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#IDEA PLUS

ENHANCING LIVES



DECODING THE NEW NORMAL

Quarterly Knowledge Publication of Adamas University, Kolkata

**Fighting COVID-19:
Rebooting Education Online**



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From the Desk of the Executive Editor

Prof. Ujjwal K Chowdhury



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From the Desk of the Managing Editor

Dear Readers,

As the norm dictates (as years of experience collect dust beneath my feet), I welcome you to the first issue of #ideaPlus, a quarterly magazine at Adamas University. There are certain emotions struggling at the tip of my tongue (Gratitude? Honour? Pride? Anxiety?) and in true, dull human fashion, I will resort to a simple, heartfelt thank you. I am positive on the heel of its origin, #ideaPlus might not have been about a virus. As a proud academician, I would hope to talk about intellectual values, industry insights and the future (and how certain it once seemed).

But Coronavirus is a new reality – life in times of death.

A world moving at a dizzy pace will not be brought on its knees by missiles, but microbes, it seems. We've brewed in these circumstances long enough to be a little more accommodating, a little more accepting. I will not overlook the distress it has caused (that would be too cruel, too harsh, and too ignorant). And yet, outside my window are leaves; spring in the empty Kolkata continues unabated. The flowers don't care that no one is there to witness them bloom. The streets continue to be empty except for the occasional police vans. The stores are all closed except a few small grocery stores and pharmacies.

Life is both terrifying and oddly mundane. As human beings, we fall into the dull ache of familiarity, routine and patterns; and I never quite considered how hardwired we were until the national lockdown was announced. I have been so reliant on my work to provide a sense of direction, that my days felt hollow.



At Adamas University, our priority remains to aid the learning of our students to the best of our abilities in addition to continuous commitment to impact the society positively. We have always believed in holistic development – the idea that education extends way beyond finite walls and books (#educationPlus, we call it), and amidst this crisis, we're at a unique position. In spite of technical challenges, we have managed to successfully shift to online mode of learning, and I am reminded, once again, how adaptable humans are and how awe-inspiring our dedication has been.

In times of peril, we must invoke empathy, we must be human, and hence, #ideaPlus is an endeavour to bring together people from around the globe to discuss both the consequences of this pandemic as we battle it and the trends so that our stakeholders – students, parents, industry and society at large are benefitted.

As time moves on, I am sure the memory of this tragedy will be folded and tucked away neatly under a pile of more urgent concerns. As time moves on, I am sure this memory will persevere as one of human resilience, a catalyst for change (albeit a little hasty). As time moves on, I am sure we will overcome this uncertainty, rise once again from the ashes (not without scars).

With cautious optimism, I pray this ends soon.

I hope you are safe and sound, surrounded by love.

Prof. (Dr.) Deependra Kumar Jha,
Vice Chancellor, Adamas University
Former Vice Chancellor, UPES, Dehradun
and GD Goenka University, Gurugram

The Nation Is Safe in Your Hands

*Indian cricketing icon **Sachin Tendulkar** talks about the Covid-19 crisis and how one should cope with it.*

A month ago, I was back on the cricket field. I was representing India as part of the Road Safety World Series (RSWS). Giving back to the society in any form is something I consider as my responsibility, and therefore when the opportunity arose to raise awareness about road safety, I readily agreed. Cricket has been my life, and the month of March was turning out to be very exciting for me. There was the chance to don the national jersey and play for India in the RSWS, and the IPL was to happen in a couple of weeks too. IPL gives me a chance to interact with youngsters and share my learnings to help them realize their true potential and I find it very fulfilling. But suddenly, both the RSWS and IPL got cancelled. News about Covid-19 spreading closer home was starting to trickle in. While everyone's life has been disrupted, I feel this



was the right decision to take. Now, it has been more than a month since India has been in a lockdown. All of us are slowly beginning to accept the restrictions around us. While following social distancing norms and lockdown instructions are necessary for us to flatten the curve and win over this pandemic, we must also take care of our physical and mental well-being. Walks inside your houses and simple exercises are things one should do to keep oneself physically engaged. Staying locked up in our homes, with our mobility restricted, is not something most of us are used to. This can also have adverse effects on our mental health. Being mentally engaged – talking to family and friends, playing indoor games etc. are aspects which can ensure we stay mentally fresh. It is also our responsibility to ensure that the elders in our homes – the most vulnerable, are taken care of. They would probably be as stressed as we are during these times and we should do everything we can to regularly communicate and engage with them and help them stay calm. While the lockdown has prevented most of us from being able to carry on our everyday professional chores, there are people using this to be able to prepare for a better tomorrow. I learnt about young doctors who were using webinars to connect to other senior doctors and enhance their knowledge. I owe it to Doctors for being able to have a lengthy career. They took care of me during all my injuries. I saw this as a chance to reciprocate for what they've done for me. I shared stories about my injuries to

Following social distancing norms and lockdown instructions are necessary for us to flatten the curve and win over this pandemic.

the young minds. I hope it helped them understand sports injuries better. There are valuable lessons for all of us to be learnt here. This phase has given all of us an opportunity to pause and reflect and we should all use this time to invest in our personal and professional development. This is the ideal time to be planning. If we are all able to structure what we want to be doing in our heads, we will be able to execute faster once the lockdown is lifted and life returns to normalcy. An adversity is an opportunity for us to be able to bounce back stronger and better. I have also been reading about how nature has been using this lockdown time to heal itself as well. The air around us has been cleaner, and several animals and birds seem to have found their habitats again. I hope we identify and reduce some of our actions that have led to unsustainable environments. We have only one Earth and it is our responsibility to take care of it and pass it on to our future generations. Finally, I would like to say a message to the young graduates who have just passed out this year or are going to graduate next year. The economy may look challenging and jobs difficult to find. But don't give up. Acceptability is the key to adaptability. Along with challenges, there would be plenty of newer opportunities emerging in this new environment and it would be important to have a positive mindset to proactively identify and embrace these opportunities. By constantly upskilling yourself, you will be in a position to reap the benefits at the opportune time. I am confident that the nation is safe in your hands and you will be able to put the world back on its growth trajectory.



Education to Evolve after Covid-19 Pandemic

*In conversation with
Prof. (Dr.) Deependra
Kumar Jha, internationally
renowned educationist
Dr. Águeda Benito spoke in
detail about the impact of
the Covid-19 pandemic on
the future of education.*



Dr. Benito is a recognized academic leader, providing her services to organizations like Cintana Education, where she now serves as the Chief Academic Officer. Until March 2019, she served as the Chief Academic Officer for Laureate EMEAA. In her role, she provided guidance and support to the

academic leaders of the regional schools, located in six countries, focusing on the quality of the students' learning experience and their employability, as well as faculty development, innovation and the enhancement of the institutional reputation. Here are the excerpts:

1. Almost half of the world is in a lockdown state. How are you keeping yourself busy and motivated during these tiring times?

I was born and now live in Spain, one of the countries where the Covid-19 crisis has hit the hardest. From a personal perspective, this situation has triggered all sorts of feelings in me. First of all, it is extremely sad to see so many people around, who have lost friends and family members. It also saddens me to see people who have lost their jobs and are

struggling to bring food to the table. Sometimes I wonder how we let this happen, and feel anger, and then I think about all the things that humanity would need to do to avoid a similar crisis in the future, and cannot help alternating opposite feelings of distress and hope. But at the same time, I feel gratitude for so many professionals who risk their health and life every day to look after the rest of the population, also for the universities that overnight changed the way they were doing things to allow their students to continue to learn and grow. I feel fortunate to have a job that I can do online, at least during a period of time, and I really feel some of us are privileged to have access to technology, to be connected to our loved ones, to be informed, to be entertained and to continue to enjoy many beautiful aspects of life. I am closer to my close family too,

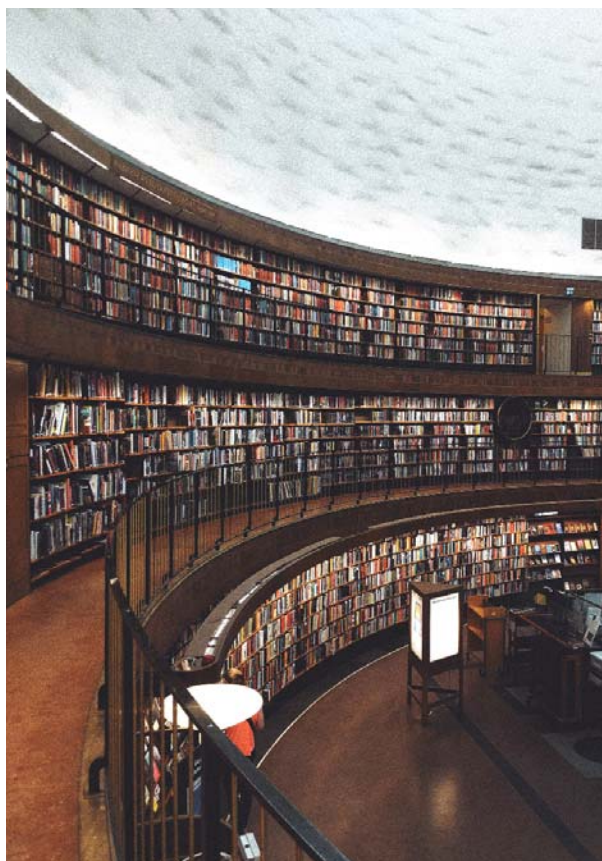
and now I have a stronger sense of love for them. I hope this crisis ends soon. However, I will do my best to keep some of the good things that have emerged.

2. What three long term impacts of Covid-19 pandemic on school and higher education do you see ahead?

I am not sure about the long term, but I believe that in the midterm, the less developed countries will suffer not only from not having been able to provide education to its youth for a few months, but from an economic crisis that will continue to affect some of the key conditions for an effective education system to be re-installed. Additionally, I see some more strict regulations regarding the facilities of the campuses, and more thorough safety and health related protocols all over the world. With greater clarity, I see a new historical period starting in education, where technology will be one of the main protagonists.

3. What new forms with digital, online and distance learning take in times to come?

I think education will become hybrid. In particular in Higher Education, I think the Covid-19 crisis has taken us to a point of no return, where many students have discovered a more flexible and effective way of learning. The amount of educational innovations had increased significantly during the last couple of decades, but only a few weeks ago, we still found too traditional educational approaches in too many institutions. I hope all of us have finally realized how useless it can be for students to be sitting in a lecture room for hours, and how unrealistic it is to think that they will attentively listen to their instructors and learn. Students have now realised that they can watch their professors on video, read papers, take quizzes, work on assignments, and collaborate with other





students without having to be physically on campus at a fixed time. They can even do some of their labs at home, and take exams with rigorous protocols that ensure honesty just as much as the face to face exams they used to take.

4. Why and how will the internationalization process of education expand and how would Covid-19 contribute to that? How will internationalization now be different from the one happening for so long?

I believe that in the short term many people will not be confident about traveling as they were. Many families will prefer to send their children to the best local schools and refrain from sending them abroad, at least for now. I also think that the best local schools will be those that bring internationality home, mainly through technology. It will be those that partner with international universities to be able to enhance their offerings with online courses, and even double degrees. Those whose technology and academic strategy will connect local students with international students and with the best global faculty members, those that

engage with world-wide companies and open doors to global learning experiences and career opportunities.

5. Do you foresee the rise of freelance professors across globe in the new possible gig economy of higher education?

That might be the case in continuing education, but I am not completely sure about that in formal Higher Education, which is highly regulated and does not advance as quickly as other more innovative sectors. The fact that online education has not been adopted more effectively in the past is due in part to the limitations that regulators, being afraid of the known, have established. I believe that after Covid-19, society will embrace online and hybrid education, and regulation will support it, but I believe that faculty requirements, their credentials, appointments and promotion process, will continue to be a very strict component of the rules of the game. I do not see this as a short term professional movement, but I am sure we will continue to have part time faculty members, who will be able to teach in more than one university regardless of the distance that separates them, and I think we will have more faculty members teaching international students online as part of the new internationalization process in their institutions.

6. Will education be restructured at the higher level based on industry needs more than ever before? Why or why not?

The dialogue between universities and the industry will need to continue, and further avenues for collaboration will need to be found. Universities will have to better understand the needs of the industry, and engage them in the multiple tasks, like curriculum design, instruction delivery and student assessment. However, with the

online format, I consider that it will be easier for the industry to be more present in Higher Education. I also think that there are already some other good news, like the fact that many of the competencies that employers are demanding today can be developed much more effectively through a hybrid model, where the contact hours are less, but more meaningful, and where students can take advantage of a much more active learning experience. The new context will be a much better environment for a flipped classroom approach, where more practical, collaborative and experiential learnings take place, and where crucial competences like critical thinking, communication, teamwork, adaptation, computer literacy or global mindset can be enhanced more effectively.

7. How will education management change in the post Covid world?

I think that the basic principles of Higher Education will continue to be the same: universities will have to provide students with the necessary conditions for them to learn and get ready for a successful career and a positive contribution as citizens. Those conditions will still be related to the curriculum, the learning resources, the learning environment and the faculty members, and academic leaders will have to take care of each element thoroughly. The difference will be that technology needs to play a protagonist role in each of them, and that will need to be reflected in all the future investments and strategies. Education

can be much more effective, engaging and personalized thanks to technology, but we will have to embrace the future and manage change without fear. I believe that will be the major difference. I also believe that faculty members will be even more important now, since the change can only happen with their conviction and support. We will need to provide them with good development opportunities, make them part of a learning community themselves, support them technically and pedagogically, and recognise them. We will also

need to ensure the readiness of students in this new learning model, starting with their access to technology and some key skill like time management and autonomous work.

8. How will the economics of higher education change ahead?

I hope this situation proves that online/ hybrid

education can be as good, if not better than purely face to face education. But in order to provide students with high quality online education, major investments in technology, innovation and talent need to be made, which means that online education cannot be expected to be much cheaper than face to face. We may argue that a football stadium is no longer something necessary, but so many other expenses will be there. What will be important to consider is the return on investment, which must be as high as possible, so that graduates and society can benefit from a new model that will enhance future prosperity.

With greater clarity, I see a new historical period starting in education, where technology will be one of the main protagonists.



Learning in Covid-19 Times and Beyond: Turning a Crisis into an Opportunity



Seasoned educationist Prof. Ujjwal K Chowdhury talks about how the education sector will transform due to the advent of the Covid-19 crisis.

More than 770 million students' lives have been disrupted by Covid-19 and the consequent lockdowns globally. The United Nations has warned of the unparalleled scale and speed of the educational disruption being caused by Coronavirus. Every house has been

turned into a school and every parent is now a teacher as Covid-19 impacts the education of 250 million school students in India.

While much harm has been done by the pandemic, institutions can use this crisis to sharpen strategies and practices in areas



Covid-19 has introduced newer challenges for around 550 million children, who were so far studying but do not have access to digital learning systems.

such as internationalisation and e-learning. India has over 37 million students enrolled in higher educational institutions (HEIs). An interruption in the delivery of education could cause long-term disruption. The pandemic requires universities to rapidly offer online learning to their students.

Fortunately, technology and content are available to help universities make a quick transition to online education.

Learning broadly has three functions:

(A) The creation of learning content through research, writing and packaging with visuals.

(B) The dissemination of

learning through classes, lectures, notes, self-study and discussions.

(C) The assessment and evaluation of learners through various methods.

All these three have been majorly impacted by the self-isolation rightly imposed to ensure social distancing.

Digital Haves and Have-Nots Dichotomy

Covid-19 is, in fact, amplifying the struggles that children are already facing globally to receive quality education. Even before the outbreak of the virus, there were 258 million out-of-school children across the globe – principally due to poverty, poor governance, or living in or having fled an emergency or conflict. While there are programmes dedicated to end the existing crisis in global education, Covid-19 has introduced newer challenges for around 550 million children, who were so far studying but do not have access to digital learning systems.

The digital divide in every developing society was never as glaring as it is now. Though more than 70 per cent of Indian population has been covered now with

mobile telephony, the resources needed for digital learning from a distance or at home are not there with more than one out of four students in the country. On the other hand, if there were no enforced social distancing, the transition of those with partial or full resources to complete digital learning would not have been quickened. What demonetization did to fin-tech, lockdown has done to edu-tech.

Digital Learning Tools Today

Digital learning calls for tech-led holistic solutions. It requires several content pieces to be transmitted digitally. These content pieces can be in the form of PDFs, PPTs, URLs, YouTube links, podcast links, case studies etc. There can also be e-books, audio books, kindle-based content, Magzter-sourced magazines, etc. Then this can involve learning without being face to face, as in Google Class, or learning face to face as in Zoom. People may also use GoToMeeting or Microsoft Team sessions. Attendance can be taken on Google Spreadsheet and WhatsApp Group. There are other tools that can take digital learning ahead. Flipped Classroom method with an active learning classroom can have all study resources given in advance, and the actual session starting with a quick quiz, then doubt clearance, and thereafter a few issues of the future or counter points. This methodology is internalized, collaborative, experiential, bottom-up, as distinctly different from teaching, which is instructional, hierarchic and top-down. Then there are MOOCs, collaborative

distance learning, Wikis, Blogs etc. Individual resource-rich institutes develop their customized secured and IPR protected Learning Management Systems (LMS), through the use of BlackBoard or TCSion. Other LMS options like Kaltura or Impartus that allow video recording are also used. There are Coursera courses, Swayam online lessons from UGC and similar other avenues to learn online. Learning digitally can be further assisted with Virtual Reality (VR), Augmented Reality (AR) and Mixed Reality (MR) which

can take the viewer to an enhanced experience. These are immersive and contextual experiences, and artificial intelligence driven Chatbots can further enhance the digital interface.

Digital Learning Add-ons and Social Media Value-adds

Incorporating big data analytics and content management, educators can develop an individualized curriculum

that enhances how each student learns (e.g. Playlist of content in Wisewire changing for each student). Many in the West have started using the contemporary language and style like Khan Academy and YouTube. Twitter, Tumblr, Snapchat, iMessage, Instagram, Facebook and WhatsApp are being creatively integrated with school education. There is a case of a management school in India, where the professor sends a three-minute-long interesting video on the subject he is taking up next through group. In the US, Smartphone applications like Socrative and Plickers are helping teachers interact and assess students' progress. Teachers can publish real-time

Institutions can use this crisis to sharpen strategies and practices in areas such as internationalisation and e-learning.



quizzes and polls for students via mobile devices.

Further, using anything from iMovie to WeVideo, learners can create video as a learning resource. YouTube (with privacy settings) and Seesaw or Flipgrid can also be used. The benefits of Seesaw and Flipgrid are that students can add voice recordings or text sharing feedback with peers. Useful apps like Book Creator, Explain Everything and Educreations can also be utilised. Various software packages are used to create digital content like Camtasia, Raptivity, Captivate, Articulate Online etc.

Social media will support learning online. Facebook Pages can broadcast updates and alerts. Facebook Groups or Google Hangout with advanced features in G-suite can stream live lectures and host discussions. Twitter can act as a class message board. The 256 characters help to keep messages succinct. Instagram can be used for photo essays. One can create a class blog for discussions. There are many different platforms available such as WordPress, Squarespace, Wix, and Blogger for that. Also, one can create a class-specific Pinterest board.

Digital Assessment and Evaluation

Online quizzes, open book examinations with time-managed and proctored question papers delivered online, applied questions and telephonic interviews etc have been the usual ways of digital assessment and evaluation.

Assessment refers to learner performance. It helps us decide if students are learning and where improvement is needed.

Evaluation refers to a systematic process of determining the merit or worth of the instruction or programme. It helps us determine if a course is effective (course goals). Assessments and evaluations can be both formative (carried out during the course) and summative (carried out following the course). There can be many ways for the same. Mentors can make learners aware of expectations in advance (e.g. one week for feedback from deadline) and keep them posted (announcements like 'All projects have been marked'). Mentors can consider auto-grading options offered by LMSs and Virtual Learning Environments (VLEs). For example, one can create tests that are multiple choices, true/ false or short answer essays and one can set the assessments to automatically provide feedback.

Mentors can also incorporate a peer feedback process into their courses through student assignments. They get an initial level of feedback before submitting the assignment, prompt feedback and mentors get a better assignment in the end.

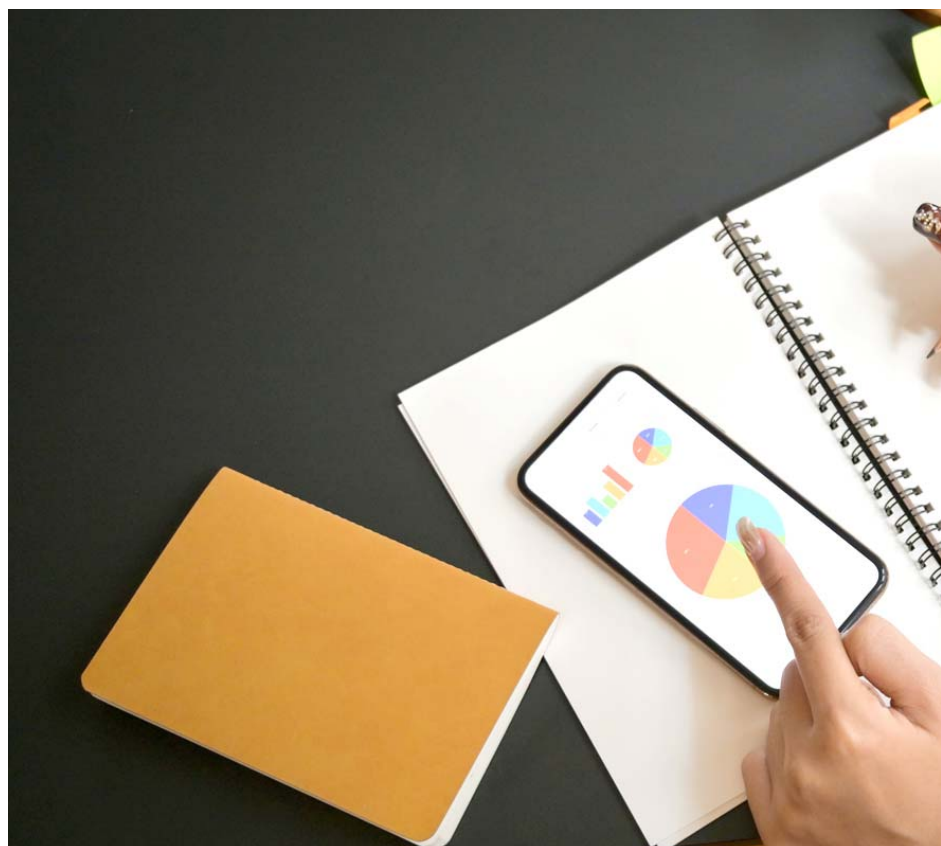
One particular popular assessment option for online and blended learning is rubrics. In part, their popularity is based on the level of detail included. Rubrics help to define the characteristics of a high-quality assignment and help the student understand assignment and assessment expectations. Rubrics also provide a range of performances by establishing categories

that span the range of possible outcomes, from basic to exceptional performance on task. If we are using an LMS/ VLE, there are additional opportunities to micro-evaluate. This type of evaluation can occur through polls, reflections on your analysis of online transcripts and student activity logs and reports. Notably, we can plan for such forms of evaluation during the course design process and embed them in the learning architecture.

Possibilities in Post Covid-19 Education

Hamish Coates, a professor at Tsinghua University's Institute of Education told Times Higher Education, "The first priority is for institutions to care for the people involved – students, faculty members, staff and the communities we serve. This is a human situation." Post this comes access to digital learning and the rest.

Online learning is the big winner from this – across all education levels; so proving quality now is at the centre stage. However, going ahead, in the post Covid-19 times, blended learning will be the way to go. The biggest future



One particular popular assessment option for online and blended learning is rubrics.

benefits of virtual instruction will come after our professors and students return to their physical classrooms. The necessity of teaching and learning with asynchronous (Canvas, Blackboard, D2L) and synchronous (Zoom) platforms will yield significant benefits when these methods are layered into face-to-face instruction. Since professors are now moving content online, precious classroom time will be more productively utilized for discussion, debate and guided practice.



Online education will also be a strategic priority in higher education going ahead. This post-pandemic understanding will change how HEIs plan for, manage and fund online education. Previously decentralized and distributed online course development and student support functions will be centralized, subject to institutional planning and cross-campus governance. Management of online learning will be integrated into existing academic leadership structures and processes.



Online education will also be a strategic priority in higher education going ahead.

[Author's Introduction: A leading media academic and an internationally acclaimed speaker and writer, Prof. Ujjwal K Chowdhury is currently the Pro Vice Chancellor and the Dean of the School of Media, Communication & Fashion at the Kolkata-based Adamas University. He has spearheaded some of the finest media institutes in the country and taken them to newer heights. Formerly the Dean of the School of Media at Pearl Academy and the Director of Ramoji Krian Universe (RKU), strategically located within the Ramoji Film City (RFC) in Hyderabad, Prof. Chowdhury has also been a Dean at Symbiosis International (Deemed University) in Pune and Amity University in Mumbai. He also acted as the Dean of Whistling Woods International in Mumbai. Earlier, Prof. Chowdhury has been a Media Advisor with the Ministry of Textiles, Government of India and the World Health Organization (WHO), India. Prof. Chowdhury is widely believed to have introduced the concept of convergence in media education.]



Is Coronavirus an Old US Bio-Weapon?



*Noted former BBC journalist, Columnist and Author **Subir Bhaumik** deliberates on the origin of the dreaded Covid-19 virus and associated conspiracy theories.*

Much debate has raged over whether the Covid-19 is a lab-made virus, a bio-weapon or a natural virus originating in bats or other exotic animals that the Chinese love on their table. Much research has been focused on the hypothesis that bats passed a virus to some intermediate host – perhaps pangolins, scaly ant-eating mammals – which subsequently passed it to humans. But the pangolin theory has not been conclusively proven. Some experts wonder whether a virus under study at a lab could have been accidentally released, something that's happened in the past.

Among the latest entrants to the debate about the provenance of SARS-CoV-2 are the authors of a March 17 *Nature Medicine* piece that takes a look at the virus' characteristics – including the sites on the virus that allow it to bind to human cells. They looked at whether the virus was engineered by humans and present what





appears to be convincing evidence it was not. They also considered the possibility that the outbreak could have resulted from an inadvertent lab release of a virus under study but concluded “we do not believe that any type of laboratory-based scenario is plausible.” Not all experts agree.

Was Covid-19 Purposefully Manipulated by Humans?

Professor Richard Ebright of Rutgers University’s Waksman Institute of Microbiology does agree with the *Nature Medicine* authors’ argument that the new Coronavirus wasn’t purposefully manipulated by humans. Bio-security expert Ebright helped *The Washington Post* debunk a claim that the Covid-19 outbreak can somehow

be tied to bioweapons activity, a conspiracy theory that’s been promoted or endorsed by the likes of US Senator Tom Cotton, Iran’s supreme leader, and others.

But Ebright thinks that it is possible the Covid-19 pandemic started as an accidental release from a laboratory such as one of the two in Wuhan that are known to have been studying bat Coronaviruses.

Except for SARS-CoV and MERS-CoV, two deadly viruses that have caused outbreaks in the past, Coronaviruses have been studied at laboratories that are labelled as operating at a moderate biosafety level known as BSL-2, Ebright says. And, he says, bat Coronaviruses have been studied at such labs in and around Wuhan in China, where the new Coronavirus first emerged. “As a result,” Ebright says, “bat Coronaviruses at Wuhan [Center for Disease Control] and Wuhan Institute of Virology routinely were collected and studied at BSL-2, which provides only minimal protections against infection of lab workers.”

Scientists in Wuhan have collected and publicized a bat Coronavirus called RaTG13, one that is 96 per



It is possible the Covid-19 pandemic started as an accidental release from a laboratory.

cent genetically similar to SARS-CoV-2. The *Nature Medicine* authors are arguing “against the hypothesis that the published, lab-collected, lab-stored bat Coronavirus RaTG13 could be a proximal progenitor of the outbreak virus.” But, Ebricht says, the authors relied on assumptions about when the viral ancestor of SARS-CoV-2 jumped to humans; how fast it evolved before that; how fast it evolved as it adapted to humans; and the possibility that the virus may have mutated in cell cultures or experimental animals inside a lab. Yanzhong Huang, a senior fellow for Global Health at the Council on Foreign Relations, recently wrote an article for *Foreign Affairs* that is dismissive of conspiracy theories about the origins of the pandemic but also mentions circumstantial evidence that supports the possibility that a lab release was involved. That evidence includes a study “conducted by the South China University of Technology, [that] concluded that the Coronavirus ‘probably’ originated in the Wuhan Center for Disease Control and Prevention,” located just 280 meters from the Hunan Seafood Market often cited as the source of the original outbreak.

“The paper was later removed from ResearchGate, a commercial social-networking site for scientists and researchers to share papers,” Huang wrote. “Thus far, no scientists have confirmed or refuted the paper’s findings.”

What no one has raised so far is the well established fact that the Corona and the Hantavirus have been known to a small community of American bio-weapon

researchers and not to most troubled by Covid-19 pandemic. By 1969, US had developed six mass-produced, battle-ready biological weapons in the form of agents that cause anthrax, tularemia, brucellosis, Q-fever, VEE and Botulism, each a deadly disease capable of emerging into a pandemic. In addition, Staphylococcal Enterotoxin B was produced as an incapacitating agent by the programme.

Covid-19 Might Have Been Biologically Developed as Early as the 1960s

One Indian-origin biologist, with long experience of research in US’ top biological labs, told this writer, that by 1969, the US bio-

weapons programme had conducted detailed research for weaponisation of at least 20 more agents, all deadly virus. He said on condition of anonymity, citing possible implications on future research funding, that the 20 bio-agents developed by the programme included both Hantavirus and Coronavirus.

The other bio-agents developed by the programme were Smallpox, EEE and WEE, AHF, Lassa fever, Melioidosis, plague, yellow fever, psittacosis, typhus, dengue fever, Rift Valley fever (RVF), CHIKV, late blight of potato, rinderpest, Newcastle disease, bird flu, and the toxin ricin. This, the Indian-origin biologist said, was “no huge secret” and was fairly well known in the American biologists’ community, especially scientists who had once worked in the country’s elaborate bio-weapons programme. Even the Wikipedia’s entry on US

Some experts wonder whether a virus under study at a lab could have been accidentally released, something that’s happened in the past.

biological warfare programme attests to this claim of the Indian origin biologist. The Wikipedia cites in a footnote to back its claim a work on Bioterrorism by well known UK biologist Nancy Khordari.

So, both the Coronavirus and the Hantavirus are old viruses developed by US bio-scientists in the 1960s

before President Richard Nixon put an end to the country's bio-warfare programme. He had told those who had reservations that if any country dared to inflict bio-terrorism on US, "we will nuke those bastards".

Besides the numerous pathogens that afflict human beings, the U.S. had developed an arsenal of anti-agriculture biological agents. These included rye stem rust spores (stored at Edgewood Arsenal, 1951–1957), wheat stem rust spores (stored at the same facility 1962–1969), and the causative agent of rice blast.

The Corona and the Hantavirus have been known to a small community of American bio-weapon researchers.

A U.S. facility at Fort Terry focused primarily on anti-animal biological agents. The first agent that was a candidate for development was foot and mouth disease (FMD). Besides FMD, five other top-secret biological weapons projects were commissioned on Plum Island.

The other four programmes researched included RVF,

rinderpest, African swine fever, plus eleven miscellaneous exotic animal diseases. The eleven miscellaneous pathogens were Blue tongue virus, bovine influenza, bovine virus diarrhea (BVD), fowl plague, goat pneumonitis, mycobacteria, "N" virus, Newcastle disease, sheep pox, Teschers disease, and vesicular stomatitis. Work on delivery systems for the U.S. bioweapons arsenal led to the first mass-produced biological weapon in 1952, the M33 cluster bomb. The M33's submunition, the pipe-bomb-like cylindrical M114 bomb, was also





The truth, a casualty in such intense exchange of allegations and counter-allegations, is difficult to establish as to how the novel Coronavirus emerged in Wuhan.

completed and battle-ready by 1952. Other delivery systems researched and at least partially developed during the 1950s included the E77 balloon bomb and the E86 cluster bomb. The peak of U.S. biological weapons delivery system development came during the 1960s. Production of cluster bomb submunitions began to shift from cylindrical to spherical bomblets, which had a larger coverage area. Development of the spherical E120 bomblet took place in the early 1960s as did development of the M143 bomblet, similar to the chemical M139 bomblet. The

experimental Flettner rotor bomblet was also developed during this time period. The Flettner rotor was called, "probably one of the better devices for disseminating microorganisms", by William C. Patrick III. The Indian-origin scientist says that though the bio-weapons were supposed to be totally destroyed, small stocks of each of the agents developed were retained for 'future research'. That included the Coronavirus and the Hantavirus, which have surfaced in China during the recent Coronavirus pandemic.

How Did the Virus Find Its Way to China?

How the deadly virus found their way into China is anybody's guess but the biologist was not willing to pander to speculations that have acquired the dimensions of a psy-war between US and China. From the beginning of the Corona outbreak, online sources advanced the claim that the virus was genetically engineered. An unpublished paper authored by some Indian scientists (<https://www.biorxiv.org/content/10.1101/2020.01.30.927871v1>) bolstered this notion by suggesting that the virus'

protein sequence included elements of HIV, that virus that causes AIDS. The Indian scientists soon voluntarily withdrew the paper after some Chinese protests but the proposed linkage attracted websites like Zero Hedge to make the claim that the novel Coronavirus was weaponised by Chinese scientists. Speaking on Fox News, Republican Senator Tom Cotton suggested that it could not be ruled out that the virus originated in a lab in Wuhan that is used to handle the most dangerous pathogens.

Zero Hedge has been barred from Twitter, but Chinese social media abounds with conjectures that the virus was engineered by the United States as

an agent of biological warfare against China.

One widely shared conspiracy theory suggests that American soldiers participating in the 2019 Military World Games in Wuhan deliberately shed the virus at the Hunan Seafood Market. Contending that "a new type of biological warfare is coming," a retired People's Liberation

Army general called for building a permanent biodefense force in China. The current outbreak in China is not the first to be a rumoured biological weapons attack. During the 2002–03 SARS epidemic, a Russian scientist claimed that the virus was a mixture of measles and mumps that could be made only in the lab. Many Chinese seized on this notion and speculated that SARS was a genetic weapon developed by the United States to target them alone. The official *China Youth Daily* linked a National Institutes of Health-sponsored genetic study in China to the U.S. genetic warfare programme. In the United States, meanwhile, a China

expert suggested that the virus was linked to China's biowarfare program. Yet SARS was by no means a genetic weapon. According to the U.S. Centers for Disease Control and Prevention, of the 166 reported SARS patients in the United States in 2003, 58 percent were white and 32 percent were Asian. The truth, a casualty in such intense exchange of allegations and counter-allegations, is difficult to establish as to how the novel Coronavirus emerged in Wuhan, whether it is a modification or an advanced version of the one the American bio-warfare programme had developed in the 1960s

and whether it was

deliberately released. What is however certain is that the Coronavirus that has plunged the world into a huge crisis was first developed by the US.

From the beginning of the Corona outbreak, online sources advanced the claim that the virus was genetically engineered.

[Author's Introduction:

Subir Bhaumik is a veteran BBC journalist and author. He headed BBC's eastern bureau for 17 years and before that worked for PTI,

Anandabazar Group and Reuters. He is a former Queen Elizabeth House Fellow at Oxford University, Senior Fellow at East West Centre (Washington) and a Eurasian Fellow at Frankfurt University. After retiring from BBC, Bhaumik worked as Senior Editor at Dhaka's bdnews24.com and Yangon's Mizzima News. Bhaumik is author of well acclaimed books like 'Insurgent Crossfire', 'Troubled Periphery' and 'Agartala Doctrine'. He has edited two volumes 'Bangladesh's Chittagong Hill Tracts' and 'Counter Gaze: Media, Migrants and Minorities'. Bhaumik is a media trainer and a political risk analyst.]



Covid-19 and Lockdown: Its Impact on the Environment



*Internationally renowned scribe **Jeremy Wilks** discusses the impact of Covid-19 lockdown on the environment.*



The fear of Coronavirus forcing people indoors must be good for the environment, or that is the common presumption. With factories and vehicles off the streets, emission of deadly gases is expected to be down. Media reports have quoted old people saying that they have not seen such a clear sky in a long, long time.

But, often realities are different from what meets the eye.

We ask the experts for the facts, and set out the differences between short-term changes and long-term trends.

In Europe in March, the average temperatures were almost two-degree Celsius above the 1981-2010 average. The figures were much more extreme in parts of Ukraine and Russia. In Ukraine, some regions experienced temperatures up to 6 degrees higher than the average over the course



But for those who imagine this pandemic will reverse climate change or stall it is to consider that it will be back to the usual once the virus is defeated.

of the month, while in parts of Russia temperatures were up to 8 degrees higher than average. Those same areas were also drier than might have been expected; soil moisture and relative humidity are down for the time of year.

The month of March is a good time to look at ice in the Arctic, as it's the time when the sea ice cover is at its annual peak. Generally, the trend shows anomalies since 1979, and reveals that there is 6 per cent less sea ice than might have been anticipated, although there's plenty of variability, too.

There has been much talk in the media about the potential climate impact of the Coronavirus-related shutdown. Europe has

come to a virtual standstill, with the majority of countries in some kind of lockdown. The fact is true for other continents too.

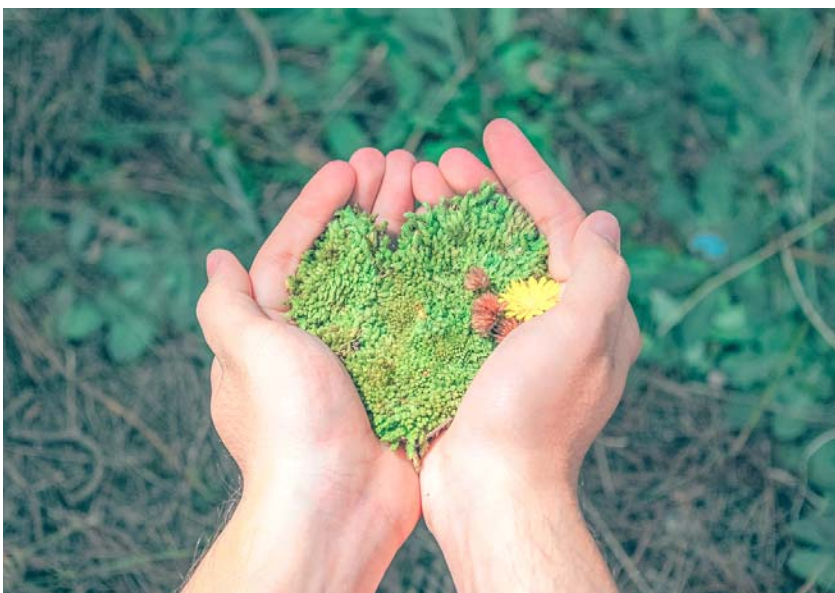
Many assume that this is good for the environment.

Data from the Sentinel-5P satellite shows that nitrogen dioxide (NO₂) air pollution levels have plummeted across all continents since the pandemic. NO₂ is emitted in most cases by burning fossil fuels at high temperatures, as in internal combustion engines.

However, Vincent-Henri Peuch, the Director of the Copernicus Atmosphere Monitoring Service said that the importance of the drop should not be overstated. "I don't think we can say that there is any long term significance in this decrease. However, in the short term, I think these decreases are useful. The level of air pollution is affecting cardio-pulmonary health in general, so having less pollution at a time where this virus is around can only be a good thing," he said.

Is the Virus Air-Borne?

There could also be another potential benefit of today's lower air





pollution; there's a chance that Covid-19 may be transported and remain viable on particles of pollution. As yet, there is no scientific consensus on this issue.

However, Alessandro Miani, the President of the Italian Society of Environmental Medicine, certainly thinks it's a viable theory: "Particulate matter, when it's at a certain density and there is a lot of smog, a lot of atmospheric pollution, can be considered a sort of highway for the acceleration of the epidemic," Miani said.

Carbon Dioxide Levels Has Witnessed a Significant Drop

Short-term air pollution level, which lasts for a few hours or a few days in the atmosphere, has dropped, and that is considered positive news.

However, despite the economic slowdown, greenhouse gases are still being emitted. Oksana Tarasova, the

Head of Atmospheric Environment Research Division at the World Meteorological Organization, says that carbon dioxide (CO₂) levels in the atmosphere are still high. "If we look at how the levels of atmospheric CO₂ are formed, it's not annual emissions in particular which are controlling the levels; it's the whole accumulation of CO₂ in the atmosphere since pre-industrial times, which actually form the current level. "So, the reduced emissions within one particular year of this scale are very unlikely to have an impact on global levels of carbon dioxide," Oksana Tarasova explained.

Tarasova is stressing that one has to grasp the difference between a cut in emissions – something some countries will see this year, even if it's only a small percentage reduction – and the actual levels of greenhouse gases in the atmosphere. We would have to look back many millions of

years into the past to find CO₂ concentrations as high as they are now, and at that time sea levels were tens of metres higher and the average temperatures globally were several degrees warmer.

Covid-19 and Climate Lessons

The Covid-19 pandemic has had an immediate impact on our home and work environments, but when it comes to the environment, the picture is far less clear. Vincent-Henri Peuch believes that the current situation may have a big influence on our approach to pollution, moving forward. "The lessons learned once we will have this crisis behind us will be very important to (rethink) the problem of air pollution," he says. "Unfortunately climate change will still be around and will not really be changed by this crisis." There have been a lot of questions about whether the virus will disappear with the summer weather. The answer isn't clear, we don't have enough information yet, and there are so many variables, including how we all behave in our daily lives as temperature increases. However, the idea that temperatures above a certain level can destroy or prevent Coronavirus is very much among the myths circling around the virus.

Media reports have quoted old people saying that they have not seen such a clear sky in a long, long time.



However, Oksana Tarasova and her colleagues at the World Meteorological Organization are doing their best to counter the myth, saying that the fake news spurt leading to an 'infodemic' alongside the pandemic is one of the major problems because it is making it very difficult to differentiate between the wheat and the chaff.

But for those who imagine this pandemic will reverse climate change or stall it is to consider that it will be back to the usual once the virus is defeated. Cars will spew smoke, so will factories desperate to make for lost production.

So don't expect a temporary reprieve as a battle won. The battle for arresting climate change will be much longer than the one against the virus.

[Author's Introduction: Jeremy Wilks covers science and technology for Euronews. He is the producer and presenter of the channel's long-running Space series, made in association with the European Space Agency. Wilks has moderated debates at Web Summit, ITU Telecom World, and CeBIT. He previously worked as a news journalist for BBC Radio, then for ITN before moving to Euronews in 2001.]



Role of Bioinformatics in the Development of Covid-19 Vaccine

*Professor-cum-researcher,
Dr. Rudra Prasad Saha
deliberates on how
bioinformatics is playing a
critical role in the future
development of Covid-19
vaccine.*



Coronavirus Disease 2019 or Covid-19 has spread to more than 200 countries, infecting more than 2.3 million people and claiming over 150,000 lives as of April 19, 2020, in less than four months since its first detection in Wuhan in China. The world today is in a deep shock due to Covid-19, which has forced a majority of the world population to stay indoors to minimize the spread of the virus in the absence of any drug or vaccine. The world economic activity has gone downhill and the IMF and the WTO have



already indicated that the world is going to face a major economic crisis, which will be much bigger than the one in 2008. The disease has caught us all on the wrong foot and extraordinary scientific and regulatory efforts are required to develop a vaccine.

Severe Acute Respiratory Syndrome Coronavirus 2 or SARS-CoV-2 is the causative agent for Covid-19. It belongs to a large family of Coronaviruses that infects a wide variety of animals, birds and human. Shifting from an animal host to a human host for a virus is not easy as it requires genetic changes that would enable the virus to survive and proliferate in humans. SARS-CoV-2 is believed to have acquired those essential mutations when it jumped from a bat to a human via pangolin, as predicted by the scientific community.

The virus mutates in such a way that it can



evade the human immune system, survive, reproduce and then jump to another human due to its highly infectious nature. The virus is believed to spread via respiratory droplets and aerosols, when an infected person comes in close contact with a healthy individual. The virus causes mild to severe symptoms in humans including fever, dry cough, respiratory distress, pneumonia etc. and may result in death. In the absence of a vaccine, scientists worldwide immediately started working by

collaborating and sharing data so that the process of development of a vaccine can be accelerated. Even if many scientists are stuck at their homes as their laboratories have been closed down due to the disease outbreak, their minds are not stuck and therefore, they have started working from home, analyzing the available data and coming up with ideas that can help us to fight this deadly disease. In this crisis, Bioinformatics has come out as one of the major fields in analyzing data

and helping in the development of drugs or vaccines. Sequence data is the 'holy grail' in Bioinformatics.

Bioinformaticians use computational tools or write their programmes to analyze biological data and come up with theories that can be further tested in the laboratory for validation. In the presence of a large amount of data, scientists have to spend a great amount on time and money to get any fruitful results. In this scenario, Bioinformatics can be used to analyze the data, discard the redundant ones, and come up with a few significant predictions which can be tested in the laboratory quickly. This way, Bioinformatics can reduce the workload and expenditure significantly, which in turn helps us to address a problem quickly and efficiently. Today Bioinformaticians are closely working with various drug/ vaccine development teams to find out a cure for Covid-19.

To predict a drug against Covid-19, the workflow of a Bioinformatician can be roughly divided into five broad areas: (a) retrieving nucleic acid data from the primary sequence databases,

(b) analysis and comparison of the data by various sequence comparison tools, (c) phylogenetic analysis of the sequences to find out relationships between various species, (d) homology modeling of target viral proteins, and (e) docking of ligand molecules to viral proteins to facilitate designing of suitable inhibitors.

Sequence Retrieval from the Database

The Covid-19 outbreak started in Wuhan, China, in late December 2019. The scientists immediately sequenced the viral genome and deposited that in the Nucleotide database in January 2020 for further analysis by other scientists. Nucleotide database is a freely available public sequence depository where scientists worldwide deposit sequences of DNA and RNA for sharing of data with the community. Immediately upon accessing the SARS-CoV-2 sequence data, Bioinformaticians started analyzing it to understand what types of genes are

present on the genome of the virus and what kind of proteins can be encoded by these viral genes as knowing this information is the first step in understating the viral defenses that can be utilized for drug development.

Comparative Analysis of the Sequence Data

Once the viral sequence was available and retrieved, scientists started to compare the data with similar types of viruses to find out how SARS-CoV-2 originated. They found high similarity with another Coronavirus named SARS-CoV which was responsible for a previous outbreak of SARS in 2003. They also found SARS-CoV-2 originated from a bat Coronavirus by analyzing and comparing the sequence data. Also, comparing different isolates of SARS-CoV-2 sequences from different countries gave us an idea of how the virus is mutating when transmitting from one region to the other and whether these mutations or changes in the viral genome would have any effect on the subsequent vaccine development procedure.

Phylogenetic Analysis of the Sequences

At present sequences of more than 150 isolates of SARS-CoV-2 are present in the Nucleotide database and by phylogenetic analysis, scientists have found that there are at least three distinct strains (type A, B, and C) of the virus in circulation at different regions of the world. Phylogenetic analysis is a very important methodology, where evolutionary relationships between species, i.e., how a sequence is evolved from another sequence, can be predicted. Significant portions of A and C types are found in the European and American population, respectively, and in Asia, type B is prevalent. These findings are very important to understand how the virus is evolving in different areas.



Theoretical Modeling of Important Viral Proteins

The understanding of the viral genome using Bioinformatic tools would help us to identify important proteins which can be potent targets for antiviral drugs. To better understand, Bioinformaticians can generate theoretical three-dimensional (3D) models of all important viral protein by homology modeling. Homology modeling is a procedure where one can build a theoretical model of a molecule based on an experimentally derived 3D structure that has similarity in sequence with the model being built. Scientists have created theoretical models of all essential SARS-CoV-2 proteins, for example, viral protease, spike protein, viral polymerase, etc. to understand what kind of drug can be designed to inhibit these viral molecules so that the virus can be stopped from further spreading. Several Bioinformatic tools like Rosetta, DeepMind's AlphaFold, Modeller, etc. were being used by the scientists to build initial 3D models of all the viral proteins.

Drug Designing

When the models of important viral proteins are available, that can be targeted by designing suitable drugs. To do so, scientists have started to scan databases of existing drugs that are already available. Using Bioinformatic tools, these drugs were tested by 'docking' them onto the target protein surfaces that are important for the activity of the viral protein. If suitable molecules are found using computational methods that actively bind and inhibit the viral proteins then these drugs or molecules

can be tested further in the laboratory to confirm their potency. Recently in a study, researchers have screened more than 30,000 molecules by Bioinformatic tools and found several molecules that can be used to inhibit the main protease from SARS-CoV-2 which would block the virus from further infection.

Therefore, a student or a researcher needs to study Bioinformatics and understand how Bioinformatic

tools can be utilized to do various experiments by using a computer which would in effect minimize experimental time and maximize the result. Covid-19 pandemic has shown us the importance of Bioinformatics and how it is being used to develop vaccines against this deadly disease.

In this crisis, Bioinformatics has come out as one of the major fields in analyzing data and helping in the development of drugs or vaccines.

[Author's Introduction: Dr.

Rudra Prasad Saha is an Associate Professor and Head of the Department of Biotechnology at Adamas University in Kolkata. He is also the Associate Dean of the School of Life Science and Biotechnology. Dr. Saha completed his comprehensive post-doctoral research on host-virus relationships at the University of Texas at Austin in USA and San Diego State University in USA after earning his Ph.D. in Biochemistry from Bose Institute under Jadavpur University in Kolkata. Dr. Saha has published several research papers in high impact international journals and presented his work in several national and international conferences around the world. Dr. Saha's current research interests include but not limited to metal homeostasis in bacteria, metallo-regulation of transcription, virus-host interaction, and bioinformatics.]

Right to Health and Covid 19



Nationally renowned legal professional and educationist Dr. Jyotsna Yagnik writes about how important the right to health has become in the wake of the Covid-19 mayhem.

For the last 15 days or so, we have been hearing from known or unknown sources or reading in print media or watching on television or sharing or are being shared by someone on social media that lakhs of people stand to lose their jobs due to the Coronavirus pandemic. It is also being premised that a scary scene ala the Second World War will be created after the pandemic becomes history. We are also being told that it will take at least five years for India to regain normalcy and the GDP of the country will go down significantly to the tune of 1.5 per cent. Coronavirus has also created many positive impacts in our social life, which is

more particularly visible in the metro cities. Some families are experiencing togetherness after ages. However, the pandemic has reconfirmed the importance of individual health and public health. As is popularly said, health is wealth. The pandemic has proved that our health is of primary concern as it is our invisible asset. Therefore, right to health is treated as a basic right.

Fundamental Premise

The international perspective of Right to Health includes:

- i. The right to the enjoyment of the highest attainable standard of physical and mental health was first



articulated in 1946 in the Constitution of the World Health Organization (WHO), whose preamble defines health as “a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity.” The preamble further states that “the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.”

ii. The 1948 Universal Declaration of Human Rights also mentioned health as part of the right to an adequate standard of living (Art. 25).

iii. The right to health was again recognized as a human right in the 1966 International Covenant on Economic, Social and Cultural Rights. Since then, other international human rights treaties have recognized or referred to the right to health or elements of it, such as the right to medical care.

iv. In 2002, the Human Rights Council had created the mandate of Special Rapporteur on the right of everyone to the highest attainable standard of physical and mental health.

v. Moreover, vide Art. 14 in Convention of Elimination of Discrimination against Women (CEDAW) signatory, states have been directed to see to it that women have access to adequate healthcare facilities and that women have adequate facilities in their pre-and postnatal period, stage of pregnancy, etc. Even concerning domestic violence, the provision of proper physical and mental health services, treatment, etc. have been directed.

In 2017 in Geneva, Dr. Tedros Adhanom Ghebreyesus, the Director-General of WHO while taking over his charge spoke about some important priorities, such as:

- Universal health coverage.
- Health emergencies.
- Women's, children's and adolescents' health.
- Health impacts of climate and environmental changes.

After perusing the address of WHO Director, it is comprehensible that due importance has been given to the right to health at the international level and that it has been treated as a human right.

In comparison with many countries, India is found to have been respecting international commitment on right to health.

The Indian Perspective

In comparison with many countries, India is found to have been respecting international commitment on right to health. The provision for the budget in the health is also notable while comparing it with the budgeting of other countries. There are numerous health schemes like free vaccination to children, *Ayushman Bharat Yojana* health scheme, *Amrutam*

and policies by which different health schemes are being introduced to take care of public health and particularly take care of the health of the marginalized class, women, senior citizens, children, etc. It is important to note that though provisions are made for cleanliness, cleanliness has become the last priority. At times, the lack of cleanliness is the principal cause for many diseases.

It is worthwhile to mention that vide Article 47 of the Constitution of India, it has been provided that the state shall have a duty to raise the level of nutrition and the



Preparing and implementing a global policy to avoid mass migration of labourers in the future seems to be essential.

standard of living and to improve public health. It has been mentioned as the primary duty of the state. This Article 11 is one of the Directive Principles of State Policy, which is fundamental in the governance of the country. However, it cannot go out of notice that Article 47 is part of Chapter 4, which is a part of the Directive Principles of State Policy. Vide Article 37; provisions have been made to implement these directive principles. It has been specifically provided here that the provisions of this Part 4 of the Constitution of India shall not be enforceable by any court and that it shall be the duty of the state to apply these principles in making laws.

India being a welfare state, these directive principles are popularly known as the heart of the Constitution of India, which have been provided for guidance to the interpretation of fundamental rights of the citizen as also the statutory rights.

As discussed, these principles are for the governance of the country. Article 38 of the Constitution of India is to the effect that the state has to secure a social order for the promotion of welfare of the people. Through Sub Clause (e) of Article 39, the Health and strength of workers have been given due importance. In a nutshell, it can be stated that the Constitution of India has taken enough care for ensuring the right to health and public health.

Article 21 of the constitution of India is an important fundamental right of protection of life and personal liberty, of which no person shall be deprived except according to the procedure established by law. Here in my humble opinion, the right to health is a part of the right to life, which is one of the basic human rights.

S. 2(d) of Protection of Human Rights Act 1993





defines human right as the right relating to life, liberty, equality, and dignity of the individual guaranteed by the constitution or embodied in the International covenant and enforceable by courts in India. The definition of human rights also makes right relating to life as a part of human rights, and health is an important limb of the right to life, which makes it a human right.

Another important segment of the said right is its enforceability by courts in India. As far as the Constitution of India is concerned, right to health is not expressly given as a fundamental right. As discussed hereinabove, Directive Principles of State Policy, where the right to health is provided, is not enforceable by the court. Thus, in my opinion, to ensure enforceability by the court,

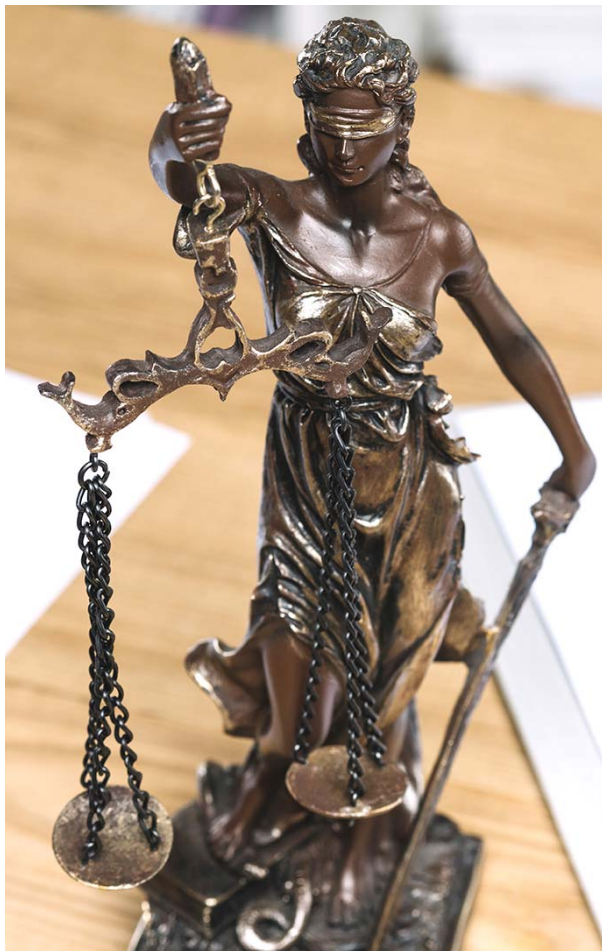
right to health must be expressly provided as a fundamental right or the Directive Principles of State Policy should be made enforceable by a court or there has to be an international covenant for the right to health.

Suggestions

In view of the discussion, following suggestions can translate the right to health into a reality and ensure that no other pandemic turns out to be so deadly as Covid-19:

Health is defined as “a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity.”

a) The saddest part of the entire Covid-19 fiasco in India is migrant labourers, who had to undergo and are undergoing many difficulties including insecurity and financial crunches. Preparing and implementing a global policy to avoid such mass migration of labourers in the future seems to be



essential.

b) Many countries have ratified at least one international human rights treaty or declaration or have signed at least one convention, which recognizes the right to health. However, in many countries and particularly in underdeveloped countries, right to health is more on paper. There is no clear right to health given through legislature, which can have enforceability by law. It is, therefore, essential that each country gives the right of health clearly and expressly through its local law.

c) The time has ripened when we need to think at the international level and adopt one binding international covenant for right to health ensuring funding from all countries. The contributions should not be uniform. It should be according to the financial capacity of each country. Such

funds should be utilised under the supervision of WHO or any such body of universal acceptance in cases of global calamities.

d) Deaths of underprivileged and marginalized people in such a pandemic are common. Covenant on the right to health and right to healthcare will reduce the risk and that will be indeed a great human service.

e) There is a dire need to evolve a global policy to be applied uniformly on all countries related to insurance coverage, compulsory free regular health checkups, medical insurance, and claim clearance policy to be adopted by insurance companies.

f) International programmes need to be introduced, which the member countries will follow to empower its people, to educate its people, to bring awareness in the general public about their right to health, to ensure access to medicines and to maintain a situation where illness becomes an exception.

g) At the international level, surveillance and checkpoints should be created to see to it that health risk is reduced, healthcare is increased, and death due to pandemic or incapacity to treat is nil.

h) Having learnt from the present experience of Covid-19, we need to bring in a situation where humanity is respected the most.

[Author's Introduction: Currently the Pro Vice Chancellor and the Dean of the School of Law and Justice at the Kolkata-based Adamas University, Dr. Jyotsna Yagnik is a Former Principal Judge at City Civil Courts in Ahmedabad. Dr. Jyotsna Yagnik has been teaching Law and imparting training to senior officers for about 33 years. She is the Former Principal of Law College and the Former Director of Yagnik law Academy that coaches for judiciary examinations.]



Whither Aviation in a Post Covid World

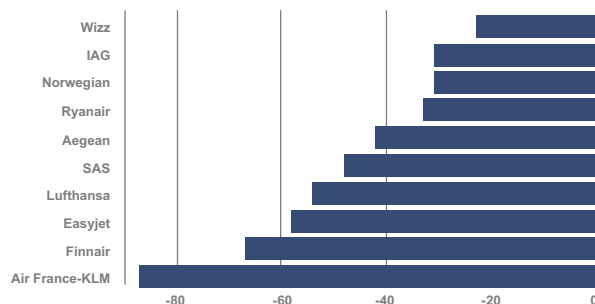


*Renowned aviation expert
Prof. (Dr.) Ugur Guven
throws light on how the
aviation sector will deal
with the Covid-19 crisis.*

One of the most significant inventions that changed the global landscape in a magnificent way was the invention of the powered flight by the Wright Brothers in 1903. While the first powered flight lasted for only 12 seconds; it opened up an era of travel and global expansion in the 20th century. Especially after the initial aviation boom of the 1930's, the aviation industry shaped the world both politically and economically. Furthermore, in the 21st century, aviation has definitely become one of the top three influential sectors in



Coronavirus fallout may hurt airline earnings
Estimated impact on 2020 profits (%)



Source: HSBC
© FT

Figure 1: Coronavirus Effect on Airline Profits
(Source: *Financial Times*)

the world.

The aviation industry can be truly considered as the backbone of the global economy since aviation encompasses not just the travel of individuals, but also the air transportation of goods and commodities across the world. The aviation industry has made the world a smaller place and it has become possible for any entrepreneur in India or anywhere else in the world to conduct business with any other country and sell his/ her products or services.

Moreover, families and friends have become closer to each other with distances becoming meaningless. People across the world have been able to explore various fascinating locations to help create a true global community. Especially, countries like India and China have played a great role in the aviation boom of the 21st century, with the expansion of their economies as well as with the expansion of new airports and new aircrafts.

Covid-19 Has Negatively Impacted the Aviation Industry

However, the arrival of SARS-CoV2-virus, which is the cause of the Covid-19 Pandemic, has altered the global

landscape and the global economy forever in various ways. The aviation industry, which has been the backbone of the global economy and global travel, has suffered immense amounts of damage due to the pandemic. Especially, global lockdowns and travel restrictions across the world (including Schengen travel restrictions and USA travel restrictions) have made air travel impossible since the mid of March. Thousands of planes throughout the world have been grounded with no clear date of operation in sight. Though some local flights in China and USA remain operational, most flights across Europe, Asia, and Africa have been legally grounded. As a result, airlines have grounded their planes for weeks. Of course, one exception to this situation has been the international flights operated by governments to extradite their citizens from infected countries. One of the primal factors of the aviation



industry is that like a well-oiled machine, it has to be kept operational in order for it to be productively functional. Just like once you shut off a machine, it becomes difficult to turn it back on after several months (if it has not been maintained), this is doubly so for the concept of airplanes and airports.

It's an interesting fact known by Aerospace Engineers that a functional plane which is kept constantly flying is in a far better shape than a plane which has been grounded. Keeping a plane on the ground requires extensive



Thousands of planes throughout the world have been grounded with no clear date of operation in sight.

maintenance, engine overhaul, protective covering, and round-the-clock supervision. This means preserving the engines, removing all fluids and getting everything covered in protective casing against outer elements such as the weather and birds. In addition, the wheels need to be rotated regularly and the engines have to be kept dry with silica moisture absorbents. Hence, in a way, this is even more difficult for airlines. An efficient and economically viable airline always tries to keep all of its airplanes flying. This is why global airlines such as Lufthansa and Emirates in the past were so successful in terms of their profitability. Many aviation analysts agree that this is the worst aviation crisis that the aviation industry has faced since its inception. According to industry research organization Cirium, more than 16,000 planes have been grounded worldwide and many major airports across the world have become parking lots to these planes. Besides the huge maintenance costs of airplanes on the ground, airlines also have to pay for parking of each plane on a long term



and these charges can depend on the country as well as the airport. For example, in India, airlines for each wide-body aircraft have to pay approximately \$1,000 per day (roughly Rs. 75,000 per day). If you can imagine 100 days or longer duration of grounding for many long range aircraft such as Boeing 777-300; it is possible to see how fast the expenses pile up for a single wide-body aircraft (Rs. 7.5 Million per wide-body aircraft for a period of 100 days) (Source: Bloomberg). For 100 wide-body aircrafts stored for 100 days, this would add up to a very large amount that would be impossible for any airline to bear on its own. If you also add maintenance costs described above to this parking cost, you can quickly see that airlines across the world are losing money excessively and it is not something that can be maintained for any period of time, especially since globally we don't know as to when the Covid-19 outbreak will be fully extinguished.

Many Airlines Will Require Stimulus Packages for Survival

Even though the peak point seems to have been reached in many countries, many analysts agree that our lifestyles won't return to the pre-Covid era immediately and that global aviation will take two to six years to recover to its 2019 metrics.

Besides the airlines, the losses to aircraft manufacturers such as Boeing and Airbus is also going to be immense, especially for Boeing, as it had a lot of grounded aircrafts due to its issues in Boeing 737 Max aircraft, which caused all Boeing 737

Max aircraft to be grounded in the world since March 2019.

Coupled with the Covid-19 troubles, many industry experts suggest that Boeing will need a large bailout from the US Government to survive. Already, some subsidy funding has been supplied to Boeing by the government. While Airbus seems to be in better economical shape; the overall effect of the Covid-19 pandemic on European economies has been devastating in general.

Besides aircraft manufacturers, airport authorities are also facing critical times, since many airports across the world are in a state of zero income (except for

those designated as holding spaces for aircrafts as described above) and even nonoperational airports have many operational maintenance expenses to keep them certified for landing of airplanes in the future. Overall, the International Air Transport Association (IATA) estimates that the loss to the aviation sector will total around a trillion dollars (Source: IATA).

Many aviation analysts agree that this is the worst aviation crisis that the aviation industry has faced since its inception.

The Aviation Industry Will Stage a Comeback

However, regardless of the negative outlook; it must be stated that the aviation industry will continue to be the backbone of global economy and global growth. We must never forget that the aviation industry brings us together no matter where we are in the world.

Aviation makes everything possible from commerce to tourism and from sports to education in a world where everything and everyone is connected. Aviation faced many crises earlier such as the 1929 depression, September 11 Terrorist Attack, 2008 Global Recession and even the 2002



SARS outbreak, which had also affected the number of passengers flying due to health concerns.

Eventually, after each crisis, the aviation industry always comes back globally stronger than before. It is expected that eventually this crisis will cause the aviation industry to be far stronger than before. Of course, this will mean that some smaller airlines may go bankrupt or that they may have to conglomerate with bigger airlines. Naturally, many governments will be providing support and subsidies to the larger airlines to help put them back in financial health similar to the German Government giving support to Lufthansa or the US Government giving a similar support to Delta Airlines.

Even the manufacturers of airplanes and parts will have to recalibrate their thinking. There may be some changes to make the aviation industry become more productive as a result. However, in the next five years, the aviation industry in its changed form will be more powerful than before. With the upcoming advances in the aerospace sector, we may also soon see the aviation industry taking a turn for more advanced opportunities in the next five to 10 years. There are exciting developments such as the inception of new supersonic aircrafts similar to Concorde of the 80's, so that travel from one continent to other will be a matter of

minutes. Space tourism is growing bigger than before with the aid of the private sector. Simple Low Earth Orbit flights by private companies may become commonplace like international flights in the next decade.

In a way, aviation and aerospace is still the future of our world. Thus, the demand for professionals will be at an all-time high in the next five to 10 years. The progress of humanity has never been stopped due to any catastrophe. Progress has continued regardless of obstacles. Aviation will not be an exception either. In many ways, aviation and aerospace symbolize the future of humanity. As long as humanity is alive, both the aviation and the aerospace sectors will continue to grow beyond our dreams.

[Author's Introduction: Prof. (Dr.) Ugur Guven is an Aerospace Engineer as well as a Nuclear Engineer. His area of interest is Advanced Space Propulsion, Utilization of CFD in Propulsion Systems and CFD Analysis of Nuclear Reactors as well as various topics related to advancements in Aerospace Engineering. On the international front, he is serving as the Advisory Council Member to United Nations Center for Space Science and Space Technology Education in Asia-Pacific Region (UN CSSTEAP) and he is also the Member of the Academic Council on United Nations Systems and Member of the European Association for International Education (EAIE). He is also currently the member of NAFSA as an educator and he is the Founder Honorary Executive Coordinator of the Indo-French Academic Alliance. In addition, Prof. Guven is a part of the NASA LEAG Research Group. He has 25+ years of work experience and over 250+ academic publications comprising of journal papers, conference proceedings, project reports, and books.]



Marketing and Business Trends Post Covid for India: A Brief Analysis

*Awarded educationist
Dr. Subrata Chattopadhyay
throws light on the
marketing and business
trends once the Covid-19
episode is over.*



The Indian population despite standing at 130 crores plus seems to have suppressed the curve so far. It looks like the country might escape the worst of the pandemic. However, it will have to be cautious. There is a good propensity of re-occurrence of the virus, which could see a possibility of regular lockdowns. Hence, businesses need to plan accordingly. Capital will look for countries that are less



battered. Western economies are badly battered while countries like India, Indonesia etc. are not so tattered. Global Capital inflow into India can happen, if we can act efficiently and strategically pull it. Emotional and economic backlash against China is expected by the global economies, which suffered badly. Already, countries and companies are working on strategies to pivot away from China as part of their supply chains. The Japanese government has announced packages for its companies bringing back manufacturing home. Businesses need to keep this in mind and work accordingly. The discretionary spending for individuals' health and safety will be the top priority.



There will be more spending on this area and reduction in other discretionary spends. The volume of spending will drop for a while. People will spend on cheaper goods than on expensive goods, or delay spending for a while. Extreme acceleration in digital economy i.e. home education, home entertainment, home fitness etc. is on the awning and trends are already visible. However, people will be less loyal towards brands as other aspects will take over. People will switch brands faster due to various other concerns like safety etc. This is because of a trust deficit amongst stakeholders like vendors, customers, employees, borrowers, banks etc. Banks will have trust deficit with borrowers, companies will

have trust deficit with suppliers etc. The good costs (e.g. digitization, tech costs, digital marketing, best employees etc.) need to be insulated and protected. The bad costs (e.g. fancy office, unnecessary spending, bad performers, traditional working methods etc.) need to be ruthlessly eliminated. It is suggestive to park about non-core businesses and concentrate on core business. In recessionary times, as the world is witnessing already, it isn't necessary to have fancy offices, fancy cars, excess employee strength, etc. Remove all the flab and be lean. It is thus important to have frank and open conversations with all stakeholders like suppliers; employees etc. and try to find the middle ground, so that the burden can be shared justly. In this crisis, there will be winners and there will be losers. Those who reorient their strategy will be winners.

The Indian Story

The Indian government earns about \$60-70 billion a week from taxes and the five-week lockdown will have tremendous impact. The size of the Indian economy is about \$3 trillion. In some scenarios, it is predicted that the government could take a hit of nearly \$1 trillion. Inequality has already sharpened. The gap between rich and poor has further increased. The

The discretionary spending for individuals' health and safety will be the top priority.



Global Capital inflow into India can happen if we can act efficiently and strategically pull it.

government needs to concentrate on mass health and mass welfare. If not, 200 million people could sink into poverty. The government must explore printing currency (quantitative easing), but there are limitations here. It has side effects like inflation etc. Rich countries have more leeway for such quantitative easing. The government must concentrate on grabbing more capital from outside and do reforms to enable that. Businesses with supply chains passing through China will need to keep this in mind and insulate themselves and build alternatives. India and Indian businesses need to try to become the contract manufacturer of the world, just like

China currently is. India needs to make use of this opportunity smartly. All big wealth funds and sovereign funds will be awash with liquidity. This liquidity needs to be attracted to India. Management has to invest correctly in manufacturing and modern technology and be honest and fair to all stakeholders etc. Indian exporters need to build trust. They need to live up to the promises made. They need to deliver on time and deliver the promised quality. They shouldn't make incorrect promises just to get more business. Bangladesh export business has built trust and a good reputation. Despite a chequered past (low quality, human rights issues etc.), they have managed to overcome and are winning.

The Consumer Trends Post Covid-19

More people will prefer to buy from retail stores where there is the perception of safety (e.g. sanitation, cleanliness, crowds etc). They will move more towards malls away from markets. Many will move towards online stores. Wholesale suppliers also need to concentrate on such retailers.

Car companies are giving buy back offers in case the customer loses his job in the next one year. Pricing needs to be re-approached. People are looking for cheaper prices or cheaper goods. Cinemas could take a big hit in the near future. Entertainment could move home. Because of this, cafes and restaurants might see some increase in business. Many chains are implementing measures like social distancing like lesser furniture etc. to build confidence to consumers. Smaller retailers need to send a message of safety. E.g. Have sanitizers, put up notice of no Covid positive employee found in the store, maintain social distancing etc. Since travel and tourism will take a big hit, connected purchases will also shift. Purchases that happened abroad will happen at home (e.g. Electronics, Luxury goods and apparel, etc.). However, travel-related purchases will drop. Indian real estate economy is sitting on a huge inventory with a huge cost-of-carry. The real industry is highly leveraged with low margins. Unsold inventory is considered as an appreciating asset, but might turn out to be a flawed view. Market was already overdue for a huge reset, which will be accelerated by the pandemic. Also, the sharing and co-working space could be hit as more businesses try to have their own smaller spaces and more WFH employees. Gold-as-an-asset could see appreciation. In fact, already it is trading at Rs. 50,000 per 10 gms. However, jewelry, as a discretionary spend, will take a hit. The Indian wedding industry will take a hit, as social distancing, cost consciousness,

Cinemas could take a big hit in the near future. Entertainment could move home.

travel avoidance, etc., will prevent fat weddings, destination weddings, etc. This will hit all connected industries (e.g. Silk, party wear, etc.). The Indian glocalised Financial Markets will witness value destruction and value creation in different companies in the same sector. High debt low margin companies will find it difficult (indicates risky or unscrupulous management). High debt high margin companies could be rewarded, but caution needs to be exercised (may indicate sharp or dynamic management). No debt high margin companies are best rewarded now.

New tech unicorns will be born. Those involved in cyber security, cloud services, online education services etc. will have a field day. The government should be buying as much oil as possible, as such prices may never be seen in the future of oil. As the western economies are more battered and Indian economy is less

battered so far, there is more liquidity coming in. That's why there is a rally in the market. This scenario could change depending on the spread of the disease in India.

Marketing and Business Outlook for Near Future

For large companies, there will be a huge concern seen for employees. Companies are paying the employees even when closed. HUL Decided not to cut a single rupee for their suppliers, service providers etc. Safety of employees and customers is becoming a major point of focus. This is possible because they have reserves of funds etc. that have been built up over the years.



For medium and small businesses, they have to work with thin capital reserves. Excess capital is taken out of the business and applied into personal assets. Small businesses take out the surplus and purchase personal assets instead of re-investing in the business. There are various factors and motivations here. Because of this, they are unable to meet the cash expenses of even the next month. For e.g. it's a common practice these days for high end business chains (with Rs. 40 crore annual turnover) who are unable to pay the salaries of the current month as it has no liquid reserve. The owner might have invested in personal assets like a house in London etc. Medium and small businesses need to have a look at how they can build some business reserves to endure such disruptions.

All parties have been affected by the crisis – the tenants, the landlords, the lenders/ financiers, etc. Parties need to sit

across the table and find a common ground and mutually decide upon the costs, rentals etc. Burden has to be shared.

It is possible for a lot of employees to not visit the office and still be productive. It may be the trend that it is enough that only 30 per cent staff stays in the office. Others can be connected from homes. This leads to lesser commute expense, stress of the commute, time wasted etc. Parents can take care of children more effectively when WFH. There can be dark hours when no calls will be made etc. Summing up the business and marketing scenario for India reflects as per a McKinsey survey of entrepreneurs released few days ago, 53 per cent of Indian entrepreneurs are optimistic, while only 25 per cent of Japanese entrepreneurs are optimistic. It seems to be a mild U-Curve for the economy. But the descent has not stopped yet. There might be more pain ahead if discretionary strategic measures are not exercised, which is the major challenge for our 130-crore populated country.

[Author's Introduction: Dr. Subrata Chattopadhyay is an M.Sc., M.B.A., Ph.D. from IIT-ISM Dhanbad. Adept at innovative teaching practices, he is highly networked with the industry. Dr. Subrata has been awarded and recognized as the Outstanding Higher Education Leader of the Year by SOE Global Education Awards in 2014 and recognized by NFED for his contribution to mentoring startups, teaching and research for two consecutive years (2013 and 2014). He was conferred the prestigious MTC Global Top Thinkers award in September 2015 and Mentor of the Year by HRD India in June 2019. He is associated as a life member with ISTD, CMA, PRSI, NIPM, NHRD, NFED, ISABS and does mentoring and consulting for various organizations.]



Bubble Valuation of Startups Will be History in the Post Corona World

*Filmmaker and producer
Cyrus Dastur writes a
scathing piece on how the
Covid-19 crisis will destroy
innumerable flawed
startups.*



The last six years has been nothing short of a party for most startups. Fancy, inflated valuations, zero accountability, no questions asked and perennially hailed as the next big thing by

investment bankers and VCs, who to be honest themselves knew very little. Every random idea was celebrated and millions poured in. Business and basic fundamentals became a joke. Profitability was scorned upon. Fancy terms like 'Unicorns' and 'GMV' (Gross Merchandise Value) were invented. In simple words, everyone was trying to convince each other that they were creating the next Facebook and Google. And every IIT-IIM student passing out was supposed to be the next Zuckerberg. Cash burn was the new Buzz word. The more cash you threw away, the higher



your valuation. Didn't matter if no one knew what was going on or if there would ever be profit. Ever!

The Oyo and Airbnb Stories

Valuations became a joke. I still remember Oyo (which is ironically on its last legs today) not long ago went around town claiming they were the biggest hotel chain in India and how their valuation – a ridiculous \$10 billion at its peak – made them much larger than the Taj Group of Hotels.

It's a different thing that Oyo has never made a penny in profit and its Founder Ritesh Agarwal and his guru Masayoshi Son (SoftBank Vision Fund) are today in a big soup and owe billions to various banks and lenders because of their over confidence.

But as all parties come to an end, businesses that lack fundamentals also get a reality check at some point. The WeWork IPO fiasco pretty much announced two things. Firstly, businesses that are not profitable even after a few years are a waste of time. And, secondly just because you use an app doesn't mean you're a Tech business.

Once the darling of the investors, the valuation of Adam Neumann promoted WeWork quickly collapsed from \$47 billion to just about \$10 billion and the IPO was

Everyone was trying to convince each other that they were creating the next Facebook and Google.



scrapped. Investors suddenly realised window dressing of Balance Sheets meant nothing. Uber was the next fiasco and investors started cutting the flab. It didn't help that both these companies had one thing in common – SoftBank. And then Corona struck from nowhere bringing the whole world to a grinding halt. Valuations slid further and many companies started folding up. One time giants like Airbnb started struggling just to stay afloat. Founder Brian Chesky has taken some decisive steps to stanch the bleeding, including halting most of Airbnb's \$800 million annual marketing outlay and cutting executive pay. The company in the last three weeks raised \$2 billion in debt, accepting a punishing 11 per cent interest rate, to pad its reserves. In recent days, the company told investors that it expects business to bounce back in the second half of this year, and that even after this year's wreckage; revenue would climb to \$5.5 billion in 2021, a 15 per cent increase over 2019.

Sniffing the Coffee

New age companies like Opendoor, scooter rental service Lime and apartment rental company Sonder started firing people left, right and centre. Forget the billion-dollar valuations, these one-time VC darlings are today finding it tough to even pay salaries!

Back home, the situation is even worse. India's favourite startup Oyo has

defaulted on most of its payments to partner hotels. They've furloughed thousands of their staff, have run out of cash and are staring at a virtual dead end. It would perhaps take a miracle for the likes of Oyo to see through these times.

For the uninitiated, Oyo has burnt over \$3 billion (Rs. 23,000 crores) in less than five years (you read it right!) with pretty much very little outcome. There was a time when flush with funds, Agarwal would go from motel to motel in the USA, throw money and tempt the owners to sign up for Oyo. Sadly Agarwal and his guru forgot that only money doesn't really make businesses work. It is strategy, experience and sound knowledge that are more important. With his inherent incompetence, Agarwal has not just put his 25,000



Once the darling of the investors, the valuation of Adam Neumann promoted WeWork quickly collapsed from \$47 billion to just about \$10 billion and the IPO was scrapped.

employees and SoftBank in a mess but also a permanent question mark on other promising Indian startups. For a long time to come, new age entrepreneurs will have to carry the cross of Oyo's failure.

It is said that after downturns, the strong emerge stronger. The weak players get wiped out. This is not the first downturn, nor will this be the last. What makes this crisis so different is that this is something none of us has ever seen. The whole world coming to a virtual standstill is hitherto unprecedented.

But one thing is for sure. The bubble valuations of startups will be history. From here on, it's survival of the fittest!

[Author's Introduction:

Cyrus Dastur is the founder of SHAMIANA-Asia's largest short film company and one of India's best known startups. Besides being a cinephile, he is also a keen observer of the startup space and actively innovate new-age business. Cyrus is a respected producer having produced a Bollywood feature film, a TV series and two Musical productions – Strangers in the Night and The Name's Bond.]





The Stock Market Chronology of Covid-19 and Beyond



Educationist Sabyasachi Mondal chronicles the continuous impact of Covid-19 on the stock markets and analyzes what is going to happen afterwards.

A cursory glance at the last two years' return leading to the Covid-19 pandemic shows that the stock market gave healthy returns until the beginning of January 2020. The benchmark BSE Sensex gave a return of 16 per cent and 21 per cent for one-year and two-year returns respectively. In fact, until the middle of February, the market grew handsomely even with the initial news of the virus outbreak across the world.

Was the Market All Good?

The economic parameters of the last two years were nothing to write home about. The real GDP growth has climbed down from the peak of 8.13 per cent in January 2018 to a paltry 4.71 per cent in October 2019. The fall in GDP can be attributed to the decrease in overall demand for products in the economy. The most prominent factors affecting the





Until the middle of February, the market grew handsomely even with the initial news of the virus outbreak across the world.

economy for these two years were the deteriorating asset quality of banks. The receivables of the bank didn't materialize on time leading to a huge spike in non-performing assets (NPA). As a result of that, banks were not willing to issue new loans. Moreover, due to high profile financial profligacies and strict government actions on the offenders and the bank managers, new loan issue dried up as banks were not willing to take risk. Consequently, a liquidity crunch was created in the economy, which meant there was not enough money for new investments. However, the rosy picture of stock market in this period really didn't

reflect the sorry state of economy. This points to the fact that though the economic fundamentals were not strong, people still kept buying stocks and it made the market overvalued. The price-to-earnings (PE) ratio of Sensex, which is an indicator of over or undervaluation of stocks, supports the above argument. The PE multiple of BSE Sensex of 2018-2019 and 2019-2020 stood at 23.71 and 26.44 respectively, which are a lot higher than the 10 year average of 20.80. It indicates that the stock market was grossly overvalued. It is this scenario when the global pandemic of Covid-19 came into the picture.

The Mayhem

It was December 31, 2019 when China reported a pneumonia-like disease in Wuhan, which was identified as the novel Coronavirus. But it was not before January 5, 2020 that the world knew about its existence when WHO published its first report. The market apparently didn't take the first signs seriously and it was not until February 20, 2020 that they realized that something is not right. By that time the pandemic





started spreading across the world and market had slowly started to crumble. From February 20 to February 28, 2020, Dow Jones Industrial Average (DJIA) from USA dropped nearly 12 per cent, FTSE 100 from London tanked 11.5 per cent and Nikkei 225 from Japan shaded nearly 10 per cent. Taking the clue from these markets, the benchmark BSE Sensex tanked nearly 7 per cent within that period. The mayhem continued thereafter and the Sensex crash landed to 25,981 on March 23, 2020 losing a whopping 37 per cent from the peak of 41,170 in February 20, 2020. In the USA, this is comparable to the infamous 'Black Monday' crash of 1987, when the Dow Jones Industrial Average (DJIA) crashed 22.6 per cent. In India, on the other hand, it is comparable to the infamous 1992 crash due to the Harshad Mehta Scam.

What Went Wrong?

The crash in global as well as Indian

market was caused largely by the unabashed fear about the spread of the deadly pandemic. It is well known that the market runs on hope, fear and greed. As all the global markets are connected to each other, a fall somewhere out of fear will lead to the fall in others because fear is contagious.

The crash in global as well as Indian market was caused largely by the unabashed fear about the spread of the deadly pandemic.

Governmental lockdowns the world over crippled the economy as production virtually stopped and so has the demand. As a result of that, the growth projections are lowered across the board and people started selling stocks in a hurry causing the market meltdown. However, uncertainty and fear over the deadly virus

is not the sole reason for the market's downfall.

Global Oil Market Conundrum

With the advent of the pandemic, demand fell and so did the production. Factories got shut as a result of that. Due to the lockdown, global transportations, be it public or private, came to a

screeching halt. Airlines, trains, buses and cars have all but vanished. This led to a fall in demand for fossil fuels. As the demand fell, prices nosedived. As the prices came down, the oil producing companies incurred huge losses. Most of these companies are based in Saudi Arabia and Russia. To cover the losses, these companies have started increasing their production heavily which ramped up the supply. Consequently, lack of demand and abundance of supply have severely crashed the oil prices. Brent crude, the benchmark oil index of the world, plunged 68 per cent by March end from its peak of \$63.27 in January.

FII Outflow

Foreign Institutional Investors (FII) are the ones who invest in our financial markets. It is seen that they continuously withdrew money from equity and debt market alike for the last three months to the tune of Rs. 1 lakh crore. The fund outflow is mainly caused by redemption of Exchange Traded Funds (ETF). This sudden outflow has caused the market to go down further. Moreover, it has severely damaged

the dollar liquidity in the market and depleted the Forex reserves of RBI.

What Is in It for Investors Now?

The market has gone down, reached its base and came up a fair bit. From 25,981.24 on March 23, 2020 to 31,588.72 on April 17, 2020, the market has moved up the ladder by 21 per cent within a month. The market was overvalued even three months back and now it has shed some of its fat. But is it good to invest now? 2020-21 PE ratio of BSE Sensex stands at 18.18, below the last 10-year average of 20.46. It means that the market is undervalued and it is a good time to invest now. In fact, the market is expected to move up even further. The GDP



Online education may have got a permanent boost now and more startups may come up. With this, stocks, allied to the education sector, are expected to soar.



growth rate is still at its minimum and the government is expected to take measures to shore it up after the debacle is over. This will enhance the prospect of industries in the future and the market will improve. Moreover, a few decisions already taken by the government to bolster the economy will take time to reflect in the market, like cut in corporate tax. Among the sectors pharmaceuticals, healthcare and banking are expected to perform well in medium to long term. With the advent of huge R&D expenditure in these torrid times, new vaccines and medicines are expected to come up soon, which will improve the balance sheet of pharmaceutical companies. Banking companies, especially the private ones, on the other hand traded at their lowest a month back. Measures to improve NPAs and credit growth are expected to improve their balance sheet as well. Lastly, oil prices are expected to maintain their low level even in the coming days. Hence, any company which is using oil as raw material might see their stocks surge.

An Interesting Take

With the economy in doldrums, there is a probability that the government may dole out more cash benefits to the needy over and above the economics package that has already been declared. The government can print money and buy back bonds from commercial banks through a process called quantitative easing. This will shore up more funds in the banking system, which may later be distributed to the needy and poor, at the cost of a certain increase in inflation. However, if this fund is open to all, corporate entities can buy back shares and investors can invest in financial assets including stocks. As a result of that, stock market will move up further.

Conclusion

Covid-19 has taught us many lessons. It

has taught individuals to respect nature, to be hygienic, to improve efficiency, be technically literate, give quality time to families etc. It has also taught corporate entities to prepare for eventualities and failsafe, to be more respectful to nature and decrease carbon footprints or other pollutants emanating from them etc. All these factors are going to play out in the coming days. For example, online education may have got a permanent boost now and more startups may come up. With this, stocks, allied to the education sector, are expected to soar. Likewise, CSR activities may no longer be a choice, it may be a compulsion in the coming days for each Company. Because the socially concerned investors may choose to invest more in socially responsible companies and with this, socially responsible index may get a boost. It is known that any change in human behaviour, good or bad, leads to activities that directly or indirectly affect some stock or other. We can only hope that the movement in the stock markets in the coming days will be associated with the better behaviour of individuals and corporate entities alike.

[Author's Introduction: Sabyasachi Mondal is an Assistant Professor of Finance at the School of Management under Adamas University in Kolkata. He has significant experience in the fields of equity research, academics and competitive examination training. He did his B.Com. from St. Xavier's College in Kolkata and M.B.A. from ICFAI Business School in Hyderabad. He worked with corporates like NESS Technologies and AMBA Research in the fields of equity research and business analysis. He qualified NET at the first attempt. He is presently perusing Ph.D. from Indian Institute of Information Technology in Allahabad, in the area of 'efficiency of socially responsible indices'.]



Changes in Consumer Behaviour that Are Here to Stay

*Creative marketer and entrepreneur **Arijit Banerjee** speaks on how the Covid-19 crisis will have an irreversible impact on consumer behaviour across the spectrum.*



I may be a marketer from 9 am to 5 pm, but I am a consumer 24x7. I started Consumer51 in 2011 to bring the consumer perspective to our clients. Over the years, we've put together a team of experts to help our clients look at things from their consumer's viewpoint. This team consists of experts in technology and marketing, who think of themselves as consumers first, and developers and designers second. What we do helps our clients create usable products, develop memorable messaging, and Minimize the risk of our clients' efforts missing the mark. To channel the consumer at these decision-making meetings and have a



voice at the table, we need to know and understand the consumer (by consumer, I mean all the different consumer personas). We play devil's advocate a lot, often role-playing one consumer persona versus the other and pre-empting consumer responses. If there's one thing we've come to learn from helping our



Consumers want the same thing from the brands they consume: be faster, more affordable, more convenient, and in line with their beliefs.

clients connect with their consumers, it's that consumer behaviour is always changing. Our Consumer51 team has worked with clients ranging from manufacturing firms in Indiana to healthcare providers in Minnesota, government agencies in New Mexico, AI companies in Silicon Valley, and educational institutions in Nepal. We have helped market destinations and dinners; we've created online portals and apps; worked with celebrity clients, Fortune 500 brands, and one-person startups. This experience has allowed us to learn about people from many different

backgrounds. While their political views, demographic profiles, and ambitions may be different, all these groups have some things in common. In essence, they all want the same thing from the brands they consume: be faster, more affordable, more convenient, and in line with their beliefs. Given this background, a question that I have been asked many times in recent days is how Covid-19 will change consumer behaviour in the long term? I will try to answer this question as best I can. There's a commonly used quote, which accurately sums up the disparity of our times.

"The future is already here – it's just not very evenly distributed." Often attributed to William Gibson, this quote comes to mind in thinking of consumers and how differently this crisis has impacted different segments. Some are working from comfortable temperature-regulated homes, watching Netflix, and shopping online. At the same time, others have lost everything to the pandemic and are struggling to find funds for prescription drugs.

I think in some ways, Covid-19 has created a sort of time warp. It has accelerated some trends that would have taken years to take hold and made some things obsolete that had years to go. I also want to remind you that we don't live in a single-event world. Covid-19 is just one influencing force, and there will be many other changes, such as government interventions and business responses, that follow. With that in mind, here are just some changes that I see sticking with us for the long term.

Buying from Those Who Share My Values

There is a lot of anger, frustration, and a sense of loss with this pandemic. People have lost loved ones, jobs, freedoms, and so much more to this crisis. This deep sense of resentment will induce more value-driven buying decisions. And, when I say value, I don't mean value for money. Consumers will act in alignment with their beliefs. If you're the mom-and-pop shop that served the community during the crisis, went out of your way to keep employees safe, then you will be rewarded. What businesses do for their

employees, their community, and the planet, will become as much a part of the purchase equation in the consumer's mind as the product or service itself.

Bots Are Our New Buddies

Most consumers think of bots as those pesky cost-savings measures businesses use that make us repeat our requests and curse into the phone. Well, in this new world of physical distancing, bots are turning out to be a bit of a blessing. Not only do bots allow businesses to safely connect with consumers, but they are also keeping kids entertained and are available on demand. As we get on the

other side, there will be a greater acceptance of bots in day-to-day B2C interactions. Beyond the Siris and Alexas, we'll see more everyday bot-to-consumer engagements, such as delivering groceries, making policing safer and filling in the void when friends are unavailable.

Home Is Where the Heart (and Job, and Bank, and Gym) Is

As much as people are impatient to get out of their homes and go back to routine life, the lockdown experience will elevate the importance of housing in the years to come. Consumers have become used to working from home, getting food and wine delivered at their doorsteps, and even getting exercise at home. And they don't mind the short commute from their bedroom to the computer for work, either. So, the question is, will we see the renewed consumption of large houses in the future? Will consumers be willing to outfit their homes with more technology and conveniences in the future? I believe the

Covid-19 is just one influencing force, and there will be many other changes, such as government interventions and business responses, that follow.



Entrepreneurs have been stymied. Those who are used to taking risks, chasing dreams, and bringing ideas to life have been holed up in their homes, waiting.

answer is a resounding yes. As work from home, banking from home, gym from home, take off, people will spend more to be comfortable at home.

Virtual Is Very Real

Virtual tours, online orders and zoom parties! These are some ways society has been pulling together during this crisis. In the coming years, we'll see greater adoption of virtual technologies. Even the so-called essential tasks that need to be handled in person will have virtual alternatives. Could we have virtual surgeries

and haircuts? Why not? From this experience will come innovative solutions that will make business happen from virtually anywhere

An Innovation Boom Is on the Horizon

Entrepreneurs have been stymied. Those who are used to taking risks, chasing dreams, and bringing ideas to life have been holed up in their homes, waiting. All that energy, all those ideas are about to be unleashed as the world gets back to business. This will mean newer services, better products, and more choices for



consumers. As I have stated, in some of the other points above, the way consumers adapt their behaviour will depend on many factors. This will be another defining factor that will counter the loss caused by Covid-19.

Brace for Short-Term Demand Shock and Long-Term Demand Glut

Over the next year or two, we may see a demand shock as China is experiencing just emerging from the lockdown phase.

Even though businesses

are open, consumers are rationing their funds and not really rushing to spend money. That's natural given the conditioning during the quarantine period of segmenting "essential" versus "non-essential" expenses. We saw this happen after the Great Recession, and this behaviour may very well take hold in the first few months following the "reopening" of economies

around the world. However, in the long term, I do see demand bouncing back. Just wait for the all-clear messages to be sounded out a few times, and consumers will start planning vacations and trips again.

Individual Privacy versus Collective Security

Imagine if we all had medical chips embedded in us that could check for the presence of antibodies or viruses in our bodies. Would that have made it easier for the world to counter this disease? Perhaps. But it would have also put at risk our individual privacy. In combating this highly contagious Coronavirus, we're also finding out where the balancing point between collective rights and individual

rights lies. Consumers will eventually determine what level of intrusion is permissible for the greater good. The key will be to make sure one doesn't come at the cost of another.

As a result of these changes, the world will become more connected, more digital, and conscious of its actions. There will be some lasting changes and some not-so-lasting adjustments in the years to come. For government agencies creating or implementing public policy or brands

looking to sell services and products to consumers, I will give you the same advice that I share with my clients. That is, give consumers a seat at the table and let them co-create the future with you. That is because if you build your future on the foundation of consumer trust, it will last the test of time.

In combating this highly contagious coronavirus, we're also finding out where the balancing point between collective rights and individual rights lies.

[Author's Introduction:

Arijit Banerjee is an

award-winning creative marketer and martech specialist. A natural leader, Arijit founded Consumer51 in 2011, a new type of marketing agency driven by a consumer centric philosophy. He has distinguished his company by challenging his team to come from the heart, say more with less, and create experiences that matter. From digital marketing to prototype development and multicultural messaging, Consumer51 has been a growth catalyst for businesses of all sizes, ranging from startups to Fortune 500 clients. Arijit is regarded as one of the pioneers in the field of multicultural marketing. He has created commercials targeting Indians and Asians in the U.S. for major brands, including Walmart, McDonald's, and Lexus.]



“Stay-Home Economy”: A New Reality in Post Covid World



*Seasoned Journalist turned Academic, **Prof. Mrityunjay Chatterjee** deliberates on the emerging “Stay-Home” economy in the post Covid world.*

The roads are empty. The factory chimneys are not spewing toxic chemicals in the air. No vehicle is causing line pollution. Schools and Colleges are closed. Public gathering are a strict no no! People are indoors, practising social distancing.

On the other hand, the sky is azure blue again as nature is slowly but surely reclaiming its lost space.

We Are in a Post Covid World.

The recent trends are all set to have far reaching impact on the economy, both short and long term. Both consumers and business would change. These forced behavioural changes usher in a new reality – the “Stay At Home Economy”.

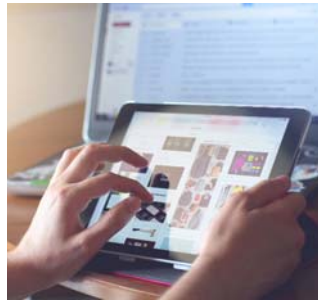
Origin

The word ‘Otaku’, originally a Japanese pop word referred to ‘geeks’, has transformed and has been broadly known in Taiwan as “people who stay at home”.

Thanks to the rapid development of the online shopping industry, it is common for consumers nowadays to switch among different purchase channels. The Internet has provided consumers a faster and easier way to get things they need, and changed the traditional shopping environment and reduced consumers' trips to stores.

People are being urged to work remotely from home and this trend is here to stay. This pandemic only has given a chance for a trial run on a large scale. This trend is a silver lining in the crisis. For employees, benefits include saving on commute and more flexibility when it comes to work-life balance. For employers, the pluses are establishment cost-saving and enhanced productivity.

Through the internet, it is easy for consumers to obtain information about others' product-using experience. The rise of YouTubers and live-streamers, who film or stream videos about their product experience, makes it even easier for consumers to know what a product is about without the limitation of photos or words.



The Internet has provided consumers a faster and easier way to get things they need, and changed the traditional shopping environment.

Based on past market research, most consumers still consider retail stores as an influential part in their "Path to Purchase", especially for high-end products or products that require using experience, such as audiovisual products, furniture, and so on. In fact, it is common that consumers go to retail stores first to try out and decide which product they want to get, and then go back home and turn to online stores, and pick up the product with the best bargain. Therefore, it is important for retailers to integrate both the physical and online stores, to give consumers no incentive to switch to other retailers. For example,



retailers can offer consumers price discounts, longer warranty or better after-sales service for consumers who have visited the physical store and purchased from the same online retailer.

What retailers need now is an overall market research to help them investigate the consumers' "Path to Purchase", and to develop a strategy that integrates the roles of both physical and online stores throughout their consumers' purchasing behaviour.

Encouragement to WFH

A number of HR heads see the trend a permanent feature in the post Covid emerging economy. Commenting on the issue, Rajkamal Vempati, the Executive Vice President and Head – Human Resources at Axis Bank, says, "Work-from-home is here to stay." For a bank, functions such as customer service roles, phone banking, HR and corporate office functions, which do not require meeting customers, could be the ones to be first considered for remote working. "Nearly 20-30 per cent of the people can work virtually going ahead," says Joydeep Dutta Roy, Head, Strategic HR and HR Integration at Bank of Baroda. Sandeep Kohli, Partner and Talent Leader at EY India, see WFH as a factor in increasing ease of doing business and cutting costs. "WFH is poised to become an increasingly acceptable norm as we have seen in many countries," says Ramkumar Ramamoorthy, Chairman at Cognizant India.

"Any company that would have shied away from it earlier, would not have a problem now with the IT infrastructure being put in place," said Azfar Hussain, the Group Head – Organization and Talent Development at diversified conglomerate RPG.

HR heads also say arrangements such as hot-desking will become more common, bringing down establishment costs.



These shifts are also likely to change how people work and shop far into the future and accelerate the pace of changes already underway.

The hardest-hit industries – hospitality, travel, and entertainment – will make a comeback; other industries might take long to recover.

Organizations will see value in remote work and allow employees to continue it after the pandemic passes.

Consumer and shoppers may be less interested in going to the grocery store once they've grown accustomed to home delivery. While many businesses will struggle with the shift to a stay-home economy, both companies and content publishers in the following verticals are poised to thrive, especially through a relationship called affiliate marketing. Leaders of the industries and businesses looking to reposition their offerings might take note and re-strategize their policies to suit the demands of time and the emerging concept – The Stay At Home Economy.

Direct to Consumer Brands

Home delivery services have been surging in the past decade, but as people are encouraged to avoid crowded supermarkets and big box retailers, direct-to-consumer providers of clothing, over-the-counter medicines, cleaning supplies, and even home decor will see an influx of new customers. It's fair to assume many new customers will continue buying from these brands after the pandemic has passed. Buyers will be also looking for publishers and content websites that spotlight the latest deals and advise on the best products and these sites should expect a huge surge in traffic.

Remote Work and Education Support

It is likely that millions of employees and students will spend significant time teleworking and participating in distance learning. As a result, there will likely be a spike in demand for items to ease this transition such as laptops, flexible cell phone plans, headsets, monitors and superior Wi-Fi. Businesses that provide this enabling technology and equipment can capitalize on this with special pricings and promotions.

Physical and Mental Health Apps

Two needs will immediately appear for many who are isolated due to Covid-19 – the need to exercise at home, and the need to relieve the added stress of dealing with the pandemic. Brands like ClassPass can draw customers to their database of online yoga, pilates and HIIT classes. Meditation apps like Headspace and Calm will provide opportunities for users to unwind after a long day of solitary work or managing a household full of kids

off school. Health apps like Noom will also see increased interest from people, who will want to keep track of their health goals while they're stuck at home.

Games, Toys and Projects

Parents, especially working parents, are scrambling to keep children entertained while they are home and isolated alongside their parents. You can expect to see families invest in toys, to keep their children occupied, as well as board games, projects and puzzles that can be done as a family in the evening and on weekends. Hasbro, which currently has five of the 10 top-selling board

games on Amazon, has major potential here.

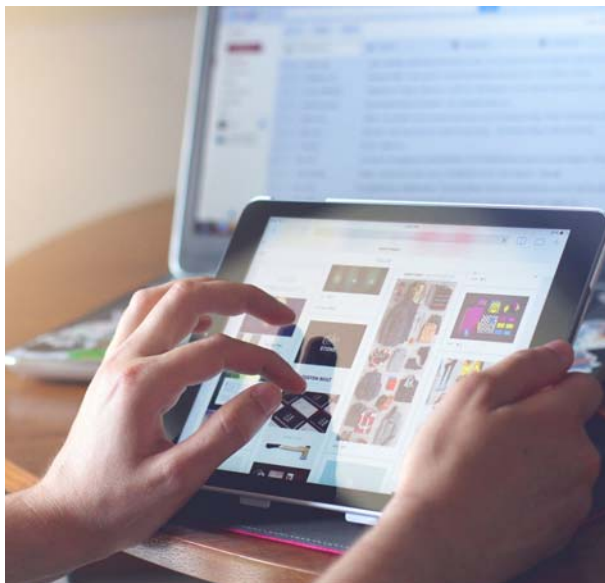
Influencer parenting bloggers are already putting together lists of their favourite items in these categories and sharing them broadly. Your business may want to consider partnering with them.

Food Delivery

As consumers are increasingly avoidant of public spaces, the restaurant industry will likely be hit the hardest. Because people will be eating at home as often as possible, direct to consumer meal prep companies will have the chance to serve an increasing number of home diners. And as with direct to consumer vendors, these businesses may gain customers who try their services for the first time and stick with them well after the Covid-19 threat has dissipated.

Companies who deliver will also need to recruit thousands of new delivery people in the coming months to accommodate demand. So, advertisers who can help promote these opportunities will do well, and college students who are home early

You can expect other remote software providers to experience similar up-ticks in demand as more employees work remotely.



should be good targets to earn some extra income.

Audiobooks and E-Books

With limited public social activities, kids and adults will need to find ways to pass time. While purchasing physical books may not be practical during the pandemic, consumers will find the instantaneous accessibility of eBooks and Audiobooks enticing when they are facing another weekend stuck in the house. This will be another area where Amazon will succeed with the easy access of Kindle, and audiobook vendors like Audible can thrive as well. There's also an opportunity for publishers, who create book reviews and recommend book lists as people research what to read and listen to during their time at home.

Gaming and E-sports

Video games are a dominant market force as is, and they're the perfect activity for both parents and kids who are isolated at their homes. Not only will game-sellers profit, but online gaming platforms will see a significant up-tick and with these platforms drawing so many

eyeballs, they'll become key places for advertisers to invest in, especially to reach younger buyers.

E-sports will also see a surge in popularity. While in-arena e-sports events will be cancelled, these video game leagues are prepared to move entirely online – an industry that may grow very fast and become highly valuable to advertisers.

Streaming Media

Streaming giants such as Netflix and Disney+ were already dominating the entertainment landscape, and they'll only see demand increase. For working parents, Disney will help carry the burden of keeping kids entertained so that parents can work during business hours, and in-home movie nights will become a leading social activity for individuals, couples, small friend groups and families.

Virtual and Video Tools

Even as the stock market plunged in the past two weeks, the videoconferencing leader Zoom is one of the few stocks up this year, and is earning press coverage for giving services to schools for free. You can expect other remote software providers to experience similar up-ticks in demand as more employees work remotely and government and non-profits learn how to go digital and virtual. Armed with new technologies and economy trends, companies and businesses should pay due attention and think forward to plan for success.

[Author's Introduction: Journalist turned academic administrator, Prof. Mrityunjay Chatterjee has over 35 years of experience in mainstream media and education industries. Widely travelled, he has held coveted positions across media and academia. Mrityunjay is presently the CEO-Chancellor's Cell at Adamas University in Kolkata.]

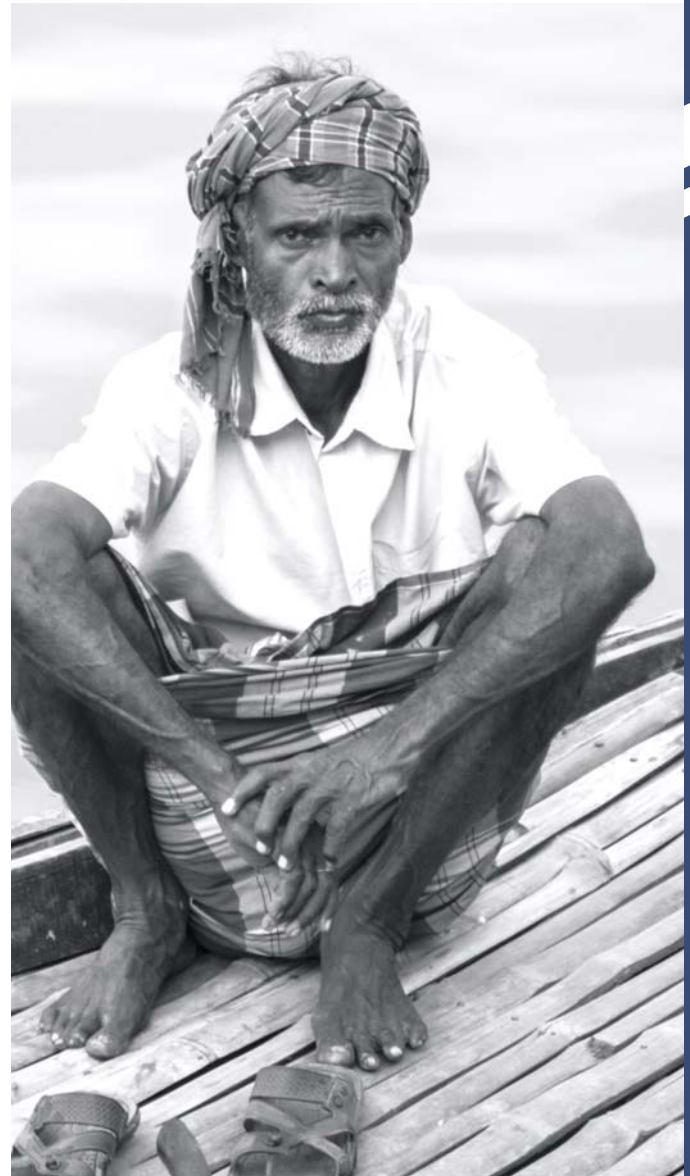


Why Are They Here Is the New Norm, Not WFH

*Wharton-trained, award-winning journalist and writer **Shantanu Guha Ray** goes deep into the human tragedy that the Covid-19 crisis has caused in the Indian Capital city of Delhi.*



It's been a quarter of a century since Michael Jackson sang *They Don't Care About Us*, a protest song that remains – till date – one of the most controversial pieces Jackson ever composed. The song was accompanied by two music videos shot in Pelourinho, the historic city of Salvador, and in Dona Marta, a favela of Rio de Janeiro. Many tried to stop the shooting but residents of the area were happy, hoping their problems would be made visible to a wider audience. One video was shot in the streets, the other in a prison containing footages of multiple human rights abuses. Jackson wanted to raise a mirror to the world that deliberately ignored the pains



and ills of the poor and the homeless. In a Covid-struck world, the mirror's absence is being felt badly. In India, anxiety over the deadly virus and the fear of death has united a billion plus Indians like never before. Everyone and everything is off the streets, including those who live on footpaths and cannot work from home. The Indian Capital – like other cities – has turned into a ghost town, everyone is extra careful to keep outsiders away from homes. Back off, back off, back off scream residents from their condominiums, they are keeping salaries



In India, anxiety over the deadly virus and the fear of death has united a billion plus Indians like never before.

for guards, garbage collectors and maids at the gates in sealed envelopes. The act, on the face of it, looks very insensitive, very inhuman. India is not only seeing social distancing, the world's second most populous nation is witnessing a fast emerging trend in human behaviour. Doctors treating Coronavirus patients are spending long hours in hospitals. When they return home, they face isolation and insults. Across the city, posters have come up identifying houses under quarantine, as if the houses have leprosy patients. Panicky Indians have shared the 1977 Bee Gees chartbuster *Stayin Alive* through WhatsApp

messages, many have been found standing in their balconies with portable loudspeakers for a game of *Tambola*. There is unity in beating the stress. Divide comes only when the poor come close. Politicians, always squabbling over issues ranging from defence deals to court judgements to lack of funds for development projects, have suddenly united. Everyone is following diktats issued by the Central government; there is no opposition because of the fear of bearing the brunt of the pandemic's unceasing spread. Every state government wants a low figure of Coronavirus patients. Why not? A higher figure would bring a stigma of a lifetime. Some states, sadly, have even started fudging numbers.

Delhi Is a Changed City

And at the heart of the crisis is Delhi, once described by author Rana Dasgupta as a city living on its wheels (read powerful cars of powerful men). The fear has been a great leveller, the city is not witnessing anymore divided influence, no one is talking about newly acquired assets and no one is flaunting

connections. Everyone is reminding the other that USA's total dead count is over 37,000, the most for a single country and a billion plus India — where a few have died — is still struggling to contain the virus. The virus has pushed India's conspicuous consumers underground; they do not want to seek visibility. Rather than brag about their money or show it off, they are keeping quiet about their advantages, describing themselves as normal. No one wants to say that they have returned from London or Spain, they are saying that they have returned from next door Sonapat, even Vrindavan, home to India's Love God Krishna.

India's big social distancing business has wreaked havoc on those who eat, sleep and live on the streets, among them the country's half a million beggar population. For them, class never mattered. But now, their very existence has come under threat. So they want to be safe. One night, right after Prime Minister Narendra Modi's

second address to the nation, violence erupted in a South Delhi neighbourhood where three girls from Manipur were taunted and pushed away from a grocery store because people in the market mistook them for Chinese. Among those triggering the chaos were doctors, engineers, bank employees, even rich real estate developers. Eventually, cops were called to escort the girls to their home. The girls were, obviously, shaken by the violent reaction. Elsewhere, residents had tried their best to kick out air hostesses and crew of airlines from the neighbourhoods, blaming them as carriers of Coronavirus. In some places, bank officials have been ostracized and food

delivery boys from Zomato and Swiggy have been beaten up by security guards. The fear of death, claim social scientists, is driving Indians to a strange frenzy. Everyone wants a gate with locks to keep outsiders away. They have found an excuse to enforce the government's call for social distancing. And then, there are other problems.

How Is Delhi Dealing with Its Poor Populace?

The Indian Capital does not have Soul Kitchens (like in Chennai or Mumbai) where the poor can come for meals

throughout the day and

night. Some volunteers are making efforts to supply cooked meals to the homeless who do not have the cash to go to departmental stores, do not have homes to work for offices.

But such Samaritans are very low in numbers. Worse, no definitive mapping has ever been done for the homeless in India. Hence, no one knows how many poor

and homeless have been affected in the Coronavirus crisis.

Beggars, who form a large chunk of the homeless, are the most vulnerable. In normal times, they earned off the streets and cooked frugal meals at their makeshift homes near the highways, under the Capital's gigantic flyovers. But now, they have all been shunted along with their children, who would play I-spy under streetlights. Everyone wants Delhi clean, everyone wants Delhi safe, everyone wants Delhi silent. There is, of course, justification in what the government and the cops are doing. There is also no justification at the way the poor have been left alone at the height

The Coronavirus crisis has suddenly brought up the negative side of this high inequality where the poor are left to fend for themselves.



of this gigantic crisis.

I am reminded of Shyam

Bandhopadhyay, a retired clerk whom I met way back in 1999 in Kolkata who worked tirelessly to collect data on the city's beggars, now estimated at a little over 45,000. Bandhopadhyay told me why it was important for the nation (read the government) to give dignity to the beggars and not leave them on the streets as nobodies. "Dignity is more important than a handful of coins people throw at the beggars," said Bandhopadhyay, whose work drew praise from the city's greatest humanitarian, Mother Teresa.

Bandhopadhyay reminded me about Kolkata's author, Subodh Ghosh, whose short story about a beggar's death shook the city's conscience. The story went like this: A beggar was run over by a speeding truck. When he fell, coins he had collected scattered all over the road, blood-soaked coins a reflection of the beggar's deep discomfort with life despite having a decent amount of cash. Bandhopadhyay reminded me how the rich remained elite and snobby, wore wealth on their sleeves but rarely came together to put in place a fool-proof plan for the homeless. Bandhopadhyay – fondly called *Shyam Pagla* – told me why the poor should be the responsibility of the super-wealthy and not the

government. "Government Babus will never help the poor."

Today, I feel the need for a few *Shyam Paglas* in India! Or a handful of *Soul Kitchens*!

Inequality Is Still a Factor

The Coronavirus crisis has suddenly brought up the negative side of this high inequality where the poor are left to fend for themselves. Majority of India does not want a real neighbourhood existence. People have their justification in place. The government has announced a nationwide lockdown, which includes travel restrictions and the closure of most stores apart from groceries and pharmacies. The government (read the PM) has also asked Indians to take care of the poor and the homeless.

But the majority is not keen to follow the Prime Minister's diktat. The poor is the responsibility of the government, no one else. After all, everyone wants to keep Coronavirus statistics in control, the homeless must stay out of the iron gates. The government's financial packages are meant for those in the WFH (work from home) category. Streets are homes to the homeless. WFH does not apply to them. They fill India's latest category. It is WATH, or *Why Are They Here?*

The beggars have disappeared; the famished faces of migrant labourers are stuck on the highways. India's rich and burgeoning middle class have displayed their hypocrisy like never before.

[Author's Introduction: Wharton-trained Shantanu Guha Ray is an award-winning journalist who lives in Delhi with his wife, daughter and two pets. He is the India Editor of Central European News (CEN), a Vienna-based feature news agency. He is much-acclaimed for the award winning book – 'Target', takes a closer look at the NSEL payment crisis.]



Perfect Work-from-Home Solutions for Organizational Heads in the Post Covid World



*Ex-IITian and noted techie
Kingshuk Adhikary
deliberates on the trend of
working from home in the
post Covid-19 world.*



Executive Summary

By treating WFH (work-from-home) as a new “philosophy of work”, rather than a few cosmetic changes to existing behaviours or processes, many organizations will transition easily to the 21st century work culture, in the new economy.

Introduction

At the onset, let me calm your nerves. This article is not about AI, IoT, Blockchain etc. This is about tried and tested technologies that have long existed. However, they make perfect solutions in the post Covid world and the new emerging economy. As I write this, I am staring with amusement at word documents that are titled “Standards and Best Practices for Remote Working” to be read, signed, accepted by employees as they work from home. I am amused because humans continually fail to accept that the

age of humans is over, it is the age of machines. Humans are only meant to fill the gaps. Ever since Turing invented computers (and won the Second World War almost singlehandedly), the world has changed. Since then, the real task of top management has to be seen as “looking at a screen”. A screen that shows KPIs, health of the organization, order books, finances etc. A “Deus ex machina” that is the real organization, where people are replaceable components of a machine.

Harsh but true.

This article is thus written for those who believe only in machines, not in human beings.

Is My Organization's WFH Effort Going Well?

There are three quick checks one can do to find out if a WFH scenario is "efficient" or not.

Do my people think deeply enough about properly "naming" a task? Just that, giving a proper name to each and every task.

Is an email platform or chat or video calling software the primary means of handling WFH? Are "video meetings" going on, same as earlier "physical meetings"?

One cannot automate in the virtual world what is originally haphazard in the real world. Therefore, the "good habits" to remote working begin in the physical world.

Proper naming of a task or job makes it recognizable, sizable and traceable. Very few people appreciate that this "*naamkaran of tasks*" is the key to a successful transition to a WFH culture.

Emails and chats are not traceable to particular tasks, hence are useless for WFH. They merely enable many people to "hide" behind the appearance of doing



work. If emails and chats are the primary methods of working, or video meetings, then most likely the work is being expanded by the "physical" people, not reduced.

Task-management tools, platforms that are specifically designed to handle tasks, trace them from their conception to their completion and beyond, are the basic tools for WFH.

Why Is the "Task Name" So Important?

This is easier to understand, if we first understand this: "who is

Humans continually fail to accept that the age of humans is over, it is the age of machines.





an employee?"

The correct answer is "anyone who has a valid username and password to the organizational system."

If you take away the username/ password, an employee ceases to be an employee. Understand this single concept, and you understand a lot about the 21st century workplace.

Your employee could be one metre away from you, or 5,000 kms away, it simply does not matter. All that really matters is the "task" the employee does and its tracking, its completion, its aggregation into larger tasks.

So, if a task is well named, well understood by many people from its name itself, its size or granularity estimable, it helps a lot.

For example, if you call the task "sending a man to the moon", that immediately suggests smaller sub-tasks are needed to be created, named until a task becomes doable by a remote worker in a few hours, sitting at home.

Workflows

Most people have a vague idea about what a workflow is, as indeed they have a vague idea about most technology jargon.

A workflow is not jargon, however. It is a series of well-defined steps (or stages) by which a task moves from conception to completion, and beyond.

Most good task-tracking systems allow multiple workflows to be defined in them. A sales task workflow is different from an accounting workflow. A task is assigned to a person, who moves it to the next stage, say "drafted", and another moves it to say "approved", "corrected" or finally "completed".

This simple combination (a task management tool + customized workflows) is the general rule of doing tasks remotely, known to all virtual workers from Alaska to Australia. It existed much



before Covid, and half the world's work was already being done this way, by the efficient companies at least. There is nothing new in all this, all this is at least 20 years old.

Roles, Permissions and Responsibilities

When we mentioned “an employee is just a username and password”, we did not mention one more important thing, the role of this username/ password i.e. this employee.

Each employee has a “role”. This role is nothing but a set of permissions over certain files, certain documents. These permissions decide visibility, editing rights etc.

If your WFH is to succeed, the role of every employee, permissions and rights over documents, must be clearly understood, listed, and implemented in the task-management system. This is not easy. But without a clear idea of these roles, if you start WFH and expose every employee to every document, that is a bit hazardous.

No “Beck and Call”. No Fixed Times.

It goes without saying that when an employee works from home, he/ she stops being a slave and becomes truly productive. The useless employees, the ones who were only “showing” how useful they were hiding their inefficiencies and lack of knowledge, are completely exposed. Why? Because at every moment, their usernames/ passwords are being tracked, their personal contributions (under the task-management system) are available for the records. And the records are in

perpetuity, so even HR cannot really ignore a bad employee.

There is no question of a master-slave relationship, no question of ownership, rights to accept, approve, unless allowed by the machine, the underlying tools. Thus employers (and managers) who thrive in a feudal structure, enjoy it, should probably not implement WFH.

The employee is only expected to complete X number of tasks in Y time. To expect anything “more” is not efficiency, it is merely unsustainable stupidity. As WFH becomes widespread, an efficient employee could easily hold three remote jobs at a time. So don't fool yourself with “over the shoulders monitoring”.

Anyone who has a valid username and password to the organizational system is an employee.

No Meetings

This is of course the most impossible ask from managers in a WFH scenario. Most managers only collect work done by their subordinates and present it as their own. They can neither create tasks nor assign them well nor aggregate them, or manage their lifecycles and risks.

The umbrella under which all this inefficiency is hidden, is called “meetings”. In a proper WFH environment, meetings become less, shorter, and more of a bottom-upwards phenomenon than a top-down thing.

Improved Hardware and Software

It goes without saying that if your employees do not have high-speed bandwidth at home, large screen TVs, HDMI cables, efficient laptops, and your office system is unable to handle so many VPN loads, you are building a very slow distributed system. Eventually, slow upload or download of files will frustrate your

remote employees.

Not just bandwidth, a lot of efficiency comes from your company's selection of "tools". Some companies are very strict about use of specific tools, do not allow virus-laden downloads by the employee (remember you cannot control this as well as you could under your company's LAN, your employee is now on a public network).

There are indeed some tricky issues here. You may need expert help here.

What Is Your "File-Savvy-Ness"?

This is a critical question. The "file" is both the raw material and finished product of remote working. Which type of files you deal with, and up to what level they contribute to your deliverables, is important to estimate.

If you can see a "file" as your final product or deliverable, then you are lucky. Most likely, your whole organization can work remotely. You can select talent and employees from all over the world, keep a close watch on the task tracker, deliver product, receive payment, and manage a completely virtual organization. You do not ever have to physically meet a single employee. [Before you rush to object, right now as we speak, there are at least 500 companies in the world of reasonable size that are on 100 per cent remote working. Just do a Google search, or go say here: <https://weworkremotely.com/remote-companies>].

You may think, oh, I am a manufacturer. My work is factory work. Well, for you, there are 3D file formats coming soon. As you go deeper into remote working and find efficiencies there, you may have to subscribe to a lot of SaaS software and allow your employees to use them for sharing files, working on the same files simultaneously, managing different versions of a file etc.

So the "what is a file, to your organization?" question is not a trivial one. Here again, you may need expert help.

Conclusion

Rethink the whole WFH phenomenon. Do you really want WFH in your organization? Or, would you prefer a big organized "fixed place of work", physical presence, visibility etc. or something in-between? There are many considerations, besides the ones already mentioned above. Real estate rentals, overheads of estate maintenance, unnecessary headaches of security and safety of employees, commuting, parking, fixed timings are some of the obvious ones.

Not so obvious are other things. For example, when Edison first lit up a few blocks with electricity, no one could have predicted that every place on earth would have electricity.

Some changes happen very fast.

Especially, when the top persons want it and practice it themselves.

[Author's Introduction: A pass out from IIT-Kharagpur, Kinshuk Adhikary has 28 years of experience in the industry – 16 years in a "pure technical" role as software architect and 12 years in high value business development roles. He has held senior positions with renowned companies such as Hyundai and L&T. He has also held the Head of Technology roles in smaller organizations with tech and business responsibilities. He has been instrumental in architecting (designing and creating) several enterprise software products for U.S/ U.K companies. He promotes management with a strong technology culture. Kinshuk is hands-on and is easily conversant with cutting-edge technologies. He still learns IT/ software, now as a hobby.]



A Letter From Italy

Covid-19: A Social Challenge than a Pandemic in India



***Ace scientist
Dipanjan Bhattacharya
delineates the problems
that will accompany the
measures to contain
Covid-19 in India.***

In December 2019, when China informed the world of the novel Coronavirus for the first time, no one had any idea about the destruction it would cause in the coming months. Human civilization around the globe is

facing the worst crisis since World War II. A tiny pathogen has brought the world to its knees causing not only a global pandemic but also the destruction of economies and social structures. When Coronavirus started spreading in India from the middle of March, the Indian government responded with a nationwide lockdown from March 25 to April 14 and later extended it further to May 3. The lockdown, having been proven effective earlier in China and Italy, is the most accepted approach globally to contain the spread of the virus at a rapid rate. China has successfully restricted the spread of the virus from

Wuhan province by using this method. Italy was able to restrict 44 per cent of its cases within Lombardi area and 82 per cent of the cases within Lombardi and neighboring four districts. Now many experts are questioning the effectiveness of the prolonged lockdown in India. Every country has its own battle to fight depending on its strength and socio-economic condition. What may have worked for Europe may not be the best model for India. To understand and develop a successful strategy to fight Covid-19 in the Indian context, we need to analyze why lockdown is working so well in several European countries and find out where India stands in comparison to these factors.

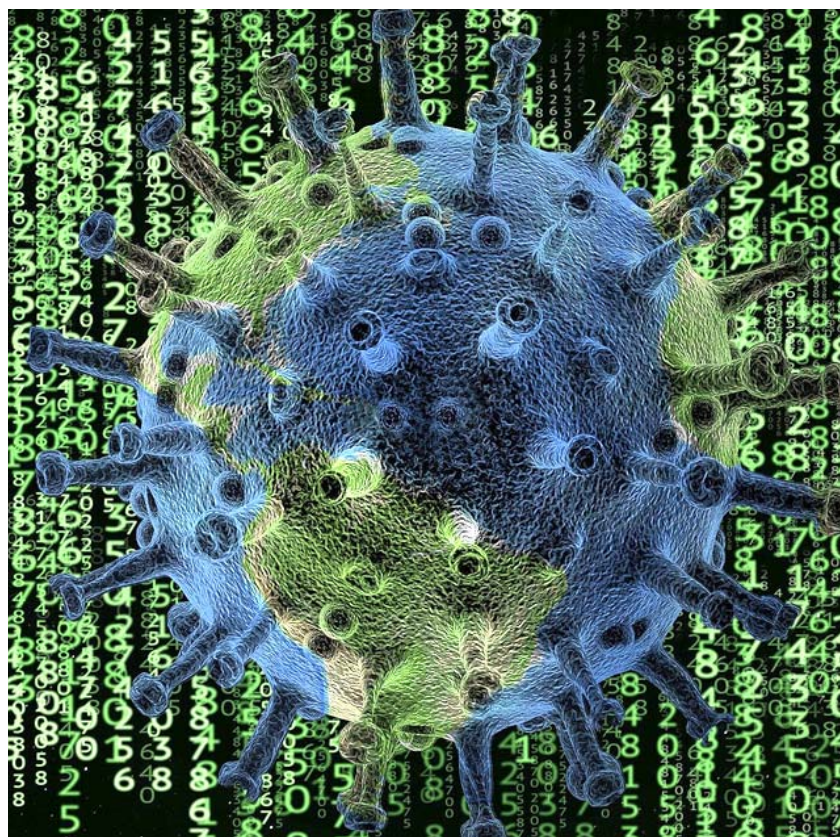
Economy and Social Security: In the European nations, social security structure guarantees unemployment benefits, free healthcare and subsidized education system for all the citizens or permanent residents of the country. This makes the common people financially less vulnerable and they can stay at home for a few months without worrying

about the probable crisis they may face unlike the poor, middle class people of India.

Diversity: India is almost as big as the whole of Europe in terms of population, cultural and natural diversity. Just like we observed that the peak of this pandemic is happening in different countries in Europe at different times; the peak in different Indian states will come in different times as well. The complete lock down in each European country is equivalent to the state-wise lock down of any typical Indian state.



It is difficult to stop people from attending a religious gathering in a mosque, temple, church or a gurudwara.



Economy and Infrastructure:

In comparison to India, countries in Europe have less population, less population density and negligible percentage of people below poverty level. The financial capacity of the state is also five to six times higher than that of India (GDP per capita). They have a better medical infrastructure. So locking down the country for one or two months while undergoing rapid testing to eradicate the virus may damage their economy but they can still afford to do so. The same is not the case for India.



Religious, Social Practices and

Superstition: Changing a society takes generations. Education is a key factor that encourages this change. In India, the literacy rate is lower than that in Europe. A large number of people believe in divine interventions and quacks more than they believe in doctors. Religion takes a priority in most cases. It is difficult to stop people from attending a religious gathering in a mosque, temple, church or a gurudwara. Then, there are gurus from all religions offering

What may have worked for Europe may not be the best model for India.



unscientific treatments and assurances, which trivialize the pandemic in the mind of common people. Increase in social violence and intolerance is creating an additional problem for the medical staff and the administration.

Employment

Issue: Unemployment is going to be the biggest headache for the working-class Indians. At present, small businesses, the hotel industry, the tourism industry and retail chain businesses are severely affected. Total unemployment of



USA has reached a mammoth 22 million in the second week of April and it is still rising. The situation is same for Europe as well as other developed nations in Asia. It is understandable that these nations might tend to reduce the percentage of immigrant workforce from different foreign nations including India. Similarly, the restrictions in frequent traveling and probable change in foreign policies may create unemployment in the multinational companies. More than 80 per cent of India's workforce is employed in the informal sectors and one-third of them are working as casual labourers, earning on day-to-day basis. A great fraction of them is going to lose their job.

Is Social Distancing Feasible?: A survey-conducted by National Statistical Organization (NSO) found that 28.7 per cent of India's rural households lacks

access to usable toilets and 32 per cent of the people practice open defecation as of September 2018. More than 80 per cent of rural households do not get tap water-supply at home and they have to rely on public water resource. According to the 2014 data, 24 per cent of the urban population of India lives in the slums. In the slums, several families use a single common public toilet and share the same public tap for collecting water. In a typical slum, six to ten people live in an eight feet by eight feet room without proper light and air circulation. A proper social isolation is practically impossible in this scenario.

What Is Next?

It is evident that India cannot succeed with a complete lockdown without taking care of these social issues. For the economically backward people of India, the daily struggle for survival is no less important than their struggle against the virus. According to the estimation of National Sample Survey (NSS) and Periodic Labor Force Surveys (PLFS), the jobs of around 13 crores non-agricultural workers are at immediate risk. Agriculture is the backbone of Indian economy and the society. A lockdown at this time has already affected the Rabi

It is evident that India cannot succeed with a complete lockdown without taking care of these social issues.



crop cultivation. Now it is the time for farmers to prepare for seeding of the crops before monsoon. If the farmers, fishermen, and the people involved in animal farming do not start their work immediately, a massive food crisis will occur within a year's time and it can have a catastrophic effect. The government also acknowledges these problems.

Different governmental and non-governmental organizations are working hard to supply the basic food and ration to the people below the poverty line. But around 42 per cent of migrant workers do not have any ration card and India needs to include them for the ration supply. Moreover, they also need some cash flow into their account for

their daily survival. It is becoming obvious that India may need about a year to finish significant amount of testing of the people in the present rate of testing and the disease will grow much faster even with a complete national lockdown. In the present scenario, we shall not be able to stop the spread of the virus but if we continue the economic shut down, we may start a famine-like situation in India in addition to the pandemic.

Around 42 per cent of migrant workers do not have any ration card and India needs to include them for the ration supply.

One of the biggest advantages of India is that India is a country of young people with only six per cent of the population over 65 years of age (most vulnerable segment of the people for this disease are the elderly). According to the report of ICMR, the initial results indicate that 80 per cent patients are

asymptomatic in nature. It gives India an opportunity to implement herd immunity by bringing back the young healthy people into normal working life and completely isolating senior citizens or the people with critical medical history. Herd immunity is a standardized process to safeguard vulnerable population by creating large percentage of population immune to a virus through infection. The dangerous part of removing the complete lockdown and implementing herd immunity will be the possibility of rapid spread of virus, which may overburden and crash the entire healthcare system.

The government should implement strategic planning for isolating the highly infected localities and implement zonal lockdown. At the same time, they should also socially isolate the elderly vulnerable people from their families. Government can even think of moving them to the local school buildings or government buildings and provide them accommodation and food.

India is having a great railway network. The government should utilize the railway network and take control of transporting rations and migrant workers maintaining basic safety and social distancing. In a short time, we cannot create enough hospitals in every corner of the country. However, moving hospitals on trains can fill the gap. As peak of the disease will not happen all over the country at the same time, hospital trains with dedicated medical facilities to fight the Coronavirus can move from one infected zone to another, depending upon the requirement.

We are in a situation where we have to accept that even if we continue this kind of massive lockdown in the country, we shall not be able to stop the spreading of this virus. Rather, we shall end up completely demolishing our economy and it will have a horrific effect on the



poor, marginal and tribal people of the country. In a country where 22 per cent of the population live below the poverty level, (according to the 2012-census), an economic shutdown will kill more people due to hunger than the virus itself. It is the time for a bold strategic plan from the Government.

[Author's Introduction: Currently, Dipanjan Bhattacharya is working as the Head of Imaging Development Unit of IFOM, the FIRC Institute of Molecular Oncology at Milan in Italy. Dipanjan did his B.Sc. and M.Sc. in Physics from the University of Kalyani and joined Raman Research Institute in Bangalore for his Ph.D. During his Ph.D., he worked in a collaboration programme between RRI and National Center for Biological Science, TIFR in Biophysics. After his Ph.D., he joined the Bioengineering Department of Massachusetts Institute of Technology (MIT) for his postdoctoral work. Following this, he moved to Singapore to work as a Research Scientist at Singapore-MIT Alliance for Research and Technology Center (SMART), an offshore research programme of MIT, funded by National research foundation of the Singapore Government. His multi-disciplinary interest is extended to the socioeconomic and cultural issues in human life and a vast range of traveling.]



The Long and the Short of the World Post-Covid-19: A View



*A renowned educationist,
Dr. Manas Paul writes
about the long term and
short term impact of
Covid-19 on humanity.*

The global pandemic of Covid-19 with its tentacles spread far and wide, ruthlessly cutting through societies, both rich and poor, is suddenly rendering the human civilisation of the 21st century visibly defenceless.

Humanity is yet to find a way to stop this menace beyond the practice of 'Social Distancing' and 'Lockdowns'. Though there are enormous efforts underway to find a vaccine as a permanent cure,

current information suggests it is likely to be anywhere between 10 and 14 months away. Moreover, finding a vaccine, even if most pertinent, is only a part of the solution. Beyond that, there are issues of mass production and its administration. Remember, here it does not imply administering vaccination to a specific portion of the population like the newborns, or elderlies alone, it implies administering it to the entire population at large.

What is more likely to be true is that till there are veritable advances in the development of Covid-19 vaccine or the virus suddenly enters into slumber as a part of a natural phenomenon, lockdowns and social distancing is likely to stay in some form or the other. If that be true, then the world post-Covid-19 needs to be seen through two lenses –

one with the perspective of short run (till the onset of vaccination) and the other more long term, much beyond that. However, be that as it may, both the long-run and short-run impacts are likely to remain distributed across (i) Economic, (ii) Social, and (iii) Behavioural aspects of the society.

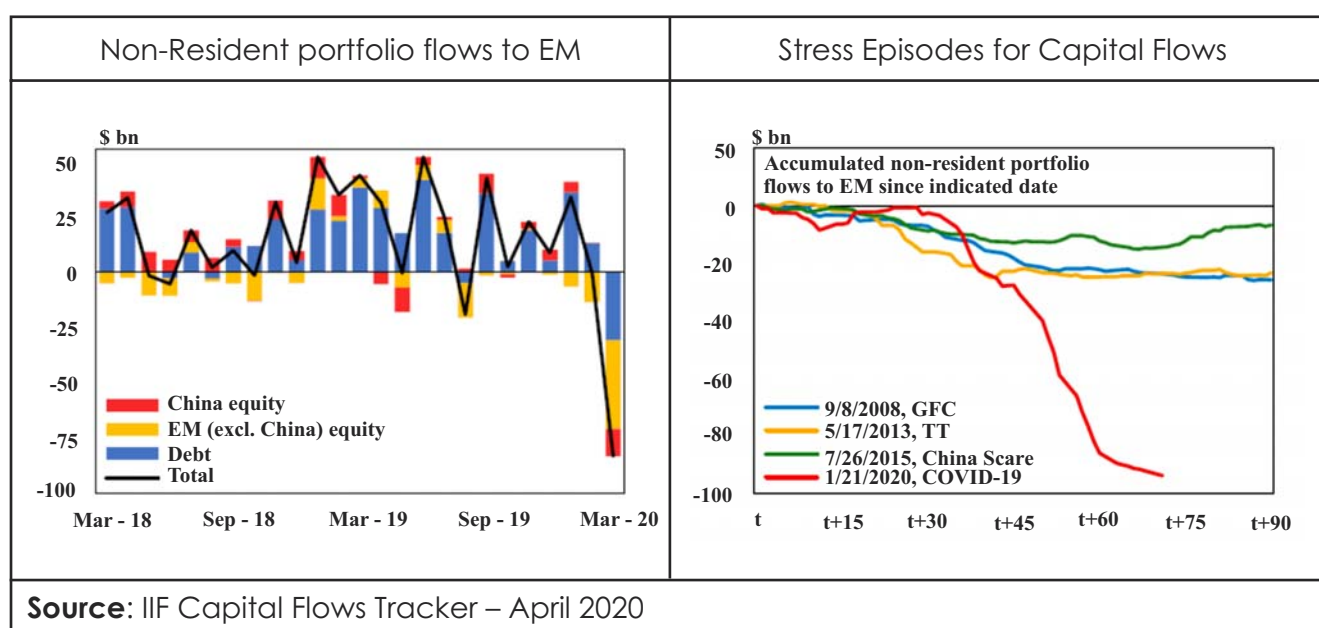
The Economic Impact

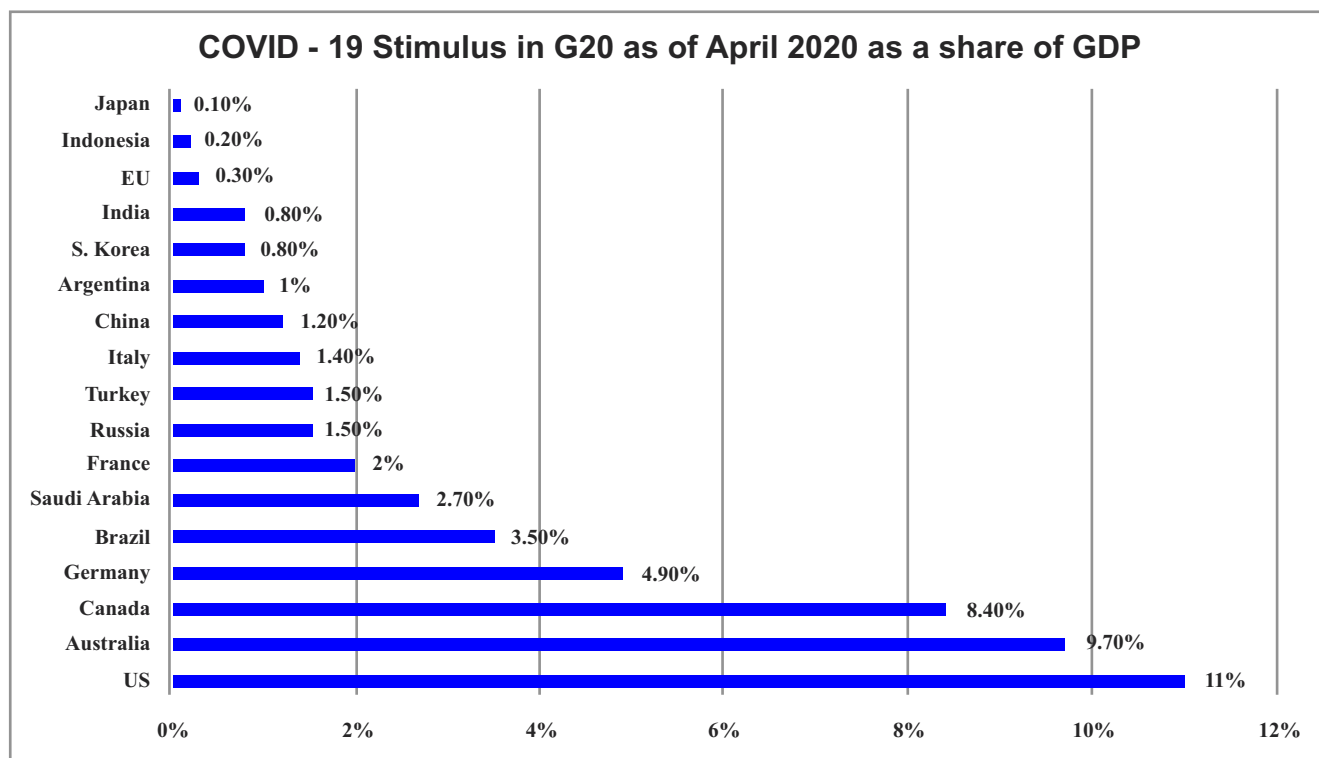
While the economic impact is the more commonly discussed theme, the other two cannot be neglected due to apparent interconnectedness amongst them.

In the short-term, the most apparent economic impact is the economic costs of imposed 'lockdown' across the globe. These are evident in the loss of production, inability to leverage the services of mass transportation, reduction in or no demand for hospitality services, disruption in the supply chain as well as the loss of employment and earnings. The lack of visibility on the way the lockdown is likely to pan out is impairing economic expectations and outlook. Businesses are not only grappling with

limited, low or no demand, but there are also concerns of liquidity shortage to tide over current conditions.

In the emerging markets (EMs), these complications got compounded by record capital outflows. The IIF capital flows tracker puts the March 2020 outflows from the EMs at a record-breaking USD 83.3 billion overshooting those during the global financial crisis of 2008, the uncertainty of taper tantrums of 2014 and the scare of Chinese devaluation of 2015. Such amount of outflows has obvious liquidity implications in these markets. Government and policymakers across the globe have indeed come with up several packages and provisions to address such disruptions and distortions in economic activity. The US fiscal expansion of USD 2 trillion (11 per cent of GDP) is the maximum announced by a country so far. India's fiscal package of USD 23 billion even if looks minuscule in the range of 0.8 per cent to 1.2 per cent of the USD 200 to 300 billion suggested by Industry associations, there has been definite steps taken by RBI as well guided by the rhetoric of doing "whatever it takes" to





Source: Chart created from the data available at <https://www.statista.com/statistics/1107572/covid-19-value-g20-stimulus-packages-share-gdp/>

support the economy.

The monetary and fiscal stimulus across the globe is unlikely to provide any significant support to economic activity in the near term as its imposed behavioural and cultural changes are likely to act as additional obstacles.

The Sociological and Behavioural Impact

As argued earlier, the expectation of the arrival of a new vaccine and its effective administering across the globe supports prospects of continuance in social distancing and lockdowns in some form or the other till then. Such practices would be affecting supply chains to take a longer time to return to normalcy affecting supplies. And at the same time, the consumption demand is likely to remain directed to necessities. Eating out, footfalls in malls, mass transportations are the three major sectors to remain visibly

impacted where reduced demand emanating out of behavioural change manifested in self-isolation, and social distancing is likely to lead to a spike in unemployment initially within the temporary workforce but gradually spilling over to permanent workers as well. While the services sector, like ITES, banking, consultancy etc. can still chug along with the help of technology, manufacturing, including energy and industrial metals, would have to bear the brunt. Banks and the financial industry, exposed to industries witnessing a significant reduction in demand in the new global environment, cannot go untouched either.

Amidst heightened uncertainty, as the world grapples with finding a cure to this pandemic, investor initiative would be driven more towards protecting the value of their ongoing businesses rather than

take on added risks of new expansions. Though this is not to rule out value buys, witnessed more prominently in Chinese interests of global acquisitions. However, amidst this doom and gloom, the rising dependence on virtual meetings and activities can see investments in new technology platforms that facilitate such transitions.

All this would imply a de-growth in global economic activity not only in 2020 but well into 2021, with all possibilities of a recovery starting only late 2021 to early 2022 and gaining pace in the latter half of it. The recovery, once it starts gaining momentum, could well be a V-shaped at the back of the post Covid-19 fiscal and monetary accommodations across the globe. The financial markets are likely to remain wary with bouts of volatility extending deeper into 2020, possibly start showing its resilience into 2021, gaining in conviction and start gaining in momentum into it.

What We Need to be Mindful of

Nonetheless, in the short run, the world needs to be mindful of:

1. US policies, both domestic and foreign, especially with the Presidential elections down the year.
2. The escalation in technological decoupling across major powers raising a virtual wall for dependent countries having to choose sides, casting a geographical chill over global business.
3. Rising distrust and nationalism changing landscape for MNCs. Over the long-run, the world has to take care of:
 1. Impending impact of debt overhang.
 2. Rising threats of superbugs.
 3. Rising social and political sensitivity over health, education, inequity, and the need



The population, in general, would be in favour of policies directed towards increased spending in the health care system and infrastructure.





for continuous re-skilling of the labour force to remain relevant for technological innovations happening at a rapid pace. Large scale technology adoption could be one of the most significant behavioural changes in the post Covid-19 world. With technology dependence forced across businesses, the corporates and business houses across industries could begin to accept the practice of flexible work hours and working from home at a much broader scale. Online education is likely to shed some of its perceptual disadvantages and become more acceptable to society. People, in general, are likely to become more finicky about cleanliness and would be willing to pay higher for sourcing raw material and cooked food from a healthier environment. On the social front, the population, in general, would be in favour of policies directed towards increased spending in the health care system and infrastructure.

Moreover, there would be political compulsions to deal with massive unemployment, loss of life and livelihood. Despite the ongoing suspicion and mistrust drifting countries apart across the globe over the origin of Covid-19, one can only hope that the humanitarian cost so far pushes the world to find a reason to come together and fight it out.

One can only hope that the humanitarian cost so far pushes the world to find a reason to come together and fight it out.

[Author's Introduction: Dr. Manas Paul is currently a Professor in the Area of Economics, Environment and Policy at IMT Ghaziabad. Prior to joining IMT Gaziabad, he was the Strategy Economist with SGRF, Ministry of Finance, Sultanate of Oman. His other assignments were as Vice President Business and Economics Research at Axis Bank, Assistant Vice President at HSBC Global Markets and as Chief Economist of Securities Trading Corporation of India Limited. He is a Doctorate in Economics with 20 years of post Ph.D. experience across banking, finance and education sectors.]



A Letter From London

Britain and Coronavirus – The Bad, Ugly and Good

Technocrat Jeff Watkins writes a letter from London as to how the Covid-19 crisis is impacting the Brits sociologically, psychologically and politically.



Britain, once a tiny giant punching above its weight in command of much of the world, is undergoing unprecedented times!

We have had it too good in Britain for too long, without credible threats at any kind of scale. Any missteps we've made have been decoupled from the consequences and reality, and we've forgotten how finely everything hangs in the balance. Our perception of a solid equilibrium was actually nothing but an illusion.

This sudden worldwide crisis has brought out the good, the bad and the ugly in many of us, but in uniquely British ways.



However, in order not to end this article on a sour note, I'm going to misappropriate the classic Spaghetti Western title as 'The Bad, the Ugly and the Good', leaving the positive things I've observed until the end.

The Bad Brexit: The timing of this couldn't have been worse for us as let's face it, Britain has been on the ropes for a while, as our protracted Brexit has cost us billions with no real movement alongside our insistence on reelecting a government hell-bent on dismantling our NHS. The upshot of this is that a once powerful empire has been left in an enfeebled state.

Debate about Death: Mirroring the American sentiment (as we want to do), many questioned if it was more worthwhile to just accept the death of millions of vulnerable citizens rather than collapsing the economy. I want to believe that people only advocated this out of fear rather than antipathy towards our elderly and sick, even though the numbers show that population reduction actually harms economic growth. But now that we've had a number of younger



If there's one thing we excel at, it's passive-aggressiveness, and two very British types of behaviour have been pushed to the extreme in this lockdown environment.

people dying, that self-centered idea is being mentioned less often; now everyone is at risk, we're starting to see sense.

Mental Stresses:

However, in any idea (no matter how abhorrent), there are usually kernels of truth. In the first couple of weeks, several whole-family murder suicides were reported, domestic violence increased by 25 per cent and as we were slow to announce our protection for the self employed and small businesses, many businesses were forced to close. But, despite our infection-rate and death projections around Coronavirus, we have not been furnished with projections around the other damages we



might incur, namely ones concerning mental health and our economy.

Was It Like the Blitz Bombings during the War?: What came as a surprise, was that restrictions on movement are worse than WW2, where people would huddle together in blacked out homes singing, being as merry as you can with only a lard sandwich for dinner due to extreme food rationing. I suspect some people would take the small chance of being bombed; over the isolation many of us are feeling right now.

A Society Isolated: In my opinion, the salient problem is that over the last 30 years, Britain has become significantly more isolated. In many countries that might sound bizarre, but many people in Britain live alone, their interactions being limited to work and occasionally friends, which aren't an option during a lockdown. With our skewed view on work-life balance, many of us find the majority of our emotional connection purely with colleagues.

Two Distinct Kinds of Behaviours: If there's one thing we excel at, it's passive-aggressiveness, and two very British types of behaviour have been pushed to the extreme in this lockdown environment. Firstly, there's the "curtain twitcher" busybody type watching every movement for transgressions, encouraged to report things to the police, leaving passive-aggressive notes for a shopping trip that contained "non-essential" items. The second type is the section of society who takes our freedom for granted, like

the rules don't apply to them and they will force us to tighten restrictions, spoiling it for the majority of us who are being sensible about things.

Nationwide Health Services: Our stretched NHS (National Health Service) has been put to the test by this, with eight doctors dying after exposure. Poignantly, they've all been immigrants, staying and sacrificing their lives for us, despite some ugly scenes of xenophobia both during and after Brexit. Finally, the NHS for all the good it does has a poor record on

managing mental health issues; when we come out of lockdown, many will need help to rebuild our mental health.

Job Losses and Worries:

The financial damage caused by this has exposed the great lie of capitalism; that if you're living paycheck to paycheck then you're stupid/ lazy and should work harder to be successful. That bubble burst a few days in, when

many national-scale companies either furloughed/ laid off their staff or went into administration; they couldn't even make it through a month. As with any crisis, the people who suffered the most have been those lowest on the food-chain, the low-paid, unemployed and single mothers.

The Ugly

Brexit party politician Nigel Farage recorded a risible 13-minute address, claiming that we've been turned into a "police state" and we should rise up against it. He went on to blame the police-force for dying the famous "Blue Lagoon" of Buxton black to stop people using it during lockdown; except that this

This sudden worldwide crisis has brought out the good, the bad and the ugly in many of us, but in uniquely British ways.



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incident actually happened in 2013 due to the lagoon actually being highly toxic. Also the inexplicably famous conspiracy theorist Davie Icke caused panic around his claims that 5G was causing our bodies to spontaneously create Coronavirus. This resulted in people burning down 5G masts in several areas, and given we're relying more than ever on our communications infrastructure, this wasn't helpful.

This crisis has seen many of the worst of our public figures crawl out of the woodwork and cause more harm. I'm half expecting Nick Griffin (card carrying racist who makes Nigel Farage seem moderate) to rear his head up on YouTube spewing xenophobic rhetoric.

Now is not the time for

fake news as we're too busy saving lives, families and our economy. But people aren't fact checking, they're just growing angrier and closed-minded, finding a way to blame foreigners for this (especially the Chinese). We're embarrassing ourselves with this behaviour, especially as we pride ourselves as a multicultural nation. Worse still than the aforementioned national embarrassments, is that our collective Brexit hubris is coming back to haunt us, as we're struggling to find people to do the key jobs we're not interested in like picking crops, and with the supply chain from abroad drying up we now have national food shortages driving the prices up, and other produce being unavailable at any price.

The Good

Come Together: But, it's not all bad as I think there's a silver lining; England has mostly come together, aside from pockets of ugliness. People are shopping for the infirm, being conscientious; those of out of work have a financial plan in place, with lenders providing repayment holidays. Farm shops and local

grocers are seeing an uptake in usage and people are supporting local businesses, even pre-paying to keep them afloat, and more traditional businesses are adapting quickly to online services, which is in the spirit of our “make do and mend” heritage we engendered during wartimes.

Volunteers and Communities: One thing nobody saw coming was how many people really wanted to help the nation. The volume of people volunteering to be an NHS Responder in England has been breathtaking; the initial target was 250,000 people, but recruitment was paused at 750,000 (which is over 2 per cent of the working age population) due to over-subscription.

In lieu of the NHS having the capacity to provide help, people are really rallying together to protect each others' mental health, building up online communities, using video-conferencing and phone calls more than ever.

Clean and Green: England is becoming greener, as modern Britain was a very commuter heavy country, with some of the worst employment rights in Europe and many employers claiming that it was impossible for their workforce to work remotely. It's curious how attitudes can turn on a dime when a gun is held to their head, for many companies tele-commuting is now almost business as usual!

Accepting and Caring Society: England is finding its lost sense of society, and although many people are accepting furlough payments, volunteering, dutifully obeying rules around stockpiling, growing their own vegetables, and generally behaving themselves, they still baulk at the idea that some of it looks a bit like socialism. Call it what you will, but if it moves further away from the

Conservative ideal of late-stage capitalism, that's no bad thing.

Less Hatred?: We're even changing our armchair hatred of the world, as although our ambiguity and dithering caused a lot of losses, both life and money, and the weakness in our elected party showed through (but for balance, I'm not sure Labour would have done much better), we're becoming more moderate. Our opinionated media hurt this process at first, spewing out misinformation and vitriol. Surprisingly, our media and politicians have started to behave in a more adult fashion, pulling together on the really important matters. Perhaps some of the Conservative bubble has burst, and we will start thinking more about how much things like the NHS and society are really worth to us.

Conclusion

In conclusion, Britain is more capable of change and pulling together than we had ever imagined.

We had just gotten lazy and “safe”, and idle hands are the devil's playground. I believe that some of these lessons will stick, because Brexit is still going to happen, so we need each other, and a nation of millions people working together is going to be preferable to millions of individuals living on a tiny, cold island hating each other.

[Author's Introduction: Jeff Watkins is the Chief Engineer for a Digital Consultancy (AND Digital in the U.K.). He has been a Computer Scientist since 1995 and has 22 years of experience in the software and IT industry. He is also a highly experienced Technical Architect. He has worked with major U.K. government and non-government projects. Jeff enjoys social blogging and has active interest in how technology impacts the society. He is an expert on electronic music.]



Global Cinema and Pandemics: Past Portrayals and Future Possibilities



Teacher-cum-journalist Dr. Dr. Sunayan Bhattacharjee gives a rundown on the impact of pandemics on the cinematic culture.

As the Covid-19 pandemic ravages the world, we all remain confined to our homes. While it is perfectly normal to feel helpless and anxious, there is an effective mechanism to maintain sound mental health – watching movies. This proposition might seem a little preposterous to start with, perhaps a little

selfish too.

While thousands of migrant workers continue to struggle against the odds amid rising unemployment in India (the unemployment rate has touched a whopping 23 per cent), it seems utterly cruel to talk about cinema. But cinema it is! While we must do whatever we possibly can to help those in distress, the fact remains that we shall continue to stay locked within our homes for some time at least. Given the scenario, it becomes of the essence that we make a fruitful use of the time.

In the prevailing nightmarish setting, movies can help us deal with the crisis, at least psychologically. In fact, it wouldn't be an exaggeration to note that we

seem to be in the middle of a disaster movie ourselves, a movie that is still unfolding. Thus, it is but natural that we shall tend to tilt towards cinema that resonates with our contemporary predicament.

Pandemics have constituted an enduring subject for movies – the perfect recipe for experiencing dystopia. While some of the movies have been fantastical and deal with Zombie outbreaks, there have been many others that have taken a more realistic approach in handling pandemics. From Ingmar Bergman to Steven Soderbergh, filmmakers from across generations have dealt with disease outbreaks – both regional and global – in their works of art.

Thus it is but imperative that we take a nuanced look at some of the most impactful pandemic movies ever made. The idea is to prepare a bucket list for people, who need an outlet to vent their anxiety in view of the global condition. In our discourse, we shall stay clear of the Zombie genre partly because it doesn't mirror what is happening around us now. In our list, we shall not make any comparative comment as all the movies that will

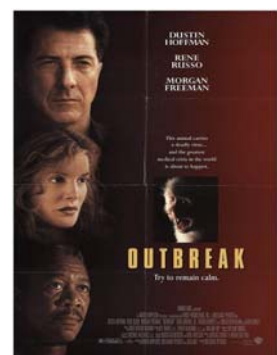
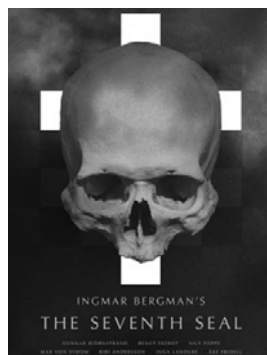


In our discourse, we shall stay clear of the Zombie genre partly because it doesn't mirror what is happening around us now.

be featured in the following section have had their moments of brilliance.

The Seventh Seal (1957):

A contemplative masterpiece from the coffers of the Swedish genius Ingmar Bergman, 'The Seventh Seal' was set during the Black Death in Europe. It features a game of chess between a knight and an incarnation of death. The movie metaphorically talks about the end of the world. As we are grappling with an apocalyptic scenario ourselves, this movie is a telling commentary on the transience of life and the impermanence of



the world. It is a philosophical take on how we are completely helpless when it comes to nature's fury. 'The Seventh Seal' is considered one of the finest movies ever made.

12 Monkeys (1995): Directed by the maverick Terry Gilliam, '12 Monkeys' is again a stark commentary on human beings and their self-destructing traits. Set in futuristic Philadelphia, it chronicles a post-apocalyptic world where human beings are forced to live underground. In an allusion to biological warfare, the movie shows that most of humanity has been wiped out by a manmade virus. The film showcases a mission where a prisoner goes back in time to understand the reason for the viral outbreak. Widely applauded for its thematic richness, '12 Monkeys' is also known for its plot complications, the usage of multiple novel technologies and ambient gloom and doom.

Outbreak (1995): Roughly based on the Ebola outbreak in Zaire, the intelligently named 'Outbreak' talks about a small town in the United States of America that faces a possible medical disaster due to a deadly virus. Directed by the seasoned director Wolfgang Peterson, 'Outbreak' is an intelligent take on the travails that medical and military personnel have to face when there is a pandemic. It needs to be remembered that an actual outbreak of the Ebola virus was happening in Zaire at the time when the movie was released. Many critics praised its storyline and lauded its allegorical

representation of the pandemic politics.

Blindness (2008): Directed by Fernando Meirelles, 'Blindness' is a Portuguese movie that deals with the pandemic of blindness. In the movie, a disease known as white sickness afflicts people and takes their eyesight. Although not a critical success, the movie was praised for its unique plotline. The movie is beset with allusions to multiple artworks. 'Blindness' courted some controversy when blind people objected to the depictions in the movie saying that blind people are not savages and they do not behave the way the movie has shown.

Despite everything, the movie remains memorable for having engineered a different genre of pandemic movies.

Carriers (2009): Directed by Alex Pastor and David Pastor, 'Carriers' is a chilling tale of a post-apocalyptic world where a group of friends try to save themselves from a global viral outbreak that eliminated the most of

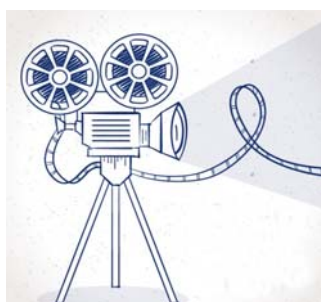
humanity. The movie was critically appreciated for its rich theme and a unique storyline. The movie is distinctly bleak and perfectly resonates with the current setting. Social distancing, a term that is being increasingly used globally received a significant traction in this movie. 'Carriers', which perfectly chronicles the horrors of a global pandemic, is intentionally bereft of any positive or hope-inducing elements.

Contagion (2011): Now, let us talk about the movie that has been the subject of many a debate over the past couple of months. Directed by the immensely

While it is perfectly normal to feel helpless and anxious, there is an effective mechanism to maintain sound mental health – watching movies.

talented Steven Soderbergh, 'Contagion' is probably the closest to the Covid-19 outbreak. Interestingly, a la Covid-19, in 'Contagion' as well, the virus spreads through respiratory droplets. Reminiscent of many past global disasters, 'Contagion' perfectly captures the social disorder that accompanies any pandemic. It was directly inspired by the global Swine Flu outbreak in 2009. The movie was opulently lauded for its realistic take on pandemics. The movie follows a hyperlink style of storytelling.

Flu (2013): Aptly titled, 'Flu' is an unnerving tale



There is not an iota of doubt that a number of blockbusters will be created out of the human tragedy that is Coronavirus.

of how the rapid spread of a mutant virus throws a South Korean city into utter chaos. Directed by the talented Kim Sung-su, the movie has typical Korean characteristics – gore and bleakness. The movie portrays that the virus victims die in only 36 hours and vomits blackened blood. 'Flu' is also renowned for being extremely intense. It is rife with political intonations and has all the typical traits of a pandemic disaster movie. Unfortunately though, not many critics liked the movie. Currently, the movie is rated 36 per cent fresh on Rotten Tomatoes.

The Last Days (2013):

Directed by David Pastor and Alex Pastor, 'The Last Days' interestingly deals with the concept of social distancing. Originally christened as 'Los Últimos Días' in Spanish, the movie portrays a situation when people die when they go out into the open. As we all are confining ourselves within the four walls of our homes in view of the Coronavirus scenario, this movie becomes all the more relevant. The movie won universal acclaim for its unique depiction of an apocalyptic situation. Albeit based on a silly



concept, the movie has stunning visuals, fantastic sound design and memorable special effects.

93 Days (2016): A lesser known Nigerian movie, '93 Days' recounts the outbreak of Ebola in Nigeria in the year 2014. It is believed that Ebola has a death rate of 50 per cent. Directed by Steve Gukas, the movie is in fact a tribute to the medical workers, whose contributions helped contain the disease at an early stage. The movie is also representative of the political ramifications of a possible pandemic. This underscores how a strong political leadership can play a critical role in stopping the spread of a contagious disease. '93 Days' also has uncanny similarities to Covid-19 outbreak.

Virus (2019): We end our list with an Indian movie. 'Virus' is a Malayalam language movie directed by Aashiq Abu. It deliberates on the outbreak of Nipah virus in the state of Indian state of Kerala in 2018. The movie was critically acclaimed as it features a very realistic depiction of a possible pandemic. It purposefully includes the contributions of the medical fraternity in containing the spread of the disease. The movie was appreciated for its compassionate and intense take on the subject. The best part of the movie is its unrelenting and uncompromising stand in revealing the actual situation pertaining to the Nipah outbreak.

As we end the list, we also look at the possible impact of Covid-19 outbreak on the global movie industry. There is not an iota of doubt that a number of blockbusters will be created out of the human tragedy that is Coronavirus. Such disasters, tragic as they are, act as fodder for future movie plots. In fact Canadian filmmaker Mostafa Keshvari has already



made a movie by the name 'Corona'. The trailer for the movie has already been released. No wonder that the audiovisual creations won't stop at this. The rest, as they say, will be part of our future cinematic history.

[Author's Introduction: Currently an Assistant Professor with the Kolkata-based Adamas University, Dr. Sunayan Bhattacharjee has a Ph.D. in Film Studies from Pandit Deendayal Petroleum University in Gandhinagar and a MMC degree with specialization in Journalism from Symbiosis Institute of Media and Communication in Pune. A UGC-NET qualified scholar in Mass Communication and Journalism, Sunayan studied the surrealist works of renowned American filmmaker David Lynch for his Ph.D. thesis. Sunayan has a cumulative experience of more than a decade in the creative and academic domains. He was earlier an Assistant Professor at Pearl Academy in Delhi. He also has the distinction of having worked with leading organizations such as Reuters News, The Times of India and Ramoji Film City. Additionally, he has worked as an Associate Editor with The Cinemaholic and has edited edInbox, an educational news portal.]



Creative Bloom amid Covid-19 Gloom

*Educationist **S Manna** writes a pleasant piece on how the Covid-19 crisis has evoked the lost sense of creativity among otherwise busy citizenry.*

Shuvo Banerjee and his wife Arpita have uploaded a duet song on Facebook (FB) last week, which they claimed to be their first song together in the last 14 years. Their renditions took little time to create a niche audience among the known netizens and beyond prompting the couple to come up with an exclusive FB page of their own. No, the Banerjees – acclaimed singers in their own right since the college days – had no *Abhimaan* story between them, which might have taken their passion to the back seat. Covid-19 lockdown found them enjoying endless leisure hours, stirring their nearly forgotten passion to surface again.

The Creative Surge

You don't need to be a saint or a soothsayer or a psychologist to find out why suddenly your social media feeds are flooded with the creative flashes of your friends, followers and acquaintances. Why people, even a small kid or your



eccentric neighbour, are precipitously making their presence felt through social media? Why there are so many literary talents, danseuses, singers, dramatists, actors and mimic artists are swarming your timeline? Why texts, graphic, audios and videos of skits, recitations and memes are crowding all social media channels?

The Reason

The logic is simple. When you had all the world's time to stay busy outdoors, the inner self had shut its door. Now, as you have all your official and social outlets locked down, the daily hours have hunted down the keys to your inner philosophical, spiritual or creative rooms. Thus, the last month has made you stay homely uncovering your long-elapsed fervour. It is nothing but re-discovering one's own self.

With crores of people on the planet stuck in isolation, many are using the opportunity to get creative and show it to the world, albeit the e-planet.

The Covid-19 Communication

Creative sparks amid global shutdown are giving birth to an unusual group of audience out of a personal yet unresponsive circle. No doubt, it forms a new mode of communication – a Covid-19 communication. A welcome noise amid an eerie silence!

When Sheersha Das, an IT employee working from home for an Indian MNC, suddenly rediscovers her dancing prowess on a terrace afternoon, little does she know that it is being streamed 'Facebook Live' by her sister and fetches as many as over 3,000 FB 'Like's and a little less than a thousand comments.

In a couple of weeks, the 23-year-old resolves to make it big. The confidence inside her makes a statement. Social media users like Sheersha are sharing titbits of their new reading, baking, knitting and painting.

The Celeb Way

As Singer Katy Perry believes that this year's 'American Idol' episodes will get 'very creative' amid lockdown, talent spotters across the globe, too expect the world to see a fusillade of creative acts online.

Bollywood has already got the taste of this 'Corona-tion' of creative minds. Actors, directors, script writers keep themselves busy in making things in a unique way – from making short films, narrating fictional stories or creating web shows online. Author Tahira Kashyap has currently decided to keep her creative flow going with online shows. Actor Richa Chadha is lining up a comedy script to hone her writing.

Creative sparks amid global shutdown are giving birth to an unusual group of audience out of a personal yet unresponsive circle.

Ways to Unwind

There are many ways. A virtual book club at Washington's DC Public Library or Italian Michelin-starred chef Massimo Bottura's new series on Instagram called Kitchen Quarantine are the perfect avenues to connect with people stuck at home.

Tim Hinchliffe, the editor of webzine *The Sociable*, has penned an enchanting piece on how people are igniting their passion or taking to bizarre ways to beat the lockdown blues.

Apart from live streaming of musical performances and making public service announcements or giving sermons along

with Twitteresque news flashes, operating an online book club, showing the struggles of learning something new while on lock-down, canvassing culinary capabilities, watching repeat telecast of old series etc – the list is endless.

With all public amusement and entertainment hubs, such as parks, clubs, cinema halls, pubs and almost everything being shut, people are now eyeing alternatives to keep themselves entertained.

Twitter flashed one video which shows two quarantined people are beating boredom and playing tennis through their windows. The game may not be too easy to play; the creativity and efforts are worth mentioning.

Kids Corner

With no clear date in sight for relaxation of the confinement, children, cooped up at home for almost a month now, are among the worst sufferers.

Some parents have, however, enrolled their wards in online classes, where they learn about art and craft and create the same at home, some of which are also shared online by their parents or

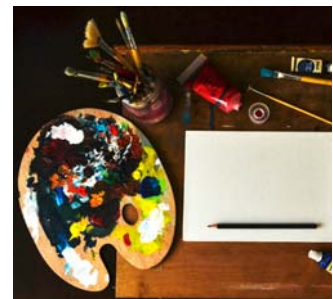


organisations that run those sessions.

Now that Ramayan and Mahabharata are back on TV, children, who are otherwise juggling books for tuition classes, can get a peek into history and mythology.

Several parents, including Bollywood celebrities, have also roped in their kids for Instagram and TikTok videos – which could also be just another way to keep them engaged. Actors Shilpa Shetty, Madhuri Dixit and Raveena Tandon often share videos, where they are seen dancing, playing and making merry with their little ones.

Common people are different. Many of them were posting videos of



Each of us who are self-introspecting in this time of crisis, will miss these 'Me time' — the prime gift from the cruelest months of our lives.

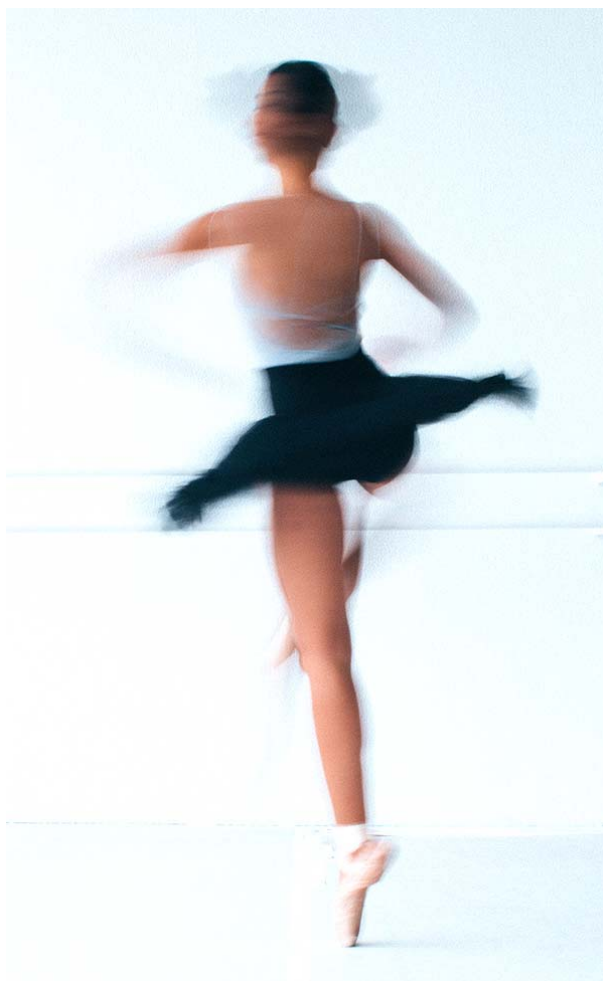
recitation and dance performances of their toddlers, which, goes without saying, are garnering more likes and views than those of adults.

An art teacher in Behala has been live-streaming classes for children who are out of school, inspiring them to get creative at home.

The Challenge Games Keep You Occupied

From whipping up a frothy cup of Dalgona Coffee, catching up on fitness challenges, and joining live Antakshari Challenges, the lockdown has given people an opportunity to bond with friends and families – albeit on a social media platform.

The #SafeHands Challenge, initiated by



Creative minds were at work at Australia's Sydney Observatory which has been offering a tour of the night sky for the Corona-stuck folks at home.

the World Health Organization to spread awareness on cleanliness to keep the Coronavirus at bay, was received well by people across the globe. Director-General WHO, Dr. Tedros Adhanom Ghebreyesus, after taking up the challenge, nominated many other celebrities across the globe. The challenge involves washing hands with alcohol-based sanitizer or soap for at least 20 seconds, posting a video of the same on social media and nominating three more people to join in.

Then came fitness games such as

#See10Do10Challenge,

#100SkippingChallenge,

#PlankChallenge,

#NoEquipmentWorkout, where people encourage others to stay healthy, and beat stress and anxiety.

Some other challenges that went viral on social media included 'Life Imitates Art' – in which a reputed museum asked home quarantined people to recreate a piece of art using people or objects readily available at home, and #UntilTomorrow – where one had to post his or embarrassing picture taken in the past. For some, it takes the boredom away or delays the onset of depression. It's like participating in one online challenge a day keeps your Shrink away.



When Cloud Is the Medium

Studies suggest that students were more participative during online classes, and attendance had also spiked. Several government and private institutes have arranged for online classes to ensure that students, especially those about to appear for board exams, do not fall behind schedule. In fact, much of India's education sector is going online, creating virtual learning infrastructure and radically transforming the way education has been offered for millennials.

Several tutorials are also available on YouTube and similar other platforms to help the teachers and the students adapt to the new reality. Several short-term or certificate courses on the Internet also allow people, especially youth, to learn new skills, pursue interests or advance their career.

Terribly Tiny Tales, for instance, has sought submissions from budding authors and

poets. Similar platforms are also available on Instagram and Twitter, where one can get exposure and feedback on their creations.

Online Soirees/ Webinars/ Virtual Gallery

People are leaving no stone unturned when it comes to meeting the audience online. Pop stars, including Coldplay frontman Chris Martin and country singer Keith Urban, have been live-streaming gigs to combat the boredom of self-isolation.

Virtual tours the famous paintings of the Louvre in Paris and the classic sculptures of the Vatican museum offered by the world's biggest galleries will make an art aficionado like you to forget that many public spaces have been shut. Creative minds were at work at Australia's Sydney Observatory which has been offering a tour of the night sky for the Corona-stuck folks at home.

Will the Trend Last?

Obviously not! As and when the lockdown gets lifted and Corona fears ebb away, people will start revisiting their old paths. For office worms, families and kids will take a backseat. For party goers, book reading will become the last option for their leisure hours. For club hoppers, terrace gardens will remain 'once-in-two-month' affair. But one thing is certain, each of us who are self-introspecting in this time of crisis, will miss these 'Me time' — the prime gift from the cruelest months of our lives.

[Author's Introduction: S Manna teaches print media studies at the School of Media, Communication and Fashion (SMCF) at the Kolkata-based Adamas University. He loves to interact with each student of a class across a day's session. As a self-made professional, he believes that challenges and tough times can only bring the best from a person.]



Adamas University Round Up

October 30, 2019

It was a great privilege to welcome and host Honourable Andrew Ford, the Consul-General of Australia in Kolkata, India at Adamas University. Andrew was welcomed by Prof. Samit Ray, the Chancellor of Adamas University. He had meetings and discussions with the leadership and professors of Adamas University concerning the roles and contributions of the Australian government in the development of education, business and cultural relations with India and specifically with West Bengal. The Consul-General highlighted that his visit to Adamas University symbolizes a new page of growing

favourable and constructive relations between the two great nations of Australia and India.

November 22 – November 24, 2019

The 18th Asian University President Forum (AUPF 2019) was hosted by Daffodil University in Dhaka in Bangladesh. The Forum saw 76 delegates from 40 universities and 13 countries from Asia and Europe. Among those present were founders, Chancellors, Vice Chancellors, Rectors, Presidents, Professors and other distinguished guests. Adamas University was represented in the Forum by Prof. Samit Ray, the Chancellor, and Dr. Parimal Chandra Biswas, the Dean of



Students Affairs and International Relations. Adamas University signed MoUs with Daffodil University and Petra Christian University in Indonesia.

November 29, 2019

Techjagran 2019, organized by the Department of Mechanical Engineering, was an initiative to infuse among the young innovative minds a desire to seek better technological solutions to the challenges posed by the industry and academia. The event aimed to provide a unique platform to the entire student fraternity of Adamas University to promote the seeding of ideas through a problem-solving competition cum exhibition of working models and prototypes.

December 2, 2019

Bengal Young Entrepreneurs' Summit was organized by Adamas University in association with Youth Aid Foundation, Waymark and development professionals. The event had around 50 participants from several institutes and NGOs, who pitched with their plans on a low investment business idea.

December 2 – December 6, 2019

Adamas University participated in the



Fourth General Meeting of the 'Tuning India' Project for capacity building in higher education, funded by the European Union Erasmus + Program.

December 6 and 7, 2019

The 2nd Global Summit on Education (GSE), organized by the Global Educators Initiative for Sustainable Transformation (GEIST) and Adamas University, witnessed a conglomeration of educators from across the globe, in a two-day learning carnival with a mission to share the best practices of pedagogy within and beyond the classroom among the educators and to network with other innovative thinkers on contemporary issues in education pertaining to professional development.

January 12, 2020

Adamas University also celebrated the 'National Youth Day' at the Adamas University Auditorium. Residential Students from different schools performed songs, recitations, dance and drama, related to Swami Vivekananda's thought and work.

January 22, 2020

In a glittering ceremony, Adamas University held its 3rd Convocation where

243 undergraduate and 63 post-graduate students received their degrees. In addition, 50 students of the School of Pharmaceutical Technology received their Diploma. Ruma Acharya, technocrat and philanthropist, was conferred with D.Sc. Honoris Causa. The Chief Guest during this solemn occasion was Arjun Malhotra, a well-know Indian entrepreneur, industrialist and philanthropist. He is the Co-founder of HCL Group and is presently the Chairman of Evolko Inc. at Santa Clara in USA. The Guest of Honour was Prof. Lallit Anand, Warren and Towneley Rohsenow Professor of Mechanical Engineering at the Massachusetts Institute of Technology (MIT).

January 23, 2020

Titled I-Cube, the Career Development Cell (CDC) of Adamas University held a day-long programme at the Convocation Centre of Adamas Knowledge City to celebrate the success of all the students, who have been successfully placed through the CDC, by felicitating former and present students.

January 24, 2020

On World Education Day, Adamas University was proud to receive the award

of The Best University in West Bengal at the World Leadership Awards 2019 conferred by World Education Congress.

February 4, 2020

Adamas University, in collaboration with Mahatma Gandhi National Council of Rural Education (MGNCRE), Department of Higher Education, MHRD, Government of India, organized a two-day Industry-Academia Meet cum Exhibition on Waste Management.

February 4, 2020

A Panel Discussion on Media, Literature and Society was organized at Kolkata Book Fair. Actor and activist Swara Bhaskar, the face of FM Radio in Kolkata Jimmy Tangree, Author Sreemoyee Piu Kundu, film Director Arnab. K. Middy and popular Bengali television and film actor Sayoni Ghosh participated.

February 13 – February 15, 2020

ADINOVA, the 3-day-long annual fest brought out unique creativities of the students through out-of-the-box contests and competitions such as #Strings (Solo Singing competition), Behind the Mask (Face Painting Competition), Creativo (Poetry Competition), The Benchmark Debate (Debate Competition), Nukkad





(Street Play Competition), Tell Tastic (Story Telling Competition), Envy (Fashion Show), Quizathon, Carousal (Film Making Competition), Prime (Photography Competition), Evoke (Dance Competition) etc. The first day of the event saw a soulful performance by Bangla Band Dohar followed by Canada's most popular Indian singer Parag Ray. The evening ended with strains of *Baul* music, performance by Arko Mukherjee and Satyaki Banerjee. Bollywood duo Palash and Palak Muchhal enthralled the students on the second day with some top Bollywood numbers which made the evening worth remembering. Last evening was reserved for Bengal's 1st rock band FOSSILS, whose high-octane performance made the event spectacular.

February 28, 2020

Adamas University, hosted Hackathon; an annual competitive event for engineering students conducted by Kolkata-based Sankalp Semiconductor Private Limited, a



HCL Technologies Company. The theme for this year's Hackathon was 'IoT based Solutions for Indian Eco-system'. Over 130 abstracts from different colleges across 11 states of India were received.

March 2, 2020

Adamas University, jointly with the South Asian Women in Media – SAWM, organized a Panel Discussion on 'Women in Climate Action: The Future and its Scope'. This event was supported by the British Deputy High Commission, Kolkata. His Excellency the British Deputy High Commissioner in Kolkata, Nicholas Low graced the event.

March 14, 2020

The Annual Sports Day was held with the usual zeal and fervour. The Chief Guest and Guests of Honour were Prakash Gangadhar, Coach Archery SAI, Rahamatulla Molla, International Athlete and Kamal Moitra, Secretary WB Athletic Association. A total of 11 events were held, where all the members of Adamas

University participated. An important feature of the Sports Day was felicitating 65 Adamas University students, who won laurels for Adamas University and are also state and national level players. The disciplines were cricket, football, volleyball, kabaddi, archery, swimming, shooting and athletics.

Sikshak Samman

A ceremony that Adamas University has been conducting for the past few years all over West Bengal has been taken out of Bengal to other states of Eastern India as well. This felicitation ceremony is held in recognition to outstanding contributions of teachers to the profession and their students. It recognizes and rewards teachers, who demonstrate instructional expertise, creativity and innovation in their classrooms; who make learning engaging, vibrant and relevant for students; and whose work and accomplishments set a standard of excellence for all teachers. Its purpose is to elevate the teaching profession, to motivate and inspire

teachers, to allow teachers to share best educational practices with their peers, and to enhance the reputation of teachers all over India.

#AdamasUniversityCares

In response to the global Covid-19 crisis, in the last week of March, Prof. Samit Ray, the Chancellor of Adamas University (AU), transferred Rs. 10 Lakhs to the CM Relief Fund, and offered the campus for quarantine centre. Adamas was the first university in the country to have made this offer for an isolation centre. As on today, close to a hundred persons are kept there, those suspected but not proven to be infected, and their food is also taken care thrice a day by AU. Alongside, Adamas University has quickly started online classes through Google Class and Zoom. It is to be noted that a history teacher, who shifted to Bankura to be with family during lockdown, went up on a tree in a low-network zone, to be connected with his students. This has been widely covered in the media.



From the Desk of the Executive Editor

The Last Word #WorldNext

The world ahead is surely going to be marked by two eras – Before Covid (BC) representing the time until the Covid-19 took the world by a storm, and After Covid (AC), the time after Covid-19 ravaged the world.

The world after Covid will have some distinct differences from the one we have grown up. This is surely a bigger crisis than anything else since the Great Depression. Covid-19 is a true pandemic for health and economy, and one that has struck almost every nation and every human being around.

First, from being an additional enabler in our lives, the digital technology will now be at the heart of most operations in the economy – from banking to education, from business to negotiations, from healthcare to



All businesses will look for long-term sustainability norms leading to cleaner non-fossil fuel energy, better food-habits, ethical garments, long-term medication and the likes.

communication and, from entertainment to relationships. Technology as a whole stands to gain immensely today and there will be decreasing barriers to adopting technology and increasing democratization of the same.

Second, public health, which has less than a trillion dollar investment globally with a gross economy size of \$80 trillion, will rise in size and significance and my guess is that it would be four times that of what it is today. It is a shame that India is below 2 per cent of its budget in public health. As a natural corollary, societal attitude to hygiene and sanitation will change for the better. Focus on biotech and pharma-tech is expected to increase as well.

Third, public education, which is less than \$1.5 trillion investment globally, will now grow to more than three times. The digital mode would

make education cheaper. Skilled manpower will be the need more than ever before. It is a matter of grave concern that India dedicates around three per cent of its budget in education. The need for use of technology will also expand in education, which now will move from the instructional to the experiential, calling for skill-centricity rather than degree-centric scholasticism.

Fourth, sustainability goals shall not just be pious desires but an ardent necessity for the survival of mankind. All businesses will look for long-term sustainability norms leading to cleaner non-fossil fuel energy, better food-habits, ethical garments, long-term medication and the likes. It is no wonder that crude oil costs is less than 10 dollars a barrel now and shall not go back to the earlier rates of 2019 soon.

Fifth, consumerism will shift towards an enlightened version in the form of reduced buying due to lower average purchasing power in a distressed economy and also conscious decisions. So, there can be a shift to veganism, along with less conspicuous demands for jewellery, fancy cars, and high cost branded accessories.

Sixth, savings at individual level will be a driver of development ahead, and growth shall not be defined by bottomless greedy consumerism as it has been for long now fuelled by an unviable debt trap, from individuals to societies. Since movements will reduce (including restrictions on global travel) and a cautious social distancing shall continue for long and thereby becoming a part of lifestyle for most, lesser consumerism and higher savings would be the natural consequences.

Seventh, the Western nations have

already committed Six per cent to 18 per cent of their annual GDPs to combat the current impasse and a total of \$8 trillion is being spent hence. But more is expected, for example, the mere One per cent allocation of GDP in India will not suffice in any way going ahead. Public spending will be the other driver of development, and will support various sections, from the marginalized farmers and migrant labourers to sick banks and enterprises.

Eighth, while technology-driven surveillance of the State is expected to rise in the short run, a new techno-driven human consciousness shall also bring in a new form of civil society activism and will hopefully make the state more responsive and responsible towards public good.

Ninth, a guaranteed basic minimum income for all citizens, and demands for fundamental rights to education, health and work are expected to rise in nations across the globe fuelled by experiences of the Covid times and evolving civil society consciousness. This can give rise to focus on governance, social sciences, personalized entertainment, art and culture as well.

Finally, a mixed economy with micro, small and medium enterprises, or in other words, the informal economy at large, shall engage the larger population and will prove to be the bulwark of development ahead. We might also see healthcare, technology and food and essentials producing companies to be stronger than ever before in the economy, many coming from MSMEs.

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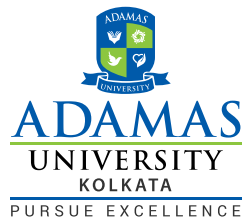


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