Digital India:
Communication policy, issues and challenges

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Abstract

Erstwhile faith and belief in media and its potential for development spurred the growth of broadcasting to its present level in India. The arrival of printing press in the early phase of European colonialization subsequently lead to print journalism that is now more than 240 years old. Its sustained growth and coexistence with the new media in digital India is contrary to developments in many other nations where erstwhile print journalism is giving way to convergent media. Reforms in the telecom sector and corresponding institutional arrangements have led to the formulation of an ambitious digital India programme. This programme focusses more on enhancing the access and equity to the rural population. The nebulous distinction between legacy media and social media has raised several issues including governance, production and consumption of content and delivery of welfare services including financial inclusion. These challenges are sought to be addressed through the digital infrastructure. Solving contemporary problems within the fragile and vulnerable social structure are daunting including the challenges posed by user generated content. The frequency of internet shutdowns across the country including conflict zones has increased. A key economic and commercial variable in Digital India is the media and entertainment (M&E) industry that has taken full advantage of infrastructure b evolving newer revenue models in the over the top (OTT) platforms and smart devices. India's communication policy in a digital context will be examined as a national case study by drawing parallels where possible with one or two other BRICS nations.

Keywords

India; Digital; Social media; BRICS.

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India Digital:
Política de Comunicação, Questões e Desafios

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Resumo

Em um momento anterior, a fé e a crença na mídia e seu potencial de desenvolvimento estimularam o crescimento da radiodifusão até seu nível atual na Índia. A chegada da imprensa, na fase inicial da colonização europeia, levou a um jornalismo impresso que tem, agora, mais de 240 anos. Seu crescimento sustentado e coexistência com as novas mídias na Índia digital difere dos desenvolvimentos em muitos outros países onde o antigo jornalismo impresso está dando lugar a mídias convergentes. Reformas no setor de telecomunicações e seus correspondentes arranjos institucionais levaram à formulação de um ambicioso programa digital na Índia. Este programa se concentra em melhorar o acesso e a equidade para a população rural. A nebulosa distinção entre mídia legada e mídia social levantou várias questões, incluindo governança, produção e consumo de conteúdo e prestação de serviços de assistência social, abrangendo inclusão financeira. Procura-se enfrentar esses desafios através da infraestrutura digital. Resolver problemas contemporâneos dentro de uma estrutura social frágil e vulnerável é assustador, incluindo os desafios colocados pelo conteúdo gerado pelo usuário. A frequência de desligamentos da Internet em todo o país, incluindo zonas de conflito, aumentou. Uma variável econômica e comercial importante na Índia Digital é a indústria de mídia e entretenimento (M&E) que aproveitou ao máximo a infraestrutura e desenvolveu novos modelos de receita nas plataformas *over the top* (OTT) e em dispositivos inteligentes. A política de comunicação da Índia em um contexto digital será examinada como um estudo de caso nacional, traçando paralelos sempre que possível com um ou dois outros países do BRICS.

Palavras-chave

Índia; Digital; Mídias sociais; BRICS.

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Introduction

There are many approaches by which a communication system in a vast country such as India can be analysed. The Indian context allows for such diversity recognising its civilisational importance and more than three centuries of colonisation. As one of the many nations that gained independence in the post War period, the quest for nation building has been challenging. Different phases of these initiatives can be recognised. A firm belief in science and technology and addressing the complex challenges of development has formed the backbone of the policy framework.

Brief overview of media

The arrival of printing press in India from Europe was by accident. The press intended for Ethiopia could not reach the destination and was put to use in Goa, an erstwhile Portuguese colony in India (PRIOLKAR & RIVARA, 1958). More recent history of the many facets of the origin of the first newspaper in India has been documented (EXCERPT, 2018). References to history of newspapers (MURTHY, 1966) are cursory to highlight the continuity. Broadcasting relative to papers is a medium of the last century with a few experiments aimed at demonstration and sale of broadcast receivers. The failure of the private initiatives to develop the broadcasting system in India gave way to its incorporation as a government departmental operation in the mid-1930. Media historians state that the organisational structure of news was put in place with limited growth of broadcasting stations in the sub-continent (MASANI, 1976). Only radio was introduced and television was a distant possibility at the time of Independence. However, Indian cinema had established itself and was popular.

Studies in mass communication place substantial importance to the potential of mass media for development. The critique apart, India articulated its belief broadcasting and embarked upon a phased expansion to begin with and exponential growth in the post 1980s period. The modernisation paradigm formed the basis of the justification. Many studies in communication and development in Africa, Asia and Latin America premised on the arguments put forth by Schramm, Rogers and Lerner have led to proactive policies concerning mass media growth in many developing countries (LERNE*R et al*., 1977). The top down model advocated in the literature often described as the dominant paradigm gave minimal opportunity for understanding the social and economic structural limitations at the grassroots level. Pragmatic approaches have stressed on participatory and communitarian approaches to harnessing the media and its potential for development (CHATTERJI, 1983).

Technology adoption and absorption for Communication

An essential dimension of the communication system in India is the adoption of the state of art communications technology-communications satellite-as a leapfrog solution to address the limitations in the terrestrial expansion of television and telecommunications. The Indian space programme within which communications satellite programme is situated forms the hub of the media and communication system in India. Spearheaded by Dr. Vikram Sarabhai (AMRITA SHAH, 2016), the plan was incorporated in the general approach to peaceful uses of outer space for development (ERIC, 1980).

The exponential growth of television following the acceptance of the satellite system as the transmission hub led to a debate about the eschewed purposes of television broadcasting in India as in for education and development versus its skewed orientation towards entertainment. The substantial market for television sets and the appetite for entertainment initially led to dependence on imported serials that were cheaper. However, the existence of a robust film industry and content such as music and screening of films led to a balance in favour of domestic content. In the present situation, India has more than 800 television channels broadly distributed into news and general entertainment category (GEC). The domination of Indian language television channels is evident. The size of television universe calculates as on 2018 is about 800 million individuals and 200 million households (BARC India, 2018).

The media traditions and practices are complex and voluminous to be captured in a short essay. However approaching it in the framework of digital India from,

> Two major media traditions in India – the older tradition of a diverse, pluralistic, and relatively independent press, and the younger tradition of state-controlled radio and television. Most objective observers are likely to agree that for all its faults, contradictions, and conflicts of interest, the first is a worthwhile tradition. In contrast, the second is a stultifying and largely misspent tradition, representing a great democratic and developmental opportunity squandered (RAM, 2011 p. 5).

Telecommunication a driver of Digital India

India, like many other developing countries adopted an incremental and slow approach towards providing essential telephone services. The fact that it was considered as a luxury restricted its limited use to business and government circles with very few elite customers for personal use. The demand was there but the long wait to get a telephone facility limited the enthusiasm of people to factor telephone in their communication matrix. Telegram till it was closed down provided the facility for other pressing and emergency requirements.

However, similar to the push for mass media, especially television in the 1950s, the 1980s saw a latent argument for telecom with the International Telecommunications Union (ITU) proposing that it be regarded as the missing link in fostering the rapid development of the third world nations.

> All these people need information. Without rapid and effective communications they will have to wait for days or travel themselves to get an answer. In many cases they will have to do without the information they require. Farming equipment might arrive after the need for it is past. (MAITLAND, 1985. p 7)

Officially India recognises the importance of the Millennium Development Goals as identified by the UN for planning and implementation of the benchmarks with regard macro development goals. The World Summit on Information Society (WSIS) in Tunis in 2005 enhanced the commitment formally by India and incorporated into its National Development plan. This included the goal of transforming itself into an inclusive information society (GOI, 2015).

The paradigm shift towards a significant policy change in telecom sector is historically analysed as: a policy vacuum up to 1990s; liberalised economic initiatives in response to global push for reforms; and, the implementation dynamics that was subject to a host of pressures ranging from ideological to technological (ATHREYA, 1996).

Reforms in the telecom sector in India have spurred the process of technological convergence that has impacted the way we produce and consume content. It has also enabled the evolution of the IT sector that has significant contribution to the economy.

Towards digitisation-imperatives or adjusting toward the global push

A formal adoption of digital as the backbone of the communication system in India is enshrined in what is described as the flagship programme:

> The vision of Digital India aims to transform the country into a digitally empowered society and knowledge economy. The programme will be implemented in phases from the current year till 2018. The Digital India is transformational in nature and would ensure that Government services are available to citizens electronically. It would also bring in public accountability through mandated delivery of government's services electronically; a Unique ID and *e-Pramaan* based on authentic and standard based interoperable and integrated government applications and data basis. (PIB, 2014).

The framework that follows will be through the articulation of what Digital India is and its promises, consequences and issues. Digital India is a omnibus programme aimed at improving connectivity where they exist and providing connectivity to places that aren't connected yet, primarily rural areas. Connectivity here is perceived as a backbone or digital highway where a host of services can be provided. The government is of the view that its welfare programmes aimed at the weaker sections will allow it to directly transfer the benefits such as subsidies (financial) and vital documents. The services sector on the other hand views the programme as being able to enhance their reach and get significant boost to their e-commerce activities. Although such efforts are lauded, substantial critique is there in the country as to how many are excluded in the digital framework. The rural-urban divide is acute as a population base of about 66 % living in the rural areas has an internet density of about 25 % while urban India with about 34 % population has 97 % internet density (BISWAS, 2019b).

Total Internet subscribers	687.2 M
Narrow band subscribers	62.20 M
Broadband subscribers	625.42 M
Wired Internet subscribers	22.26 M
Wireless Internet subscribers	665.37 M
Urban Internet subscribers	439.99 M
Rural Internet subscribers	247.63 M
Total Internet subscribers per 100 population	52.08
Urban Internet subscribers per 100 population	104.25
Rural Internet subscribers per 100 population	27.57

Table 1 – Internet Acess em India Basic information
Source: TRAI-The Indian Telecom Services Performance Indicators, July-September, 2019, p ii (TRAI, 2020).

The skewed distribution of Internet resources in the urban area is acknowledged and through committees and help from premier Institutes of technology, the issue is sought to be addressed. 50000 villages in India do not even have voice connectivity. The grass roots administration is through clustering of 2-3 villages into units called "gram panchayats" (GPs). The urban markets are served by private entities that have incentives. At the same time, they do not exist for villages that are large in area with low population density, high capital investments and maintenance costs. By default therefore it has been argued that the responsibility is of the Government. The reasoning is that the administrative and governing mechanisms can be efficient and also rapid dissemination of information (IIT MUMBAI, 2016).

'Digital India, more has explicitly reformulated how content is produced, distributed and consumed. The large, diverse and plural population derives its information and communication content from a variety of media that includes the legacy media and new media.

Coexistence of old media and heralding new media

Legacy media is not obsolete or redundant in India. There are 118,000 registered publications in India with nearly 18,000 dailies and 100000 periodicals. These are published in English and 22 Indian languages reflecting the linguistic diversity of the nation. About 9000 dailies have submitted their circulation figures and their combined circulation is about 280 M. All dailies do not necessarily have large circulation. Hindi language dailies claim nearly 47 % of circulation while English dailies claim about 11 % of the circulation figures. In essence the Indian language dailies claim more circulation than English dailies (GOVERNMENT OF INDIA, 2018). More than the circulation that is dependent on compliance by the newspapers; the present industry acceptable index is the readership. The Media Research Users Council (MRUC) conducts periodic readership surveys. Despite conflicting claims and contestations by dominant media groups, as of now this is the only source for readership figures. In 2019, the study reports that the newspapers have 425 M readers out of which 30 million are English language newspaper readers. Print newspaper industry is buoyant with the tendency and attributes credibility as the sustaining factor while fake news does affect the digital media in various forms. However, this trend may not last as the Industry also recognises the imperative need to move towards digital platforms as well (NIELSEN, 2019).

The newspapers although regarded as relatively credible given their long history and loyal readership have faced several industry and professional standards. Fierce competition had led to internecine price wars (a few years ago) causing disruption and later stabilisation. The pressure to shore up advertising revenue that had been delinked by editorial practices has undergone changes in favour of advertising oriented content or content aimed at enhanced readership. The biggest challenge that is yet to be resolved entirely was the spectre of paid news where newspapers were ready to offer favourable content packages in exchange for payment (THAKURTA, 2013).

Broadcasting system is a combination of public and private ownership. The government through an institutional mechanism, Prasar Bharati, administers both radio and television. Described as one of the most extensive public broadcasting system, the radio network, All India Radio (AIR), offers 470 broadcasting centres across the country covering more than 90% of the area and caters to almost the entire population (99.19). The programming moulded with public service orientation is in 23 languages and 179 dialects. One of the largest broadcasting organisations in the world in terms of the number of languages of broadcast and the spectrum of socio-economic and cultural diversity it serves, AIR's home service comprises of 470 Broadcasting centres located across the country, covering nearly 92% of the country's area and 99.19 % of the total population. Terrestrially, AIR originates programming in 23 languages and 179 dialects. Television service, Doordarshan operates through 34 satellite channels. While both offer commercial services, the network claim socially relevant programming as their strength (MIB, 2020).

Television-dominant media for the masses

Television is dominated by nearly 900 channels and they offer a range of 24x7 content. News channels across multiple Indian languages exist with equal number of entertainment channels. Almost 70 % of households in India have access to television sets. The measurement company as of 2018 had reported 840 M viewers. Although viewership for news content is much less than entertainment content, the channels are owned and run by different political and commercial groups to propagate their interests. The Media and Entertainment (M&E) sector is considered as a significant support to the economy. Music, reality, movies, serials, crime and spiritual content are consumed across these channels including their delivery through over the top (OTT) handheld devices, particularly mobile phones. It is relevant to mention that the number of mobile phone users in the country is significant. Changes in content consumption patterns among Indians have also led to many content streaming platforms that offer a variety of Indian and foreign, particularly Hollywood content. This sector is also considered as skill based for purposes of training.

The M&E sector's revenue base in 2019 was around US $ 23 billion and 38 % of this revenue is through digital media with television and print media following (KPMG, 2019). The transformation to digital India is due to a very high per capita consumption of online video, substantial increase in smartphone users, cheaper mobile and data rates. Online video content demand has increased substantially (around 330 million) due to increase in download speeds. E-commerce and transition to digital payments (with corresponding reforms in banking and finance sector) have eased receipt and transfer of funds. It has allowed for on demand entertainment and streaming services.

Regulatory environment in digital India

The potential for multimedia content to be distributed in India and from across the world brings to the fore a host of issues that touch upon freedom as well as the social, political, economic and moral filters. Digital media are by their very nature viable for regulation in one form or the other across the world. The regulatory frameworks have transformed to oversee the induction of technology, the use of spectrum resources, the pricing and containment of monopolistic and predatory practices, India has witnessed substantial political turmoil concerning management and distribution of spectrum resources in the telecom sector. The charges that were subsequently dismissed by the court were favouritism and kick bags for allotting the licences to a few companies. The details are not as crucial as recognising the high stakes in this sector and the interplay of global and domestic telecoms (ARPAN, 2017). The revenue generated by licence fees to the government is around 67 billion US $ in the current year. The policy framework earlier under Telecom commission set up in 1989 as an umbrella policy framework (22nd October, 2018), has been re-designated the Telecom Commission' as the Digital Communications Commission. This commission is now responsible for all policies on development of the telecom sector in India (GOI, 2020).

Telecom sector in India began with many players and the competition that ensued was a boon to consumers with low tariff particularly for voice calls. However, with subscription base stabilising and mergers and acquisitions, the market is left with three leading players and the indications are that the tariffs are likely to increase.

How does India compare in the BRICS framework? According to a study on Digital economy in BRICS (LAZANYUK; REVINOVA, 2019), India's telecommunication infrastructure index is the lowest as well as the Human development index. The study also concludes:

> These indicators there are enough, but none of the analysed indexes is unable to date to assess the real situation. In reality, it is necessary to consider the indexes are not individually and collectively to show the real situation of the BRICS countries' preparedness for the digital economy. Assessment of the level of formation of the state and development of the digital economy in the BRICS countries showed significant differences among countries (emphasis added) (LAZANYUK & REVINOVA, 2019, p. 512)

The ITU measuring the Information society report, however, is relatively more optimistic. Its assessment reveals:

> India is often described as a very dynamic market, and its outlook is positive when we consider the room for mobile growth in the country: in late 2016, more than 600 million inhabitants of that country were yet to subscribe to mobile services (GSMA, 2018b). India saw its global rank in terms of telecommunication revenues rise consistently over the past decade, moving from 14th position globally in 2010, to tenth in 2014 and seventh position in 2016 – overtaking countries like France, Canada and Australia. India is also the only BRIC country that recorded positive growth in telecommunication revenues (15 per cent in USD terms) between 2014 and 2016, compared to China, which saw a decline of 4 per cent, and Brazil and the Russian Federation,(26 per cent and 42 per cent respectively in USD terms). However, revenues in local currency increased in Brazil and the Russian Federation between 2014 and 2016, suggesting that the decrease in revenues in USD terms can be explained by changes in exchange rates. (ITU, 2018).

While the regulatory framework is in place, the society responds and adopts. Different cultures have adapted the devices for various purposes, entertainment, voice and data communication and service transactions. The spread of digital content and devices that facilitate them riding on the infrastructure may not be on predictable lines. In the Indian context and over a period the range and access of social media has been growing. The networks and platforms that are available and many of them global in nature have significant followers.

A snapshot of the social media spread in India, according to global agency we are social is

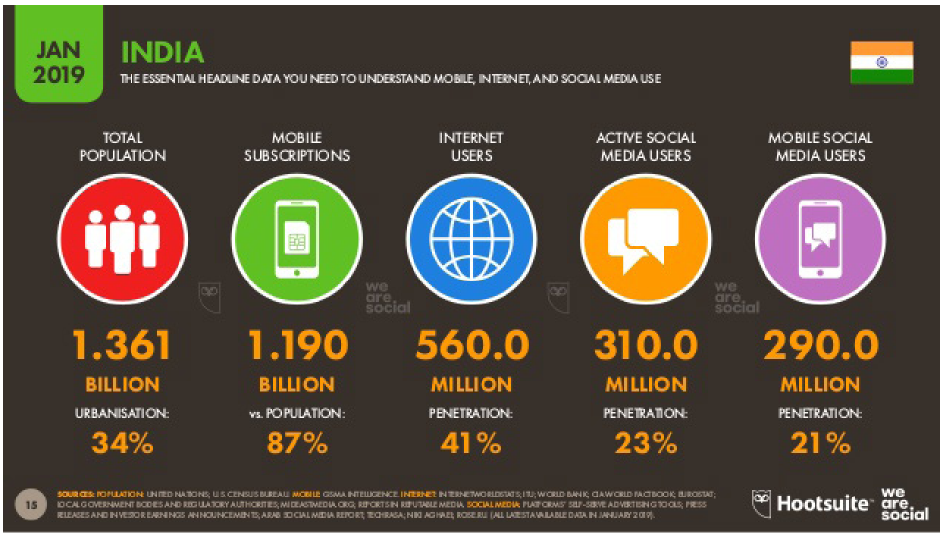

Table 2 – Snap Shot: Digital Media India
Source: Slideshare (2019) [2]

Although 310 M active social media users are there, it constitutes 23 % of the population leaving scope for further growth. The revenue stream for social media across the leading platforms is estimated US $ 450 M. Twitter accounts contribute around 8 M. It can be stated that the primary source of information for media of celebrities and political leadership is their twitter accounts-twitteretti. Narendra Modi [3], the prime minister and whose political party is credited with efficient use of social media in the last two elections where they won with substantial majority, is also considered as an active user of social media for his outreach.

The spread of social media in India has also raised several issues that are also echoed at the global level- privacy, hacking, fake news and all the other negative aspects of online life. The social structure in India is based on caste and religious lines. It has a history of many conflicts that also led to the partition in the sub-continent along religious lines. The caste system that is entrenched over millennia is spread over 3000 castes and 25000 sub-castes (BISWAS, 2019a). Although a large scale media usage along caste lines is not yet available, it may be hypothesised that social media use in India reflect the echo-chamber perspective discussed in contemporary literature.

The generation and spread of fake news is a significant fall out of the proliferation of social media use in India. In a keynote presentation to AMIC it has been argued that the extensive use of fake news affects credible journalism practices as social media users tend to deliberately spread canards and rumours in sensitive situations such as communal and social conflicts. Media houses and credible journalists are accused of putting out misleading stories and/or mistakes, the most damage is done by people with fake social media profiles, polarizing websites, and pages which spread fake news intentionally to garner votes and/ spread hatred. While education in the formal sense is imbued with a host of debates of the public sector, commercialization, and privatization, a default faith is placed in the new media that can virtually bring "handheld" education to the millennials" (BHARTHUR, 2018).

The government wanted to regulate fake news. However, it withdrew the move after it realised the resistance by the media The government wants the Press Council of India that acts as body to among other things deal with complaints by individuals and institutions against reporting practices and by journalists against restrictive practices by institutions (TEWARI, 2018). Another perspective offered by Reuters is that fake news is increasingly being used by governments as a crutch to curb freedom of the press (KAREN, 2018).

One of the measures apparently intended to curb misuse and abuse of social media, particularly messenger platforms such as Whatsapp is Internet shutdowns by the government. An analysis has revealed that since 2014 and up to december 2019, there have been 357 Internet shutdowns in the country with maximum number in the Jammu & Kashmir. The 93 shutdowns in 2019 alone were in about 170 areas of the country (RAMPAL, 2019).

The government not enthused by social media platforms' lackadaisical response to its repeated requests to pull out messages and content etc., has prepared its response to the apex court under the local intermediary liability rules. It proposes that "social media companies and instant messaging app providers to help law enforcement agencies identify users who have posted content — or sent messages — it deems questionable" (MANISH, n.d.). The tech companies and activists are opposed to any such move and may engage in a protracted legal battle.

Thus many perspectives can be applied to Digital India. Its impact on ecommerce, banking etc., is one comparable dimension. The governance system and its plan to expand and use digital India as a framework for enhancing welfare and inclusivity is another. The legacy media as in print, broadcasting and film and their separate trajectories and their convergent approach in digitised India is a crucial dimension as well. Enthusiasm about its transformative role in the M&E sector is often highlighted. It also has impacted the reforms and institutional mechanisms in the telecom sector that is played out at the global level concerning technology and macro players who co-opt domestic players. The content dimension of the user generated type that is played out intensively through the social media is a cause for concern at several levels that are examining the exclusion and inclusion parameters-caste and gender-for example and also the fragility of the networks in social tensions.

BRICS media system a brief update

Geo-political blocs formed in the past, for example the South Asian Association for Regional Cooperation (SAARC) have frittered away due to dominant bilateral agendas. They are giving way to amenable partnerships such as the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMASTEC). At a more economic level, the formation of BRICS as countering a few dominant multi-lateral mechanisms can also be cited. This formation geo spatially apart except for the two larger countries, India and China have sustained their pitch notwithstanding the frequent skirmishes between India and China that predate the formation of BRICS.

The digital media spread in BRICS provides a comparative picture but does not reflect their actual uses. Uses and content of media are governed by respective countries' traditions and regulatory or other variables including affordability of devices and access to free or paid content. The following table is an attempt to compare one variable in the digital matrix and its spread relative to respective population of BRICS.

Social Media Stats %						
Country	**Twitter**	**Pinterest**	**Other**	**Facebook**	**YouTube**	**Instagram**
Brazil	17.86	29.18	3.51	24.19	19.17	4.16
Russia	15.55	20.71	19.38	11.17	10.76	19,38
India	2.43	4.59	0.29	82.1	2.64	7.94
China	50.19	21.73	7.75	7.17	6.3	2,21
South Africa	18.4	27.28	0.29	41.38	2.35	10.3
Worldwide	14.44	10.7	0.67	62.1	2.91	8.9

Table 3 – Social Media as % of the respective population in BRICS (February 2020)
Source: Global Stats (2020) [4]

A well intentioned and ambitious study of media systems in BRICS, initiated by the University of Tampere, has thrown up several related issues of the media. They include professionalism, spread and use of social media, media regulation and entertainment (UNIVERSITY OF TAMPERE, 2020), in terms of complexity at least in terms of multilingualism and diversity, India stands out. Economic comparisons between China and India dominate global agenda as well. The absence of English as the lingua franca affects more intense collaboration and cooperation at the people to people level.

The differences in governance structures do affect the pace at which telecom policies are developed and implemented. However, in a digital context, they also need to address the structures and mechanisms that are necessary to address their priorities.

In India, the digital highways are currently skewed in favor of urban India and the government intends to bridge the gap by building networks that can connect all the clusters of village administrative units. The projections for 2022 (KPMG, 2019) as per industry assessment are as follows:

- Online population expected to grow to 840 M from current level of around 500 M
- Average fixed broadband speed to accelerate to 31.5 Mbps from current level of 9.5 Mbps;
- Adoption of 4 G technology by 70 % of users from current level of 20 %;
- The length of communication fiber will be about 2,50,000 Km from current level of 100,000 Km.

A personal data protection (PDP) bill is under consideration by the Government with an integrated view and a separate regulator. TRAI, the current regulator that is performing many of the functions is keen to hold onto the function as well (SINGH, 2019). Useful to point out that institutional mechanisms have altered keeping in view both the changes in media and technology that directs the media activities.

The entertainment industry understands the huge appetite old and expanding consumers have and are devising strategies that can maximise their reach and advertising revenue. The user generated content that is evident in various social media platforms including messaging platforms such as whats app has brought out particular concerns at the societal and state level. The overarching democratic traditions in which media have functioned in India bring in the freedom perspective frequently expressed in global fora. The challenges are multi-layered but a systemic picture may emerge in a few years.

Notes

[1] PM Narendra Modi is one of the most-followed world leaders on social media with 53.3 million followers on Twitter and 44 million Facebook. PM Narendra Modi is the most followed world leader on Instagram with over 30 million followers. US President Donald Trump currently has 14.9 million followers while his predecessor Barack Obama has 24.8 million followers on Instagram. PM Narendra Modi is the most followed Indian on Twitter. He joined Twitter in January 2009, one of the only few Indian politicians using this platform at the time. PM Narendra Modi is only the third world leader to have crossed the 50 million followers mark on Twitter. The first two are Barack Obama and Donald Trump (INDIA TODAY WEBDESK, 2020).

[2] Disponível em: < https://www.slideshare.net/DataReportal/digital-2019-india-january-2019-v01>. Acesso em : 7 abr. 2020.

[3] We are of the opinion that social media should be brought under the ambit of PCI, as its (social media's) reach is much more than the print media. Through it, anything can be circulated world-over within seconds, the chairman of the Press Council of India (PCI), Justice Prasad has said. The Social media uses uses the «same alphabet» as the print media, so why should the former be excluded from PCI's jurisdiction, he asked (PTI, 2017).

[4] Disponível em: < https://gs.statcounter.com/social-media-stats#monthly-202002-202002-bar>. Acesso em: 20 abr. 2020

References

ARPAN, C. **None held guilty in 2g scam that led to the downfall of UPA**. Disponível em: <https://www.bloombergquint.com/law-and-policy/none-held-guilty-in-2g-scam-that-led-to-the-downfall-of-upa>. Acesso em: 22 dez. 2017.

ATHREYA, M. B. India's telecommunications policy A paradigm shift. **Telecommunications Policy**, v. 20, n.1, p. 11–22, 1996. Disponível em: < https://bit.ly/2US3pEF>. Acesso em: 7 abr. 2020.

BARC INDIA (n.d.). TV audience measurement data collection. Disponível em: <http://www.barcindia.co.in/statistic.aspx>. Acesso em: 18 jun. 2017.

BHARTHUR, S. **Fake news a misleading term**. Disponível em: <http://deccanheraldepaper.com/data/pp3-20180608_10/webepaper/pdf/370567.pdf>. Acesso em: 8 jun. 2018.

BISWAS, S. **India's digital sprint is leaving millions behind**. Disponível em: <https://www.bbc.com/news/world-asia-india-49085846>. Acesso em: 17 out. 2019b.

BISWAS, S. **What is India's caste system?** Disponível em: <https://www.bbc.com/news/world-asia-india-35650616>. Acesso em: 19 jun. 2019a.

CHATTERJI, P. C. Broadcasting and Social Change. **India International Centre Quarterly**, v. 10, n.2, p, 137–144, 1983. Disponível em: <http://www.jstor.org/stable/23001639>. Acesso em: 7 abr. 2020.

ERIC . Communication media in education for low-income countries: implications for planning. **Fundamentals of Educational Planning – 29**, Online, 1980. Disponível em: http://archive.org/details/ERIC_ED213108.

EXCERPT. The Untold Story of India's First Newspaper by Andrew Otis. Disponível em: <https://www.hindustantimes.com/books/excerpt-hicky-s-bengal-gazette-the-untold-story-of-india-s-first-newspaper-by-andrew-otis/story-vS9m7VomrUIUjBCHwsWExL.html>. Acesso em: 1 jun. 2018.

GOI. Department of IT. India Journey from Knowledge Economy to Inclusive Information Society. Disponível em: <https://docs.google.com/file/d/0B-MQb50KXYJ1aXFLLWtLZnZkaTg/edit?usp=drive_web&urp=gmail_link&usp=embed_facebook>. Acesso em: 2015.

GOI. Profile | Department of Telecommunications | Ministry of Communication | Government of India. Disponível em: <https://dot.gov.in/profile>. Acesso em: 25 mar. 2020.

GOVERNMENT OF INDIA. India, I. O. of the R. of N. for, Ganesan, K., Information, I. M. of, & Broadcasting. Press in India, 2017-18, 62nd Annual Report, Registrar of Newspapers for India. Ministry of Information & Broadcasting, Government of India, Online. Disponível em: <https://books.google.co.in/books?id=-POzwgEACAAJ>. Acesso em: 28 abr. 2020.

IIT MUMBAI. Planning for BharatNet Phase 2, p. 9. Disponível em: <http://bbnl.nic.in/WriteReadData/LINKS/Rpt_Nw_Plg_tool6cad24a7-eea8-4adc-91ff-468d7119eeb0.pdf>. Acesso em: 28 abr. 2020.

INDIA TODAY WEBDESK. PM Narendra Modi says he wants to quit social media on Sunday, Twitter explodes. Disponível em: <https://www.indiatoday.in/india/story/pm-narendra-modi-social-media-twitter-instagram-facebook-youtube-1651726-2020-03-02>. Acesso em: 2 mar. 2020.

ITU. Measuring the Information Society Report, p. 204. Disponível em: <https://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2018/MISR-2018-Vol-1-E.pdf>. Acesso em: 28 abr. 2020.

KAREN, Lema. **"Fake news" crutch used by SE Asian leaders to control media, critics charge**. Disponível em: <https://in.reuters.com/article/asia-media-fakenews/fake-news-crutch-used-by-se-asian-leaders-to-control-media-critics-charge-idINKBN1FB0VD>. Acesso em: 22 jan. 2018.

KPMG. India's digital future, p. 256. Disponível em: <https://assets.kpmg/content/dam/kpmg/in/pdf/2019/08/india-media-entertainment-report-2019.pdf>. Acesso em: 28 abr. 2020.

LAZANYUK, I.; REVINOVA, S. **Digital economy in the BRICS countries:** myth or reality? In International Scientific and Practical Conference on Digital Economy (ISCDE 2019). Disponível em: <https://bit.ly/3e2FCtp>. Acesso em: 1 jan. 2019.

LERNER, D. *et al*. **Communication research:** a half-century appraisal. Honolulu: East-West Center by Univerity Press of Hawaii, 1977, Online. Disponível em: <http://archive.org/details/communicationresoorese>. Acesso em: 7 abr. 2020.

MAITLAND, S. D. Independent commission for world-wide telecommunications development. **Telematics and Informatics**, v. 2, n. 1, p.97–100, 1985. DOI https://doi.org/10.1016/0736-5853(85)90080-2.

MANISH, S. (n.d.). **India likely to force Facebook, WhatsApp to identify the originator of messages**. Disponível em: <http://social.techcrunch.com/2020/01/21/india-likely-to-force-facebook-whatsapp-to-identify-the-originator-of-messages/>. Acesso em: 27 mar. 2020.

MASANI, M. **Broadcasting and the people**. India: National Book Trust, 1976.

MIB. India's Public Service Broadcaster | Prasar Bharati | All India Radio | Doordarshan [Government]. Disponível em: <http://prasarbharati.gov.in/index.php>. Acesso em: 24 mar. 2020.

MURTHY, N. K. **Indian journalism, origin, growth and development of indian journalism, from Asoka to Nehru**. Prasaranga: University of Mysore, 1966.

NIELSEN, R. K. **The future of India's newspapers has to be digital –** and it has to be now. Disponível em: <https://scroll.in. https://scroll.in/article/937657/the-future-of-indias-newspapers-has-to-be-digital-and-it-has-to-be-now>. Acesso em: 18 set. 2019.

PIB. Digital India – A programme to transform India into digital empowered society and knowledge economy. Disponível em: <https://pib.gov.in/newsite/printrelease.aspx?relid=108926>. Acesso em: 20 ago. 2014.

PRIOLKAR, A. K.; RIVARA, J. H. da C. **The printing press in India, its beginnings and early development, being a quatercentenary commemoration study of the advent of printing in India in 1556**. India: Marathi Samshodhana Mandala, 1958.

PTI. Press council wants social media under its ambit. Disponível em: <http://economictimes.indiatimes.com/news/politics-and-nation/press-council-wants-social-media-under-its-ambit/articleshow/58702616.cms>. Acesso em: 16 mai. 2017.

RAM, N. **The changing role of the news media in contemporary India**. 72 ed. Patiala: Punjabi University, 2011.

RAMPAL, N. **More than 350 Internet shutdowns in India since 2014**. Disponível em: <https://www.indiatoday.in/diu/story/more-than-350-internet-shutdowns-in-india-since-2014-1629203-2019-12-18>. Acesso em: 18 dez. 2019.

SHAH, A. **Vikram Sarabhai -** a life. Disponível em: <http://archive.org/details/VikramSarabhai-ALife>. Acesso em: 18 dez. 2019.

SINGH, A. **Trai wants be country's data czar, MeitY not keen**. Economic Times, 2019.

TEWARI, L. J. **I&B ministry withdraws circular on fake news after Modi intervention**. Disponível em: <https://www.livemint.com/Consumer/N9kDzLNwJihO3ZfJ6GOckM/Narendra-Modi-asks-I-and-B-ministry-to-withdraw-release-on-f.html>. Acesso em: 3 abr. 2018.

THAKURTA, Paranjoy Guha. **Why paid news is a threat to Indian democracy**. Disponível em: <http://www.firstpost.com/politics/why-paid-news-is-a-threat-to-indian-democracy-1268751.html>. Acesso em: 5 dez. 2013.

UNIVERSITY OF TAMPERE (n.d.). Media systems in flux: the challenge of the BRICS countries. Disponível em: <https://research.uta.fi/brics/>. Acesso em: 27 mar. 2020.