

DIGITAL TRANSFORMATION IN THE NEW WORLD ORDER POST COVID-19 PANDEMIC



CMA (Dr.) Paritosh Basu
Senior Professor
NMIMS School of Business Management
Mumbai

The Ghastly Disastrous Stranger

Digital evangelists around the world extensively wrote about the fourth industrial revolution during the last decade, some of which have been captured in previous nine such columns. This revolution started with cerebral applications of digital solutions for problems of a common man coupled with new business and revenue models for commercial enterprises. Many innovative applications of eight deep digital technologies influenced human behaviour and started crafting a new way of living life. The journey of many

technology players blissfully moved ahead from a startup to a 'soonicorn' to a unicorn.

When the fourth industrial revolution was about to take-off for its second orbital change with a quantum leap, came the disastrous and gutsy stranger called Covid-19 virus. The virus inflicted unprecedented pandemic with an overwhelming speed. It proved to be such tempestuously contagious that people across the world could not participate in economic activities for weeks and months. Epidemiologists suggested social distancing as the only solution till the vaccine is discovered and medicines are convincingly established for treatment.

Covid-19 virus has caused the cruellest humanitarian crisis in the history of mankind, the domino effect of which has already caused much harsher and perilous economic fallouts. Every single nation's economy has been pushed back and down. The devastation is such unprecedentedly ominous that most affected are the developed countries, and not even a single country has been spared.

However, this fear psychosis may not end even after winning over this virus. Scary narratives are deluging cyberspace about more such virus attacks. Environmentalists are of the view that such an outcome is mainly because nature has abysmally been abused and the distance between encroached space for human civilisation and habitats of wild birds and animals has mercilessly been diminished.

Consequences of all these are also being manifested by frequent natural disasters.

Research of ascension analysts reveals that mankind would have to continue living life in this type of fiercely natural, societal, and economic environment for decades to come. There is no option, therefore, but to find effective and efficient solutions with risks-enabled processes for reducing close physical participation of human beings. However, engagements and collaborations of human beings cannot completely be ruled out for societal purposes and economic activities. More and more digital transformation with applications of digitally operated devices, therefore, is the call of the day.

The New World Order

The old maxim that 'Future has no precedent' was perhaps not more aptly applicable earlier than what people are now experiencing. This is because Covid-19 virus have caught every single human being and government agency unaware. The forward path would continue to be affected by consequential fear psychosis of uncertainty and insecurity. This will most certainly impinge on both supply side and demand side of any economy. The first knee jerk reaction for survival would be process simplification, cost cutting, and manpower reduction. The need for digital transformation of operations would further be reinforced.

Nations will realise consequences of dependency on import for essentials and reassess how far they would prepare for self-sufficiency to meet any such crisis in future. Every country will also reassess their partners for toll manufacturing and foreign trade because this pandemic has unfolded self-centric strategies of certain nations. All these will affect global trade and redefine industrial landscape of many countries. Case in point is India becoming self-sufficient by quickly setting up medical PPE manufacturing facilities and re-establishing her as the friendliest and most reliable medicine factory of the world.

Digital platforms have suddenly occupied the centre stage of every interaction and collaboration. Usage of digital platforms for virtual meetings have increased five folds and for that many regulatory provisions had to be changed for granting permissions. Every organisation is further being forced to accentuate and speed up the process of digital transformation. In the new world order digital networks will become the sole or primary medium of customer engagement and FinTech will proliferate to touch every citizen's life every day.

Automated processes will be the primary driver of productivity. Processes for service delivery and supply chain management must have to be flexible with reduced human touchpoints, transparent, and stable. 'Stragility' (ability to create agile strategy), the new word coined by the author, will be the main mantra for success in the new world order post Covid-19 Pandemic where customer behaviour will change almost daily. eCommerce players are hurriedly establishing methods for contactless delivery.

In events of disastrous global financial crisis such as of 2008, sovereign governments could effectively help speedy

economic recovery by injecting money into their respective economies. But the present pandemic is catastrophically unique. Even after billions of dollars being allocated, people could hardly participate in economic activities during first about 45 days because of the horrific and life-threatening intensity of Covid-19 virus. Thereafter graded reopening of economic activities became an imperative to avoid fatalities as much as possible.

Simon Mair¹ is of the view that *"The responses to the Covid-19 pandemic are simply the amplification of the dynamic that drives other social and ecological crises: the prioritisation of one type of value over others. This dynamic has played a large part in driving global responses to Covid-19. So as responses to the virus evolve, how might our economic futures develop?"* Who can answer the questions with conviction and chart the forward path.?

Market players of developed economies such as North America and Europe were driven during the last about four decades by the following specific set of experiential belief based on broad consensus:

- *"The market is what delivers a good quality of life, so it must be protected.*
- *The market will always return to normal after short periods of crisis."*

Unfortunately, these are the countries which have been worst affected by this pandemic. Therefore, it may not be wrong to think that going ahead the new patterns of human behaviour will drive emergence of unique applications of digital technologies and decides. This in turn will bring in newer types of business and revenue models. The old maxim of 'Necessity is the mother of invention' will be added with 'Adversity is the surrogate mother of invention.' Example of this could be proliferation of 'Virtual Engagement', 'RPA and Robot Human Collaboration', 'Tele Health', 'Remote Learning', 'Take Home Examination', etc. So far technology has largely influenced human behaviour which will now develop in a diagonally reversed order of people's behaviour influencing digital technology.

Digital Lipstick to Digital Destination to Digital Journey

Till recently a large group of professionals across almost all sectors used to believe that digital transformation is meant for showing-off to stakeholders that the firm is with the wind and creating brand images. Actual and effective economic activities will have to be performed by human beings. Billions of dollars have thus been wasted without any differential value generation. This phenomenon in a lighter vein is known as 'Digital Lipstick' without meaning to be offensive to anyone and any gender group.

The second group of CXOs thought that digital transformation is only a destination for gaining competitive advantage. An entity should embark for once, implement all conceivable projects to reach the destination, where after the tasks are for maintenance and incremental changes. Covid-19 pandemic has forcefully brought a directional change in this thought process. Now digital transformation is an essential necessity for survival and revival. Going forward it will be

the way of life.

The current pandemic is really testing in a hard way how efficient remote working can be! Even organisations in most digitally transformed in sectors such as FinTech, IT&ITES are threatened to the bone about privacy, safety and security of their information, data base and operating systems. This is because their employees are accessing corporate systems using private devices and public network. Organisations which used to force its employees with a policy of 'Bring Your Own Device' (BYOD), has now experienced that this practice is seriously prone to cybersecurity breaches in a working from home (WFH) environment.

Certain organisations had WFH practices even before the present pandemic. But that was more as a measure of cost savings and matching working time of overseas clients. Hardly any organisation was there who had almost cent percent remote working practices. In large capital / labour intensive industry sectors none had any iota of thought about digital transformation of those employees who do not work from any desk because of being deployed in the field, e. g. mining, oil rigs, customer facing physical technology-based services, etc. Time is here and now to even connect them through digital platforms, redefine their work processes, establish remote collaboration and control with robotic process automation.

While responding to this extreme crisis by forcing employees for WFH and adopt all possible digital measures they can, almost all organisations have switched over to a survival mode. It has painfully been understood that some of the of the opensource software and digital platforms are severely prone to security risks. Most of the CXOs are realising in a hard way that digital transformation is neither 'Digital Lipstick' to beautify the entity, nor a destination. This crisis has changed people's mindsets and taught several lessons.

New Thoughts and Approaches

Covid-19 pandemic has forced people to think and behave with a new approach. Willam Grove² wrote in April 2020 that, *"Teams are learning to collaborate in new ways, companies are realizing they are able to function properly without having people in the office and leadership is seeing that they don't need to spend so much on office space. As a result, organizations will be forced to consider how to digitally transform in order to facilitate the needs of a mass, remote workforce."*

The present situation of 'Impossible to Travel' are forcing every marketing professional to believe that there is no option but digital access, virtual meeting, and adoption of immersive technologies such Augmented Reality and Virtual Reality for product and service marketing. Even the best of the companies engaged in BFSI, healthcare and other services, academic institutions etc. have been caught underprepared or unprepared.

Business professionals are convinced that upcoming unique elements and dimensions of volatility, uncertainty, complexity, and ambiguity; that will torment global and

country specific business ecosystems; would be more unique and unprecedented. Future will continue to be shrouded with uncertainties and challenge humanity much harder. This will in turn change human behaviour, and imperatives for survival and prosperity of business organisations.

In digitally divided *Bharat* and India, where broad band connectivity and uninterrupted services are still points of serious anxiety, engagement and collaboration through digital platforms is quite a challenge. Hence, government will have to consider telecommunication facilities more as a lifeline to meet essential necessities, like drinkable water, than a source of revenue by renting out radio spectrum. Telecom service providers will in turn have to be more serious in improving speed and quality of services while carrying data through their network than measure success by number of customers and average revenue per user (ARPU).

Again, technologies for safe and secured digital access for effective and risk free WFH practices will be the most wanted facility than access with mobility. In the post pandemic era technology for differentiation in quality of services rendered from distance will be the predominant consideration than risk and cost, Users will be ready to pay for what is digitally secured, environment friendly and safe for health and hygiene. Traditional digital platforms and storage facilities like cloud computing are increasingly being proved to be vulnerable as shockingly established by several hundred thousand attacks by cyber criminals between March to May 2020. Hence users will demand much more secured and invincible platforms.

"Hopefully this pandemic has shown people that you can be trapped at home, by no fault of your own, and you can still contribute," says Mik Scarlet, an expert in the field of access and inclusion for disabled people. *"In the same way that we're trying to plan our end of lockdown, can we also plan for the end of society being inaccessible?"*

Propagators of ascension analyses such as the author are, therefore, more convinced, particularly because of the experience from the first decade of Industry 4.0, that digital transformation will kick in a massive way and will continue to help mankind to successfully face every single challenge. Digital transformation should most certainly not be the 'Digital Lipstick' to beautify and entity nor a destination to be reached for once only. It will be an ongoing journey that will perhaps never end till human civilisation moves on. In such a business ecosystem technology-enabled operating systems and processes will usher in new business and revenue models, which is a silver line for every entrepreneurial mind.

Digital Transformation - Survive Revive and Sustain

The concept of 'Playing it safe now by lockdown' which is understandably to be right decision to prevent spread till enough facilities are in place to reduce fatalities, cannot be a permanent solution. Economic activities cannot be allowed to remain in a state of grinding halt for months. Simon Blackburn et.al are of the view that, *"If a silver lining can be found, it might be in the falling barriers to improvisation and experimentation that have emerged among customers,*

markets, regulators, and organizations..... In this world, some things will snap back to previous form, while others will be forever changed.”³.

The clarion call is for creative destruction. Those changes for ever will be brought by ‘destructive’ applications of digital technologies and devices. Covid-19 pandemic has not only shown the way but also compellingly and convincingly paved the way for digital transformation at a faster speed with agile and ‘innovative’ applications for solving problems of humanity. Some such applications have been discussed in the following lines, the glimpses of some of which has been seen even before the pandemic:

- Blockchain is more and more be recognised as the most safe and secured platform for citizen’s identity management, KYC for commercial activities, and business operations with point to point tracing, stoppage of infiltration of fake medicines, baby food, costly consumer durables, etc., besides immutability, transparency, data safety and security.
- Artificial intelligence and machine learning have proved to be the handiest tools to predict behaviour of the virus in different environmental conditions, intelligently recognising and tracing affected people and thus controlling its spread by identification. These digital tools have also helped exploring and experimenting with medicines, and methods of treatments which can save more lives in varying geo-physical conditions.
- Artificially intelligent robots are gradually taking over from nursing staff the noble task of serving patients in developed countries. Human-Robot collaboration will further improve quality and precision for medical surgery, and remote collaboration for improved diagnosis and medicinal treatment of patients.
- Artificially intelligent Internet of Thing (AIIoT), Internet of Body (IoB) and robots, digitally controlled drones, etc., supported by AI and ML, will redefine the processes for pre-empting and better handling of natural calamities, and health care services in crisis situations than by conventional methods. This has been supported by a joint study report WEF and PwC.
- Drones have started being used for sanitisation of vast areas, fighting fire with water guns, pest-killing operations in agricultural fields, surveillance operation at times of emergencies due to civil commotions and terror attacks.
- By now it has comprehensively been established that robotic process automation, intelligence applications of drones, humanoids and robots can reduce human interventions in manufacturing and logistics operations. Many applications of these have been seen in motor vehicle industry, warehousing and other manufacturing operations.
- Digital engagement with customers will be further enhanced through virtual meeting platforms, digitalisation of online sales channels and eCommerce platforms with applications of immersive technologies

such as AR, VR and MR. Supply-chain management will be rendered more transparent, speedy and risk-enabled with applications of Blockchain with added layers of artificial intelligence.

- Digital platforms for speedy screen sharing, immersive experience of virtual reality, video-streaming, interactive discussions with break-out groups, opinion polling, etc will bring paradigm shift in remote learning experience of students and teaching and training professionals.
- Last but not the least data privacy, cyber security and safety will be the predominant consideration while designing any solution. Existing and new applications will be fortified with shields of safety measures, powered by Blockchain, AI and IoTs, particularly in terms of access control, proactive hacking control abilities and information privacy.

Note: The author has purposely refrained from quoting many other applications of digital tools for typical management related activities like framing and implementation of business strategies, etc.

All these applications will proliferate with overwhelming speed in post Covid-19 pandemic era. Simon Balckburn³ et. al. further observed, “*As the COVID-19 crisis forces your customers, employees, and supply chains into digital channels and new ways of working, now is the time to ask yourself: What are the bold digital actions we’ve hesitated to pursue in the past, even as we’ve known they would eventually be required? Strange as it may seem, right now, in a moment of crisis, is precisely the time to boldly advance your digital agenda.*”

Clint Boulton,⁴ a senior CIO writes that “.... with 80 percent of revenue growth hinging on digital offerings and operations by 2022, IT leaders should continue transforming their operating models. Companies that continue to invest in their digital strategy, while balancing short-term efforts with long-term measures, will emerge from this pandemic more competitive. Sound models that incorporate the best people, processes and technologies remain critical in good times and bad.”

Paradigm Shift in Solution Designing

Digital transformation typically has three major goals, viz., unlocking productivity for employees with data driven cognitive intelligence and device enabled processes; improving the experience of a customer while interacting with a service provided through a digital platform; and cyber security. The ultimate objective is to improve business performance with higher profit and profitability. Success in all these ensures sustainable growth and prosperity.

The author is of the view that the horizon of digital scientists must be widened to serve the larger causes of humanity across all segments of society in all corners of the world. The concept of ‘Customer Relationship and Experience Management’ will have to be broadened. The

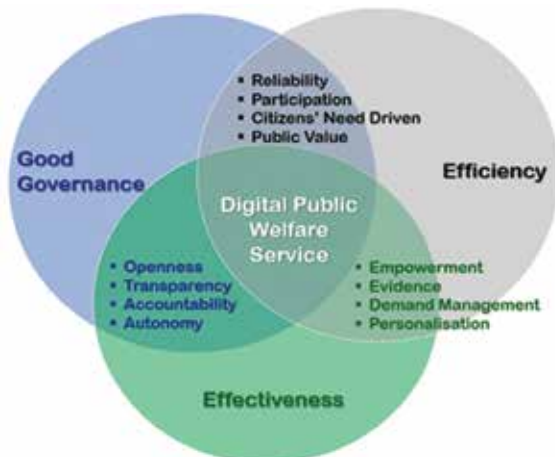
word Customer has to be replaced by 'Stakeholders'. This will bring into fold all human beings directly and indirectly connected with a business entity.

The following humane dimensions are again being recommended to be borne in mind while designing and implementing solutions for digital transformation.

- No technology has ethics, morality, compassion, and emotional intelligence. But technologists have. Success of digital transformation will depend on those humane qualities of solution builders leaving least scope for anyone to use the solution with any ulterior motive.
- Solution designing should be grounded on the humane foundation of universal altruism and sustainable shared values.
- Humanity is one and the world is its home. Hence there is a need of a global regulatory body for directional guidance, monitoring and overseeing applications of different digital technologies while each country should prescribe its country specific regulatory compliance requirements.
- Regulators must have more insight to control through oversight.

The perceived trend of many sovereign governments adopting digital solutions for rendering effective and efficient services to citizens will gain further momentum in post pandemic era. Readers are aware of many such measures initiated by Indian Government in last few months for public welfare. The case in point are Arogya Setu App and open invitation for developing a platform for virtual meetings so that Indians can avoid using similar platforms developed by other countries.

Digital platforms for governmental services must be designed with such considerations that bring people at the forefront. Primary considerations for such digital solutions should be citizens' need, simplicity, equality, independence in use, transparency, compliance with legal and regulatory provisions, cost effectiveness, multi-vernacular front end etc. It will be useful to reflect on the guidelines given by OECD⁵ to achieve these objectives. Those guidelines can briefly be narrated using the following graphics:



Request readers to decipher the graphic, which is otherwise self-explanatory, by combining two founding pillars at a time to appreciate the resultant impact noted in bullet points.

The present author recommends the following 'Ten Commandments for Digital Transformation with an all-pervasive approach for serving humanity:

- Humanity first,
- Redistribute power,
- Reduce complexities,
- Reimagine consumption,
- Go for creative destruction,
- Manage climate emergency,
- Be accountable without discrimination,
- Fix imbalance of humanity and technology,
- Enhance technology with universal altruism, and
- Let imagination, ethics, and safety lead digital transformation.

Conclusion

The objective of this paper is not spreading a feeling with any semblance of panic. Worries and anxieties never serve any purpose and solve any problem. Need of the hour is to find way outs for survival during the pandemic, revival of both society and economy, and thereafter re-establish confidence amongst all stakeholders of business. Moving ahead with all pervasive growth and prosperity are the other synonymous words for living life meaningfully and mindfully. Efforts of the author will be well served if all associated with digital transformation can serve humanity taking some thoughts from this paper. MA

Note: The author acknowledges contributions of Ms. Rajashree Basu for writing this paper.

Webliography

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Paritosh.Basu@sbm.nmims.edu