

DIGITAL TRANSFORMATION - STARTUP ECOSYSTEM AND PEOPLE CENTRIC SOLUTION DESIGNING



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Indian Startup Ecosystem

Indian startup ecosystem has presented so far twenty-seven Unicorns. But none of them, in true sense, have used any deep dive technology. NASSCOM in one of its recent reports¹ has indicated that circa 1,200 Indian startups are engaged in innovative solution designing with applications of deep technology such as AI, ML, IoT, Blockchain, AR and VR. Mr. Jayanth Kolla, founder of a deep tech research and advisory firm, is of the view that these technologies render designed solutions “*smart, intuitive, self-reliant, customised and most importantly, continuously improving,*” Those are the harbingers of ‘Digital Transformation 2.0’.

Interactions with many startups reveal that ‘Startupians’ in India suffer from fear psychosis of failing and burning cash. The Indian startup ecosystem, unlike in developed countries, hardly provides scope to make mistakes, not to speak of a free and independent environment with incentivisation of mistakes also. They are more driven by the kick of innovation and not ‘innovation’. Some of them are also driven by ‘Me Too Startup’ syndrome. An ‘innovative’ mind brings in the element of invention, i. e., something distinctively new with people-centric many-in-one solution design. Such unique products can cause ‘destruction’ (destructive disruption) and make competition irrelevant with unique products and the first mover’s advantage.

8 WH Principles of Solution Designing

In the second issue of this column design thinking has been written about. The author seeks readers’ indulgence to introduce his ‘8WH Principles’ that can help designing people centric solutions with unique features of ‘innovation’. This process involves finding answers to the following questions ahead of ever-emerging ground realities of dynamic domestic and international marketplaces:

- What are the latent and unique necessities of stakeholders, society and humanity at large?
- Which solutions are presently available and what gaps are there in meeting users’ present and unforeseen unique requirements?
- Who are the present service providers, target customers and what are their pain points, for which no remedy has been offered so far?
- When the solution for the identified unique problem(s) is to be delivered, updated and upscaled with a sustainable revenue model?
- Where are customers located, for what value and up to where the horizon of marketplace can be extended with or without any variation in solution design?
- Whose regulations are to be complied with, for which stakeholders, and what all risks are to be proactively

covered?

- Whom should the user contact in case of troubles faced while using the solution?
- Whether any better solution is being offered / prepared by competitors anywhere in the world with superior performance and unlimitable competitive advantages?
- How to minimise risks of value destructions, assess and track users' delight and ensure sustainability?

Technology does not have ethics, morality, compassion, emotional intelligence and value generation skills for a common man. Technologists have. Therefore, it is imperative for solution designers to ensure that imperatives for these human qualities are never compromised. They must not allow applications of such powerful digital tools with ulterior motives to harm humanity. The core principles of 'Digital Empathy'², tested with cognition, compassion, and emotion, must be maintained to enhance user experience and benefits for all.

It will be useful to quote Mr. Bernard Marr³, one of the top global influencers of digital technology. He says, "Since AI algorithms are built by humans, they can have built-in-bias by those who either intentionally or inadvertently introduce them into the algorithm. If AI algorithms are built with a bias or the data in the training sets they are given to learn from is biased, they will produce results that are biased. This reality could lead to unintended consequences like the ones we have seen with discriminatory recruiting algorithms and Microsoft's Twitter chatbot that became racist."

CXOs need to understand the difference between outstanding technologies, and organisational priority for alignment of those with its vision, mission, culture and strategies before implementing those in real life systems. Success will depend on analytically crafted change management with agile strategies. This author suggests 'RAGE Analysis' as the first step for making an organisation future ready with successful digital transformation. CXOs may conduct 'Required, Available, Gap and Essential' analysis before deployment of digital tools and platforms. This will help focussed attention with needful alignment of those and trained manpower for attaining organisational objectives in order of priority.

Digital Solutions for Common People

Acute lower respiratory infections and pneumonia kills about one million children every year worldwide. Unfortunately, about 5% of global population has access to higher level of treatment starting with X-Ray imaging. Scientists of John Hopkins School of Medicine⁵ have reinvented Stethoscope, the two centuries old instrument and symbol of medical treatment. They will soon successfully equip general physicians to diagnose such killer diseases more effectively through extensive use of AI and connecting a small digitally enabled tool to a smart phone. The process of diagnosis will no longer be expensive and time-consuming.

Kolkata traffic police⁴ could reduce road accidents and deaths by 34% and 30% from 2015 to 2,456 and 294 respectively in 2018 by using 3 Es, viz., education, engineering and enforcement through digital platforms. The department has its

central data storage server. Officials can now better perform analytics to study accident patterns. Road signals are more being centrally controlled and synchronised that allows better management by tracking traffic profile at different time slots. They also extensively use digital media for intensive awareness campaign and handle violators by sending notices, collecting fines and tracking progress through digital platforms.

In December 2018 the Municipal Corporation of the same city issued the birth certificate of a new-born baby through a Blockchain platform. This digital facility will be the simplest, cost effective, yet safe and secured method for identity management of a human being throughout his / her life.

One of the top ten strategic technology trends, as identified by Gartner⁵, is 'Human Augmentation'. Digital scientists will leverage technology to augment inherent physical and cognitive capabilities of a human being by implanting and / or hosting a digital device on his / her body, such as a wearable device. That digitally enabled item will be connected to a smart phone / device. Cognitive augmentation will help accessing information and utilising applications on traditional computer systems and the emerging multi-experience interface in smart spaces. Major benefits will be for aged people who will be able to lead a much better, safe and meaningful life. This will also improve processes for farmers engaged in animal husbandry. MA

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