DIGITAL EMPOWERMENT FOUNDATION

Epowering People at the Edge of Information

20 DIGITAL YEARS:
# A NARRATIVE OF INCLUSION AND EXCLUSION

BY OSAMA MANZAR

Let me introduce

Reflecting on 20 years of Digital Empowerment Foundation (DEF) is like painting a canvas with 20 different colours. The digital space and scenario has evolved, morphed, exploded, imploded, opened up opportunities, restricted freedom of speech, instilled confidence in the ambitious and also stunted growth succumbing to online bullying. With this backdrop, when I look at: "Digital Empowerment Foundation: Empowering People at the Edge of Information" today, two decades since its inception, I still find the core intent to be very relevant. To be more precise, it has been highlighted to be considered as the need of the hour as feeding the internet to people has become equivalent to providing food or shelter. On one end there is a lot of discussion on information society, surveillance, online hate speech, digital interference, virtual domination, and the list of digital jargons seems to be never ending, while on the other end, there is still a huge population reaching out to gain access. The journey of DEF has witnessed a very dynamic shift and complex evolution of the digital divide over the years in terms of impact. The continuous learnings have helped to empower the organisation to skillfully and creatively find solutions that aid in bridging the gaps of the digital world.

The Internet History

Although we have come a full circle from working mainly on the ground to partnering with the inventor of World Wide Web (WWW), which was just an interface back in 1995, a quick glance at the history of the internet lays a better groundwork to understand why, how and when the journey around digital empowerment began. The first milestone of internet evolution was in 2003 when Kofi Annan, the then Secretary-General of the United Nations, announced in Geneva about the 'digital divide' in the opening discussion of the World Summit on Information Society (WSIS). The next highlight was the following WSIS, 2005 held in Tunis where he spoke about the historic transformation that the world preempted at the dawn of the information society. During those times,

the ethos around connectivity was very aspirational and centred around 'inclusion' with the participants' main attention being focussed on getting listed on the internet like Yahoo.com. In the publishing domain, those who wrote the articles were internet illiterates, but their work would get broadcasted on the world wide web before midnight with reviews pouring in the next morning as the rest of the world had access to it. The atmosphere was such that even before the journalists got a hold on writing emails, their editorials had reviews from across the globe. I am referring to my days at the Hindustan Times, where I was the head of the Internet division and among others, one of the responsibilities of the division was to ensure that the entire newspaper must get uploaded on the world wide web before midnight, so that the reach of the newspaper content was far and wide. Incidentally, while the physical newspaper would reach every subscriber within India in the morning, the people across the world or to be more precise, the diaspora used to get a chance to read the newspaper several hours before dawn in India. And interestingly, most of the HT journalists would get less feedback or letters to editors from abroad than within India, and on email rather than through posts. Motivated by the feedback, the journalists and reporters would come to the internet division or in our cabin and ask "how to open an email account" for themselves. This was in the year 1999 and 2000.
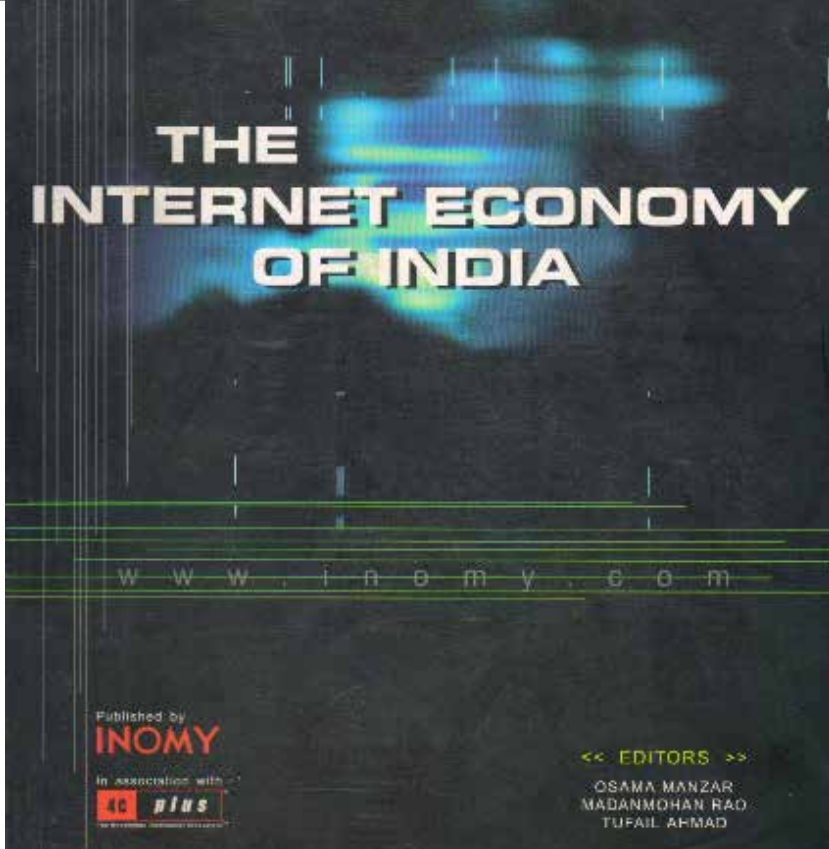
The DEF Inception

The boom of publishing content online was quite big which attracted huge investments. At this time around, I started a company called 4C-Plus with my partner which was content service oriented and the work evolved around the web, like content management system, website development, web hosting and so on. We did not know that we were in for something big: obviously everyone wanted to have their website, as there was a dotcom rush. But we got into developing the web presence of some of the biggest media houses, like Outlook, Outlook Traveller, Outlook Money, Dainik Jagran,

Amar Ujala, Rashtriya Sahara, Dainik Bhaskar, Mid-Day, Tehelka, and many more. Alongside, I used to run a newsletter called the Internet Economy of India (INOMY) through which we used to track all the developments and news related to the internet and how it was affecting Indian businesses and life. We mapped almost each and every news and announcements anybody would be making in the internet arena or dotcom businesses. We then converted all our research into a book called "Internet Economy of India", and released the same in 2001. The book became an essential reading for all and also declared that in 2000 India had invested more than 20 billion dollars in internet related businesses. Many weren't aware about the new economy and the idea of the internet economy attracted a lot of attention. After a couple of TV interviews, I sensed that something much more useful and important came out of it which made us go deeper into the work. It was during this process that the seriousness of the issue of 'digital divide' hit us hard.

We realised that we are not a poor country. We are a rich country but an "information poor" country which is rooted from economic deprivation, lacking access to information linked to void in digital access. This became the crux of DEF. In December 2002 the main idea of creating a platform to push access to information though digital infrastructure was materialised as DEF. The intent was also to bring about a paradigm shift in the way the internet was perceived in India by encouraging the rural population, which is the major chunk of the national population, to become the producers of content and not just the consumers of it. This stemmed from an understanding that the people who just consume tend to get stagnant in the development cycle which would

then demand a constant support mechanism to ensure inclusion. Such a set up would be on the verge of collapse sooner or later and leave the digital world more divided.

So, the approach has always been in not just connecting the unconnected, but empowering them so that they become the producers of information. This has been challenging given that most narratives in the internet era are driven and dominated by western perspective, creating a dent in the diversity of the cultural spectrum yielding to polarised attitudes like capitalism under the tag of globalisation. For instance, when we look at the Wikipedia pages, it is very rare to find content that provides the Indian perspective. But if we work on having a Wikipedia page per Panchayat, it would lead to a more diverse range of content. Thus, the efforts have been channelled to include local information on the internet keeping in mind that it is a permanent and transaction oriented entity rather than just a broadcasting one.

Working in Public Domain

Back in 2002, with this main idea of resolving the issues around the digital divide and an inclusive and sustainable approach in mind, I publicly started sharing my opinion that every parliament or a government body should have a website which was mocked at. But you see today that, if you don't have a virtual presence, your identity is at stake. Even today although every Panchayat doesn't have a virtual presence, we advocate it strongly because public representatives should be accountable in public domains and there is nothing more public than the WWW domain. One of the projects that we got involved with was creating the whole framework for a public representative and designing how a constituency would look like in a virtual set up. This design was later converted to fit into the context of a Panchayat. It is quite ironic that 3 million Panchayat representatives, of which 1 million are women, under whom 29 subject based government financial sanctions are disbursed to improve sanitation, road and other basic things have no commitments to accountability apart from just providing financial or quantitative data. So, the further work involved enabling these people with infrastructure and capacity building so that they get to choose for themselves how they want to utilise it.

Society and Inequality

When it comes to working in the public sector, the ever widening inequality seen in India is not just because of the loopholes in the systems and mechanisms but also owing to the attitude. Striking a philosophical note, it is not a novel understanding that the more one accumulates, the more insecurity is built, often leading to intellectual arrogance that hampers the redistribution of resources to those in need which gets stubbed under the ideological debates of quality, safety and security. The hypocrisy in the means of accessing resources persists as a bottleneck in expanding the reach of any organisation in the public domain to reduce inequality.

So we have always had a strong conviction in ensuring that the resources reach those in need the way it reaches us, that is without answering or asking any irrelevant questions. We were very clear that if someone wanted

to provide funding or resources, we never entertained the question of 'how' and retained the autonomy of figuring out the ways to implement different projects. For example, if there is a resource available to digitally empower students so that they get access to education as well as get digitally equipped; we would not like to entertain questions from the funder - what about the side effects of getting digital or what about if they watch prohibited contents online etc. We have proper monitoring mechanisms in place to counter these issues because we want the focus to be on providing access instead of trying to find smaller issues that plague those who have had the privilege of being connected. We rather simply think and execute access, following it up with work on its quality, depth, and side effects because that is exactly the way all the 'haves', like us, availed access to new tools in their lives.

Means of Access: Digital or Digit All

With this kind of working dynamics established and with a clear understanding of the focus area of work, which was filling the gaps that the public or government representatives created as an offshoot from lack of accountability, 'providing access' developed as the main theme. So, the most important aspect was: if people had the right to food, they should have access to it; if they had the right to information, they should have access to it. And on thinking on the lines of how to provide such access, we concluded that digital is the means. People often asked, "What about roti, kapada and makaan (food, clothing and shelter)?". I said all that will be taken care of under the umbrella of digital. Because earlier access to ration, housing, etc. was just a step ahead from signing or providing personal information in person. But today, that information is always beyond a digital firewall. If we look around, every house plot is monitored on GPS, biometric is necessary to authenticate one's identity, virtual presence in the database is as important as having a physical presence. The importance of access to such information was not understood or so relevant earlier. But now, given the digital divide, it plays a vital role in the survival of a huge population in India. Digital inaccessibility is actually an exclusion of all sorts.

Connecting the Unconnected

To provide access through digital means, the primary work was to connect the unconnected. Of the 773 districts in India, 374 have been identified as educationally backward. The ones that are backward are also the ones who are effectively unconnected, sparsely connected or 2G connected; always buffering. This is not just a rural scenario, even in the cities, the slums are in a similar situation because affordability is less and hence data transfer rate is less. The main work has been to empower people from such backgrounds. We pick out entrepreneurs from the locality (who have a natural flair for entrepreneurship and are service oriented) and train them, including differently abled people and preferably women. They are empowered with digital tools

and training to run a business of providing services that are necessary in gaining access to information with the added benefit of helping the locals so that they don't have to travel far or get exploited. The entrepreneurship model is community centric and covers mainly 5 areas which serve as the basic pillars of a society. Along with health, education, governance, finance and livelihood aspects being integrated within the digital framework, the social issues like patriarchy are targeted with a gender inclusive model.

Based around this entrepreneurship model, over the years DEF's reach has expanded. DEF took off in 2002-2003 and set up its first digital centre in 2007. Before the Covid-19 pandemic, a few hundred centres were set up and now we are close to 2,000 centres across the country with a presence in more than 130 districts of 24 states. As the centres are entrepreneurial and digitally driven, these are further expected to expand on their own. The entrepreneurs are trained to do anything and everything from editing on phone, providing digital information, leading digitally driven campaigns, sending messages on COVID precautions, spreading the word about financial and digital literacy, fact checking, surveying, creating databases, providing banking services, linking to doctors online for health consultations, playing teacher and trainer for various digitally driven skills, etc. They take many forms from managing the business and family, to organising online consultations, resolving social issues, taking up grievances of the people, filing online complaints, and many more. Some details can also be read at the SoochnaPreneur website.

Research and Advocacy for Impact

When it comes to research and advocacy, the general approach has mainly been fragmentary in nature with very limited exchange between initial research, policy changes, implementation and actual impact. Lately, research for impact has been gaining a lot of popularity, especially given that the world order has been witnessing increasing complexity. DEF has been practising this intuitively right from its inception by ensuring a mechanism that facilitates continuous learning from the implementation and design perspective. Being outcome oriented and including the targeted community in the design and ideation process, DEF has been able to improvise its own programs and has been collecting information that helps in advocacy. The information collected by the digital foot soldiers, who help in last mile

connectivity, is used for advocacy on a state or national level. All the collective knowledge comes from them. While we do a similar thing, we are different from any other advocacy or research oriented organisations by providing quantitative and qualitative first hand evidence of the effects of policies and programs. For example, many of the digital rights organisations are doing a lot of research on surveillance. But our experience from the ground tells us the story that at the end of the day, people want food and if they want more food, they will create 10 more identities. So what data means to the end users is different from how a research analyst, well versed in the vocabulary of the digital world, looks at data.

These shifts in outlook become prominent when quantitative data become the sole driver of policy change. Another example in this context is that of the Telangana government's initiative to develop AI for good. They had 29 departments through which they had collected data which were all merged to create a new database so that they could do better welfare to the citizens. But the accuracy turned out to be 78% which meant that several thousand people got deleted from the database and they were declared "not surviving". When you talk to people in the policy field, they will say "yes there was some error in the data" in a way that those lives didn't matter. But when we look into implementing digital rights literacy with the beneficiaries and through them by taking up examples like that of identity theft, or fraud on the basis of Aadhaar which they understand very well based on their experience, we add different weightage to the data collected. It is interesting to understand how the perspective you get from the ground can question or motivate policies. In the current scenario, Aadhaar is a necessity for the poor to avail rights, food, education, etc., but the same individual is unable to fathom that the same Aadhaar number linking to his bank account is enabling ease of banking frauds or theft of data, his identity. DEF works at the cusp of this paradoxical situation and has to constantly balance the act of enabling the poor with digital tools and also ensuring that they understand the nuances of data and are literate enough about data rights.

Attributes of DEF's Ethos

Looking back at what DEF has done differently that has resulted in having good impact and success stories from the ground, I would always steer towards the clarity about intent which drives us to ideate, design, implement and improvise with an end goal of finding sustainable solutions with an inclusive approach. Couple of examples that resonate with this are the SoochnaPreneurship program and the Digital Literacy program.

In comparison with other similar programs like that of Common Service Centre (CSC) , with digital kiosks set up in different locations, which DEF also worked for in formulating in 2007, SoochnaPreneurship model was never an entrepreneur centric model. Our learnings from writing the scheme and policy for CSC helped us understand that if the importance is given to village level entrepreneurs, they would tend to be money makers and provide services that bring them better commission rather than provide those services that are actually required by the locals. So the key aspect that was kept

in mind was to pick the right kind of SoochnaPreneurs who share the interest to serve the people. We realised the need for a very sensitive and socially conscious entrepreneur who would take up all local problems with empathy and solve them as a service and yet sustain herself/himself. As a result, SoochnaPreneur has emerged as a scale model of what Telecenter.org and CSCs envisaged.

On similar lines, another scheme was National Digital Literacy Mission which was started by Intel in partnership with DEF and NASSCOM Foundation in India that became a national program. But we never followed the same curriculum for our own Digital Literacy program. What we learnt on the ground is that they don't want to learn hardware and software. The learning of the

communities is need based. They want to watch Bollywood movies for which knowing 3 clicks of a mouse is enough. They will also tell you what they perceive from the keyboard. So, as trainers, we ask, "if you learn the keyboard, do you learn them as an alphabet or as a symbol?". I remember going to a village where one boy who didn't know the keyboard pressed 5 keys to show how he took the print out of Amitabh Bachchan. We realised that symbol based learning is more natural which is also why children draw a lot. Once they are familiar with these symbols, they can expand their learning using YouTube, etc. So, the whole digital literacy turned out to be a different ball game altogether. The important thing was the goal to impart digital literacy while the means we used was symbol based training, or oral and visual based training. Now, if we want to teach digital financial literacy, we will teach about the four most important banking apps that one uses or digital tools represented by icons on the mobile. Everything else is usually figured out amongst themselves. Teaching through examples was found to be the most effective way. As a result, in 1 to 2 years, we made 5 million women digitally literate. This cannot be achieved unless we figure out a way to include peer learning. Just introducing them to creating groups on Telegram using audio visuals helped them learn a lot more from each other. It should also be noted that although the means of introducing content is symbol based, such a model would not work unless there is a proper structure to guide and intervene in the learning process to check continuous progress.

Impact on Social Values

The case stories from the beneficiaries reflect much more than the expected outcomes. They all share aspects of breaking some social bondages, improved self-esteem, enhanced sense of social responsibility, etc. The methodologies have always considered the impacts on the social behaviour of the community and some of the important takeaways in this regard have been: the effectiveness of peer learning, self regulatory aspect of community oriented and inclusive digital design, methodologies that encourage more participation from the beneficiaries are more effective and that every digital model needs to be designed from sector perspective. This is ensured by including a baseline and endline survey under each category to help in customising deliverables for each sector.

Another key learning so far is that design and methodology is more important than technology when

it comes to implementation. The methodology should be non intrusive in terms of social standards and yet stimulate change. One such example was in designing a mentorship platform using an already existing communication tool, WhatsApp, to help in mentoring girls who could have conversation with their female mentors with the consent of their parents. So, the stress has mainly been on the design. GOAL (Going On Line As Leaders) is a perfect example of designing a program based on given conditions. We all know that our girls in villages live under severe patriarchal practices, they hardly utter their wishes and have almost no freedom. We also know that their access to mobile is restricted and at best need based. We simply designed a scheme that smartphone is available only for the girls in the village and the deliverable is that she will get a two hour session to get in touch with a female mentor in the city to get access to counselling and education of her own desire in a video based call in a free flowing manner. None of the parents objected, and all selected girls got a smartphone and in a pool of 4-5, they would talk to their mentors on a weekly video call and discuss anything and everything in life. As a result, all the girls became open, started talking, started working on their capacity to achieve their desires and turned out exercising all possibilities to become something that they had dreamt for. Just because of the design of the program, we had gender digital inclusion, fought patriarchy and created entrepreneurs. We did not develop any curriculum, we linked haves and havenots on an equitable platform; we did not create any new technology but just used existing tools and infrastructure.

20 Years From Now: Where and how do we go from here

With 20 years, and going, of work in bridging the digital divide still ongoing, the coming years pose further challenges in the realm of information society.

Looking back again at the tagline of DEF: "Empowering People at the Edge of Information", the irony is that today, those people who are connected are also on the edge of information. There are more issues like overload of information, confusion, mental health problems, digital addiction, hate speech, online trolling, bullying and harassment which also demand equal attention. Fake news and disinformation are mounting each day and especially in rural areas, it is hard to control it. Fake

news becomes a rumour and then spreads like actual news. For rural people, content generation is nothing but forwarding the messages. It is hard to combat this in real time. Awareness and education about checking the facts and sources of information is one of the ways which again is hard to control quantitatively and demands more time for the practice to set in.

Digital exclusion is still an active issue and those who are not connected have to be connected faster than yesterday because everyday they are unconnected, they are being excluded from the rights based entitlements and opportunities. These days, everything that the government is providing is through digital means. Irony is that today, the poorest of the poor are more dependent on the internet compared to all of us for their basic needs. Only privileged ones have the luxury to opt out of it which is another divide that needs to be addressed all over again. So the future challenges would be more about tackling the attitude and practices and less about infrastructure.

The Bottlenecks

This is a very serious issue which most part of the society hasn't yet realised. We are still making policies that are making the internet inaccessible, exclusionary and expensive. The stakeholders in providing basic necessities are government bodies while the stakeholders in providing connectivity is majorly dictated by the private telecommunication sector. The public sector is service oriented while the private sector is profit oriented. This difference in engagement and orientation has an impact on the end users in need of the internet as a basic necessity. Even in the funds sanctioned to MPs and MLAs, there is no mention of digital yet. The researchers and policy activists are also usually blinded and it is hard to convince all the stakeholders that an open system is very much necessary to see meaningful progress. The biggest bottleneck for the current digital ecosystem is the lack of empathy among the policy makers to understand the problem at the bottom of the pyramid caused by the absence of digital and also because of the presence of digital. We cannot create digital policies with an analogous mindset.

Government's Role

One such attempt has been pointed at the effort to introduce optic fibres to ensure last mile connectivity. But outcomes seek to be similar to the BSNL era where wires are seen hanging but no connectivity is achieved. In terms of last mile functionality of making the infrastructure usable and serviceable, there hasn't been any progress as it is a design implementation issue rather than a program issue. To be more precise, the BharatNet program that promised and claimed to connect all Panchayats with more than 100 MBPS connectivity is not yet functional even after making the infrastructure reach to all panchayats. The immediate question would be: Why? The reason is that we do not know how to design things to serve people comprehensively but we are in the habit of designing things to tick the check box.

Another recent initiative is PM WANI which is based on DEF's work of developing community networks which use 2.4 and 5.8 Gigahertz of free spectrum and distribute it locally. One doesn't have to bother about creating last mile connectivity in a very physical way. Connectivity can be brought in one location from any telco and travel using WiFi to another location. Without much infrastructure connectivity is made available. But then there will arise a need to create plumbers and electricians to engineer these things locally as no one else willingly goes to work in these villages. These engineering aspects can be approached in a non technical way by focusing on the how to engineer rather than the why. In other words, the last mile connectivity under the new scheme called PM-WANI can be achieved without the participation of telcos, but yet the telcos have to facilitate in providing backhaul of the internet so that new, private, independent entrepreneurs could organise their own infrastructure to develop and establish last mile internet connectivity for the bottom of the pyramid.

If these things are put in place, many digital solutions can be put into practice to make a lot of things better, even for the government. For example, schools can provide live updates about teachers and progress that adds accountability. But the government is yet to tap into it. In the meantime, we might slowly move towards a thought process of decentralising the internet and finding an alternative mechanism to keep the exchange going. We are curious to see if we will soon have the Intranet.

Essence of the Organisation

Adding further to what has facilitated the organisation to thrive for 20 years in public service and still be on a growing curve, it can be said that the essence of constantly working towards solutions has held the space for creative ideation, improvisation based on learning from doing more than talking, continued research and advocacy to bring impact and collaborative spirit of working along with skillful utilisation of funding opportunities that supports the whole effort to bring change.

Way Forward

The way forward is not easy as we are burdened by the work and achievements of the last 20 years. Also, planning a way forward in an ever changing digital ecosystem, is very risky. Yet, few assumptions are very clear and they are:

>> that irrespective of fast paced availability of access, there will always be a population at the bottom of the pyramid who will not be connected; so, constantly working on making access and digital infrastructure available to the most marginalised and unconnected and remote and excluded, would continue to be a work of priority;

>> that overflow of information, and mass production of digital content, will create societies and communities who is over burdened by information and more so, to be challenged by misinformation, fake news and hate speech; so the future task would be how to create a digital ecosystem of safe, dependable, reliable, secure and fact based environment of information;

>> that how to create an ecosystem of essentializing Media and Information Literacy (MIL) and Data Literacy among all strata of the society; which means, making it necessary for all to be MIL and Data literate - right from the children to adults to governments and the communities at large;

>> and finally, how to make internet feministic while artificial intelligence moral and altruistic;

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