regard to the digital information space in the same way as we regard its role in terms of some other domains where vested interests of the governmental incumbents are seen to be exceptionally high. Two such examples are; management of elections and the public accounts and audit system. A number of respondents in our discussions sought an independent statutory or constitutional body to deal with digital informational space. Such a body, for instance, will have the sole authority in terms of enabling legal access to personal data, where the law so determines, to the specific extent, and under such specific conditions. This body would also undertake quasi-judicial determinations whether information flows and sharing on the Internet causes any violation of law, whether regarding public order, defamation or intellectual property. The digital informational space is thus rendered 'sacrosanct' – like, to repeat the example, we do with regard to our election system and the public accounts and audit system – and put at sufficient distance from possible illegitimate meddling by the government of the day. This is however done without putting it beyond the pale of law. This could be the best way to sort out what is one of the most complex conundrums in the Internet policy space.

Larger principles based policy and regulation regime: Internet's transformational impact is being felt across social systems, and most of these impacts bring up policy challenges. Such challenges can come about suddenly as Internet-mediated social mutations take place. Further, the context can again change rapidly because of the flux which is quite pronounced at the current formative stage of the information society. In such circumstances, policies seem to be always chasing moving targets, and often end up constraining positive social development rather than enabling them. In such a context, it will be best to develop a framework of larger principles for Internet policy and regulation. These principles can then be flexibly applied to shifting situations, without encumbering positive development because of policy rigidity. Developing a set of authoritative *Internet Policy Principles* should therefore be the immediate task. These principles should be directed by Indian political and constitutional priorities, and informed by the Indian contexts. We need not look to simply lift off these principles from the international stage, where a certain set of dominances, and political priorities thereof, are working. This is not to say that India's Internet Principles can be divorced from global realities. The globalness of the Internet is valuable to India, and protecting it will very likely be a core principle in itself. Accordingly, there

would be adequate embeddedness of Indian Internet principles in the global realities. A later section will briefly touch upon this point.

The relationship between core Internet policies and domain policies: As it does to almost all social systems and structures, the Internet considerably strains the policy making system as well. One generic direction of Internet induced transformations everywhere is a certain horizontolisation (against vertical structure dominated social ecology) and networking. Little surprise then that making policies for the Internet, which touches almost all domains in a fundamental manner, is not a easy task for government's vertical silos based policy system – divided over ministries and departments looking at specific, largely mutually-exclusive domains.

How do we deal with policies requirements that for instance has to do both with Internet standards and Internet intermediary companies, and with, say, education or health? Development of commercial health data networks and Internet-based educational companies respectively are two such cases in point. There are obviously innumerable other examples of this kind, and more will keep surfacing as the Internet fundamentally transforms most domains, through what may be called loosely as 'informational-ising' and networking them.

It will be absurd in such cases to move all concerned policy competence to the Internet policy space. At the same time, the specific domain spaces will obviously not be able to deal with the involved policy issues on their own. What is required is to develop *the specialized Internet policy space* in a manner that (1) convergences all domains that are core to Internet policies, and then (2) configures itself in a manner that other (sectoral) policy domains can conveniently establish standing relationships with different parts and aspects of the Internet policy space.

Currently three different ministries of telecom, IT and information and broadcasting have to possibly converge in the near future. The distinctions between their competencies are being increasingly blurred. Their functions are too closely related and inter-mixed in a times where the Internet is increasingly becoming the converged, communicative and informational space for the society.

Such a converged *information and communication ministry* must have three distinct sections, concerning respectively with (1) infrastructure and digital enablement, (1) data, information and media, and (3) open digital architecture. (These are the three basic structural requirements for such a ministry, although it can have other sections, like a separate one for supporting the IT industry, a very important task currently undertaken by the IT department).

The department for 'Infrastructure and Digital Enablement' would be take care of all infrastructural issues, thus subsuming the current realm of telecom ministry. It would also ensure that people have universal access, not just to the Internet as such, but also to basic digital artefacts and functionalities. It would *inter alia* ensure policy support for accessible devices, and all the basic software and applications that are required for what should be an assured universal level of digital enablement and participation.

The section on 'Data, Information and Media' will deal with all 'content' issues, which range from data protection to freedom of expression, content regulation and media. The current competencies of the

information and broadcasting ministry will fall here.

The department in charge of an 'open digital architecture' has the very important task of ensuring that, as the Internet and the digital realm become the standard mediator and matrix of new social systems in most areas, the digital architecture provides a level playing field for all. Further, if some positive discriminations have to be built into its architecture, that may be ensured as well. Ensuring such open architecture requires promotion of open standards, and interoperability between software, applications and services, including data portability. It also requires ensuring sufficient competition in key digital applications and services layers, and preventing monopolies. (It may for instance seek to file and pursue cases with competition commission and other regulators, like the current telecom regulator for net neutrality issues).

These departments, of a composite ministry in-charge of Internet policies, must internalize the fact that their competence is over a 'horizontal social layer', the techno-social digital/ Internet layer, which intersects with almost all other social domains. This ministry is thus in many ways a meta-ministry, or at least in charge of a meta-domain. Its structures and way of functioning should be built over this reality. It should internalise a networking-based work method, aiming at shared outputs. This is a difficult transition to make from the current, often competitive, inter- ministry dynamics with regard to issues where competencies overlap. The success of this ministry undertaking Internet policy would lie most of all in how well it internalizes and exhibit a networking-based inter-ministry relationships and working.

All other domain ministries will gradually develop sections that deal with the digital element of their work, or mainstream it across their work. With the sections/ departments and their respective mandates in the converged information and communication ministry being clear, the domain ministries will know where to establish contact and work together for a specific purpose. For instance, one can clearly see how the education ministry at different times will have business to do with all the three sections of this converged ministry.

The above scheme enables external clarity of competences and their logic, and well as internal cohesiveness of purpose and ensuing activities and outputs – the two key principles of organizational structure. It will also help appropriately structure the relationship between the ministry of information and communication which has competencies over many meta-issues, with regard to the role of the Internet, with domain ministries.

Who implements, and the question of private policing: Getting ones polices right is very fine. However, there are complex implementation issue with regard to the Internet. (We disregard here the jursidictional issues that come with the globalness of the Internet, which will be briefly touched upon in the next section.) The techno-social reality of the Internet touches people's daily, and often intimate, lives at so many places and times that keeping account of possible transgressions is not an easy task. (The law should of course mind only such transgressions that cause 'considerable harm' – the bar being set sufficiently high so that it does not become a digital police state, but those still need to be accessed, and evidence built about.) In desperation, policy makers and even courts are turning to the Internet intermediaries to do this work for them. Such work is clearly one of sovereign competence and cannot be left to private policing, certainly not to actors whose interests are enmeshed with the concerned

social activities. Google, for instance, removes at will material it considers to be violating intellectual property laws (which country's laws?), or transgressing the limitations to freedom of expression, or, now following the 'right to be forgotten', as being defamatory (in Europe). Many big companies now simply use algorithms to police content, and even remove it automatically. Such private or technical policing is extremely dangerous, and has doubtful legal and constitutional standing. It is difficult to assert with any degree of confidence that the concerned Internet companies' own values or interests will not determine its decisions. Further, such private policing can put such heavy economic burden on Internet intermediary companies that it can considerably raise barriers to entry in the field.

The problem then is, if not through private policing by intermediaries then how to follow or access – as necessary – the billions of online interactions that take place everyday for the necessary law enforcement. It is obvious that this is a new space requiring jurisdictional application, and the challenges here are indeed tough. Online application of jurisdiction has to evolve and structure itself to the unique online reality and cannot just be a cut-paste or extension of how it was with physical interactions. As seen above, it may simple not possible to do such 'simple extension'. This of course does not mean that the online/ digital is left as a lawless space, which is even less tenable.

The proposed Internet research institution must also research the issue of jurisdictional evolution for the digital space and interactions. We just provide here a few rough pointers. One, the law should address issues only of substantial harm and not commonplace activities even if they, in a literal sense, transgress law. In the offline world, such 'wisdom' is ensured just by the costs and difficulty of preventing and prosecuting such cases. However, this is made much easier in online spaces, especially if one resorts to technical/ private means. What it results in however is massive interference with people communicative and informational rights, which is at least as much the duty of the state to protect, if not more, as punishing infringing content related activity. To maintain the needed balance, sufficient legal burden should be placed on the intermediary companies of causing transgression over people's right when it conducts private content regulation. And if indeed the companies take down content on any ground, it should be ready to legally defend its actions as upholding the law of the country. Putting such a legal burden will minimize interference with any content by these companies.

Second, with everyone figuratively holding the mike, and having means of making infinite digital copies, things will never be the same again. The society simply must adjust to new situations of expression and also content sharing. Social norms should and will change in these regards, and become more in keeping with the technical realities.

Third, in the offline world, people mind themselves and conduct as per law because there is a widespread awareness of the pains of not doing so. As one respondent said, the problem especially with new users of the Internet is that they believe they can do anything on the Internet and no one will be the wiser, which we know is simply not true. One believes therefore that as cases of (appropriate) legal action on online violations increase, and people become aware of them, they will suitably constraint themselves as they do in the offline world. This will not remove online violation of law altogether but will bring it down to a much more manageable levels. Therefore it is useful to create awareness of what constitutes an offense over the Internet and the ease with which such crimes are traced and prosecuted , without of course overdoing it to cause a chilling effect. Meanwhile, it would be best to take a restrained attitude to pursuing online transgression other than the really serious ones.

Fourthly, there would however still be need for some implementation of law with regard to online spaces. This should however certainly not be done by private parties. In keeping the previous assertions of the political power and sensitivity of the digital informational space, regular executive agencies, like the police, are also not the best suited for such a task, at least in relatively non-emergency circumstances. This task is best dealt by an quasi-judicial machinery under the proposed constitutional/statutory body dealing with the digital informational space. This law implementation machinery will consist of officials with quasi-judicial powers, who operate and take decisions remotely on a relatively rapid basis. This system replaces the private policing by Internet intermediaries. The decisions of this machinery are of course subject to appeal in normal judicial processes. The cost of running this machinery can be more than recovered by improving tax incidence and compliance with respect to intermediate Internet companies, who in any case will save a lot of money being ridden of the responsibility of private policing on the state's behalf. (However, sector regulators should never be directly financed by taxes from the concerned sector itself.)

National policies and the global Internet: Global governance of the Internet is a hugely contested subject. It will not be possible to go into details of this issue here. However, it is evident that national Internet policies must be mindful of global governance arrangements or their absence. India should promote a regime for developing global norms and policy frameworks, and for harmonizing national level policies and law, and enforcements, within such frameworks. The Internet policy mechanisms should therefore keep close interactions and relationships with global Internet governance and policy forums and discussions.