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THE FUTURE OF INDIAN NEWSROOM A STUDY OF TECHNOLOGICAL INTERVENTIONS IN THE NEWSROOMS OF LEADING MEDIA HOUSES

Media

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ABSTRACT

Keeping in view the growing automation in Newsrooms of Indian media houses for the last two decades, Robots being upgraded to produce news on a large scale in the US, the UK, China, etc. and smartphone assuming the centre stage in organising bureau meetings, gathering, processing and dissemination of news, there are talks that the Newsroom in present form may vanish from Indian media houses in coming two decades. However, it does not mean that newspapers will die and TV channels & radio will discontinue broadcast. All these will continue, but in newer formats. What will be that format is difficult to predict at this moment, but the newspapers may be in a paperless format, TV may be screenless & app-based, and the digital media will thrive in unimaginable formats. Machines will be operated through Neural Instructions. The Newsrooms in many Indian media houses have already started moving in that direction. This is a fact that the media houses, which adapt to this change timely will survive, and the rest will become history.

KEYWORDS

Future Newsroom, Vanishing Newsroom, future media, new media

INTRODUCTION:

Newsroom (NR) is the heart of a newspaper, TV news channel, radio station or web portal, where the news stories are planned, gathered, written, put together, edited and processed for publishing, broadcast or uploading. Beginning with the daily public notices carved on stones and displayed on the message boards at public places in Roman Republic during 59 BC *(historyofinformation.com, 2019)*, gradual invention of paper, printing press, telegraph, telephone, telex, radio, television, satellites, computer, internet, pager, mobile phone, smartphone, robots, etc. the process of news gathering, processing and dissemination in NR has undergone unprecedented transformation. From letterpress to mono, lino, phototypesetting and computers, the voice apps and modern software have completely changed the NR functioning. There was a time when people produced newspapers by listening to news on the radio, but now the social media is the biggest source of information for every media house. The use of Artificial Intelligence (AI) is already on the rise world over, the work on upgrading robots for producing news in the US, the UK and China often hit the headlines *(Shead, 2017)*. Significant improvement in technology has surely made the work in NR easier, faster and impressive. The faster the technology is changing, the quicker the work culture in NR is witnessing changes. People in NR have now started realising that they neither need to go to the office, nor do they need computers or high rise buildings to work. Not only the people involved in news gathering, photo or video shooting, the people who work on the desk also do not need to go to the office. They can work from anywhere —home, field or even in public places. That is why most daily newspapers, news channels and web portals have started arming their field staff with advanced gadgets, which help them to work from the field. As a result, most of the journalists working for daily newspapers, news channels or web portals directly type the news on their smartphones during press conferences and send the feed along with photos and videos instantly to their NRs. However, it is being done to be the quickest to break the news; the fact is that it has changed the work culture and mindset of both the employees and the employers in Media. Even the Bureau meetings in many leading media houses like *The Indian Express, Times of India*, etc. are now held through Skype, specially designed app and the people stationed across the world join those meetings, which was earlier beyond imagination. Now even HR department, which is responsible for ensuring that the staff reports to the office in time and does not leave before the scheduled time, has started welcoming the new trend because it reduces the running expenses of the office. It is because of this new trend that many global magazines and newspapers are entirely produced in New Delhi, Gurugram, Faridabad, Bengaluru, Hyderabad, etc. Now some newspapers have started using the software, which edits the text, searches relevant photos from the folders or Google and design the pages as desired. It shows that more posts in the NR will soon vanish. The fast the human intervention in NR is reducing; the day seems not far when total virtual newsroom will be common. Some news channels like *Aaj Tak* already have virtual sections in their NRs for several years *(Vajpayee, 2017)*. *Aaj Tak* discontinued the practice for their stringers to reach office to provide feed in 2014 by providing them weblink, where they can quickly

upload their feed any time. Even the stringers do not need to collect their cheques, as the amount is directly transferred to their bank accounts. Surely, the output in the new setup is impressive than ever before. Compared to four decades back when there were many limitations, the input and output in NR have completely changed, and in coming days, it is set to totally transform. Virtual Reality, 360-degree visuals, 3D presentation of news, smart TV, use of highly advanced gadgets like Google Glass in gathering, processing and dissemination of news are going to change things beyond imagination. The changes in technology are so fast that it is difficult to predict what happens tomorrow. In the changing scenario only tech-savvy media houses, which are armed with state-of-the-art technology will survive and those which do not adapt to changing technology will vanish.

Methodology

The Research Paper is based on the six case studies of the Newsrooms of *Dainik Bhaskar* (New Delhi, Indore and Bhopal), *Rajasthan Patrika* (Kota and Jaipur), *The Times of India* (New Delhi), *The Indian Express* (New Delhi), *Aaj Tak* (New Delhi) and *Times Now* (New Delhi and Mumbai). Also, eminent journalists working in newsrooms were interviewed and two focus group discussions were held in New Delhi to know the changes taking place in NRs. The opinion of 169 journalists working in various NRs of New Delhi was also gathered through a questionnaire.

Future Content & Technology

Like print, the technology in TV NRs has also witnessed sea changes. Before the 1990s, the production of any news programme for TV was highly time-consuming. The analog cameras then used tapes. The weight of a Low Band camera *(Jha, 2017)* was about 7 kg and the Recorder weighed around 5 kg. Both recorder and camera were separate and were connected through a 2.5-metre cable. Each camera unit consisted of four persons. After shooting, editing was done on tape. Today, if there is any last minute change in the story or suggestion to remove or add any visual or word, it takes hardly a few seconds. Even one can edit during live telecasts. But during the 1990s any change in the audio, visual or text meant re-editing requiring the same duration which was required originally. Repeated editing also adversely affected the quality of visuals on tape, because in an analog system whenever one had a generation from one tape to other, the quality lost every time. Voice Over (VO) was also done on tape recorders. It was done separately. Then it was dumped on the main editing machine to mix with the visuals. Then it was put to analog. Analog cameras gradually improved from Low Band in 1988 to High Band and to Betacam. The size of the tapes also reduced with the change in technology. But now since around 2005, everything is being done in digital format at the single place only. The tapes have been replaced with chips. The feed from chips can be transferred through OB van, Live View or through smartphone from far-flung areas. Earlier, getting the feed was very difficult. People used to carry the cast to studio or office. The tapes were sent through buses, trains, aeroplanes, etc. *(Chaturvedi, 2017)*. The technology slightly improved around 1998 and the feed was sent by injecting the tapes. In that method, the tape was played at one place and the feed was transferred

to the NR through satellite. But, it was also a very time consuming process and the facility was available with the *Doordarshan* only. Now in digital form, even the large quantity feed is transferred within minutes through FTP or other methods. IT head *in 'Aaj Tak'* Amit Gemini says: "WhatsApp is widely used for transferring video feed. The OB Van has been reduced to a Live View device and the size of Live View too has been reduced into a small device. Now the Live View also is fast becoming redundant and the smartphone has replaced it. Apple's FaceTime is very much in vogue now. Skype is also widely used. In future, there may be many other new inventions, which are in the pipeline. One of them is Periscope, which has revolutionised live telecast. Today every channel has a library in digital form. Earlier, libraries were also analog, where searching anything was very difficult. Now we at *Aaj Tak* use robotic libraries. TV news agencies also provide huge content. ANI, Reuters and APN are top TV news agencies" *(Gemini, 2017)*.

Apps: The Future of TV
Apple's CEO Tim Cook in 2015, while referring to a future where majority of the TV viewing will be through online, had said: "the future of TV is apps" *(Lella, 2017)*. While the Indians have just started moving in that direction, over the past few years app-based TV viewing has grown to become a mainstream media behaviour in the US, where in 2017 with 51 million households–or 54% of the Wi-Fi connected homes – watched video content through apps. Experts see the same situation in India by 2020. "Now people do not need to wait for retelecast of their favourite TV programmes. The same situation will emerge in case of news also. The satellite telecast has gradually started replacing by webcast. The content in print also is hugely getting video-led. There is a possibility that even the text and pictures also will adopt video format. This will be the biggest change, which will have to be adopted by all whether print, TV or web portals. *Amar Ujala* and *Hindustan Times* are already doing it. The *Times of India* has produced the largest number of videos. All major papers in the West like *The Washington Post*, etc. have turned to video segment" *(Rajan 2017)*. At home, TV audiences have multiple options to watch content. "To see what the future TV looks like, one just needs to plug in an Apple TV and see the apps that are available on this small box. The most telling is Facebook. Then there are apps like Hyper and Big Story, which just decide that this is the best of what one can watch at the moment. It draws one into a pool of content that one loves and or had no idea that one loved. Cheaper hardware and data are only making the transition smoother for a lot of households. Once exposed to this content, they will at once realise the inferiority of what they are being served at the moment. The internet lets Indian viewers expose themselves to content from all over the world and it is only a matter of time before more content players like Hulu make a beeline for the country. This is why it is the time that Indian television houses start thinking ahead like HBO has, for instance, by creating content primarily for the digital audience. The television audience is moving and it is time companies start looking beyond the idiot box" *(Rajan, 2017)*.

Machines to be Operated through Neural Instructions
Today, the electronic devices in offices, banks, defence establishments and government establishments are opened through biometric impressions. All these machines will shortly be operated through users' voice, eyes or neural activities and there will be no need to touch the keypad. Gadgets will be intuitive smart. The machines in NR will follow oral instructions. This technology is already available but needs slight improvement. As it gets cheaper, it will extensively be used in NR. As the cost of a smartphone, call rates and data charges reduces further, the software and machines will also be cheaper. Since the future is digital, the software will also be cheaper *(Upasane, 2017)*. The future changes in digital will be smartphone-centric because not only the newspapers but also the TV news channels, web portals or radio, etc. will be viewed through smartphone only. The size and shape of the smartphone will see further changes. It may be *(Shankar, 2017)* thin like paper, wristwatch, Bluetooth, wristband, ring or in any other form. The range of Bluetooth enabled gadgets will be so widespread that one will not always be required to carry the phone. Today's costly software too may be available free of cost, as the open source software trend gets strengthened. People will stop writing or typing the text. Voice typing will widely be used. Gradual improvements in Google translation will also change the things beyond imagination.

Vanishing Human Intervention in NR
Many posts have already vanished from the NR over the last two decades. Proofreaders, typists, stenographers, etc are not required at all now. In news agencies also, the messengers and technical staff in

teleprinter rooms have vanished. In the coming days, the typing work will not be required, because the voice app will automatically convert the audio into text and that too in the desired font. There are already software in the market to convert the content from image format to text. There are also software that can design the page in the desired format. As this software gets popular, the post of layout designers will also disappear. Gradually, the post of copy editors will also disappear because sub-editors and reporters will be in multiple roles and they will be assisted by newer software. In TV also, the changes are very fast. The requirement of OB Van staff, technical staff, support staff, cameramen, etc is not much required now. As the smartphone is widely used, the reporter in news channels is in multiple roles. In the coming days, the requirement of even video editors will not be there. "Journalists will lose jobs but anyone who has sharp news sense and is able to work at all platforms of communication technology will survive. It is because of the growing technological interventions the country's largest news agency, *PTI*, on October 1, 2018 retrenched around 300 such staffers at one go *(Newsclick 2018)*. 'Deccan Chronicle' closed down the print edition of its daily 'Financial Chronicle' on February 6, 2019 across five cities –New Delhi, Hyderabad, Mumbai, Bengaluru, and Chennai *(Shukla, 2019)*. *Hindustan Times, NDTV, Telegraph* and some other leading media houses have already retrenched many of their staffers during the last two years.

What the Journalists in NR Feel
During the study, the opinion of 169 journalists working in various Newsrooms of New Delhi was gathered through a questionnaire in June 2017. Responding to a question (In near future, the Newsroom will be totally Virtual, where people will not be required to go to offices and will be free to work from anywhere) a strong 77% of respondents agreed. A total of 15% disagreed and 8% expressed no view. In response to another question (The NR will be totally digital in the coming five years), a total of 70% respondents agreed. Only 9% respondents did not see any such possibility. However, 21% of the respondents said they can't say anything. During the Focus Group Discussion held in New Delhi on April 4, 2017, the opinion of seven eminent journalists was gathered on the question "how do you visualise the NR in terms of technology after 20 years from now". Former Editor of *India Today* (Hindi) Jagdish Upasane *(Upasane, 2017)* said: "I visualise the maximum use of technology in Indian NRs. There will be a shining amalgamation of man and machine. Highly advanced software and bots will optimally be used in news operation from news generation to processing, dissemination and even getting feedback from the readers. It will happen in the fastest manner. Instead of copying foreign machines, programmes or software, the Indian engineers will produce the machines according to our needs. The smartphone will be the central point of all the activities and there is a possibility that even smaller devices than the present mobile sets are in operation. There may be a possibility that everything will be done on the machine and we would not require to do anything manually. The moving visuals that were seen in *Harry Potter* may be a reality in future NRs. Today, it may look laughable, but in the coming ten years, it would be a reality. There may be advanced gadgets, which will replace the smartphone in news operation". Director General of IIMC, KG Suresh *(Suresh, 2017)* said: "I visualise a situation in NRs when we have news on demand. The subscribers or viewers get the news they want." Editor of *Panchjanya* Hitesh Shankar *(Shankar, 2017)* said: "In future NRs, the reporters will not come to the office and will file stories from the spot or homes only. The media houses feel that if the space now being used for NRs is rented out, they can earn sufficient money. Moreover, expenses on office management are very high. If the staff is told to work from home, the media houses can save a lot of money. It will be a mix of artificial intelligence and human intelligence." Editor of 'Network 18' Nidheesh Tyagi *(Tyagi, 2017)* said: "Desktop is going to vanish from the NR even before the print dies. The smartphone will replace the desktop, laptops or tablets. NR will be social first and video-led. Even the text and pictures will have to adopt a video format. Some Indian newspapers have already started doing it. However, all major papers in the West like *The Washington Post*, etc have turned to the video segment." Principal News Coordinator in *Press Trust of India* Manohar Singh *(Singh Manohar, 2017)* said: "The news agencies too would have to turn to video content. There is also very much possible that office premises vanish. Media offices from Delhi's Bahadur Shah Zafar Marg shifted to Noida. In future, the press area of Noida may shift to Bangladesh. It will be a highly challenging time for at least the news agencies because the newspapers are turning into agencies." HoD of Department of Journalism in the Central University of Jammu, Prof Govind Singh *(Singh, 2017)* said, "Very huge

convergence is going to happen. It has already happened in big media houses where the central NR supplies news to all—print, TV, radio, web, mobile, etc." National Bureau Chief of *Firstpost*, Debobrat Ghose *(Ghosh, 2017)* said: "Everything will be virtual. Big offices and NR will vanish."

CONCLUSION

Smartphone has revolutionised automation in NR to the extent that NRs are getting irrelevant. There are many successful international news organisations, which do not have NRs. They have people in different parts of the world, they meet on Skype or Hangout every day and manage the NR perfectly. Office premises are not required at all for the online media like *Scroll, Dailyhunt*, etc. People contribute from wherever they are. Even if some people need to work collaboratively, there are tools where one can see what the other is doing. For a web portal, only two departments — editorial and marketing — are required. Internationally, there are so many media houses where over a hundred persons work, but hardly 10 of them sit in the office. The biggest reason for it is the cost. If one earns Rs 10 lakh in a month, why should one pay Rs 4 lakh as rent for office? *Republic TV* in India has only one studio. Most of its staff members contribute from their own locations. Even there is no need for bureaus or regional offices. There are many people in New Delhi, Gurgaon, Bengaluru, Hyderabad, etc. who have been producing US newspapers daily for about a decade. They do not need any NR. They have not seen the faces of their clients, but they are working and earning money. Gradually, there will be no need for separate departments for circulation, printing, advertisement, production, accounts, etc. Experts feel that by the year 2040, everything will be operated from a single room with the help of machines and software. That single room will work round the clock and people will be connected to it round the clock.

REFERENCES

1. Chaturvedi, Umesh. (2017). Senior TV Journalist. Interview in New Delhi on July 10, 2017
2. Gemini, Amit. (2017). IT Head, Aaj Tak. Personal Interview at Mediaplex, Noida, on February 21, 2017 at 1.55. pm.
3. Ghosh, Debobrat. (2017). Chief of National News Bureau, Firstpost, New Delhi. Focus Group Discussion at Haryana Bhavan, New Delhi on April 7, 2017
4. Greenslade, Roy. (2018, May 2). Meyer: I was 'verballed' by Murdoch. The Guardian. Retrieved on December 6, 2018 from https://www.theguardian.com/media/ greenslade/ 2008/ may/02/ meyeriwasverballedbymurdo
5. Historyofinformation.com. (2019). Acta Diruna. historyofinformation.com. Retrieved on December 20, 2019 at 9.00 pm from http://www.historyofinformation.com/ expanded. php?id=1636
6. Jha, Sona. (2017). Senior Employee of Aaj Tak. Interview at Mediaplex, Noida, on February 21, 2017
7. Lella, Adam. (2017, July 12). How Important is the OTT Device Market if the 'Future of TV is Apps'?. comscore.com. Retrieved on July 25, 2017 at 9.29 pm from http://www.comscore.com/Insights/Blog/ How -Important-is-the-OTT-Device-Market-if-the-Future-of-TV-is-Apps
8. Newsclik, Report. (2018, October 1). PTI Retrenches Close to 300 Employees in a Single Day, Retrieved on October 3, 2018 at 11.27 am from https://www.newsclick.in/ pti- retrenches- close-300-employees-single-day
9. Rajan, Nandagopal. (2017). Editor, New Media, The Indian Express. Personal interview at Noida head office on March 9, 2017 at 2.10 pm
10. Rajan, Nandagopal. (2017, July 11). TV audiences going digital. Are TV stations in India waking up?. financialexpress.com. Retrieved on July 21, 2017 at 10.30 pm from http://www.financialexpress.com/opinion/tv-audiences-going-digital-are-tv-stations-in-india-waking-up/758013/
11. Shankar, Hitesh. (2017). Editor, Panchjanya, New Delhi. Focus Group Discussion at Haryana Bhavan, New Delhi on April 7, 2017
12. Shead, Sam. (2017, July 7). Google is giving the Press Association £622,000 to create an army of robot reporters. Business Insider. Retrieved on July 8, 2017 at 10.02 am from http://www.businessinsider. com /google-funds-press-association-robot-reporter-project-with-622000-2017-7?IR=T
13. Shukla, Ajay. Kumar. (2019. February 6). Deccan Chronicle shuts its business daily FINANCIAL Chronicle, Retrieved on February 10, 2019 at 1.57 am from https:// brandequity. economictimes.indiatimes.com/news/media/be-exclusive-deccan-chronicle-shuts-its-business-daily-financial-chronicle/67867002
14. Singh, Govind. (2017). HoD, Department of Journalism, Central University of Jammu. Focus Group Discussion at Haryana Bhavan, New Delhi on April 7, 2017
15. Singh, Manohar. (2017). Chief News Coordinator, PTI-Bhasha, New Delhi. Focus Group Discussion at Haryana Bhavan, New Delhi on April 7, 2017
16. Suresh, KG. (2017). Director General, Indian Institute of Mass Communication, New Delhi. Focus Group Discussion at Haryana Bhavan, New Delhi on April 7, 2017
17. Tyagi, Nidheesh. (2017). Digital Head, Network 18, New Delhi. Focus Group Discussion at Haryana Bhavan, New Delhi on April 7, 2017
18. Upasane, Jagdish. (2017). Former Editor, India Today (Hindi), New Delhi. Focus Group Discussion at Haryana Bhavan, New Delhi on April 7, 2017
19. Vajpayee, Punya, Prasoon. (2017). Editor, Aaj Tak. Interview at Mediaplex, Noida, on April 21, 2017