Article No. 6

FUTURE READY WORKFORCE - A STRATEGIC PERSPECTIVE

Amitabh Jha
Dy. General Manager

Rishi Raj
Sr. Engineer, Corporate Learning & Development-HRDI, Noida, BHEL

Abstract: Today's business landscape is characterized by the acronym VUCAD[2] which stands for Volatile, Uncertain, Complex, Ambiguous and Digitally Disruptive. As a result, a really high proportion of organizations are fumbling. According to a study by growth strategy firm, Innosight- the average tenure of companies on the S&P 500 is forecast to shrink to 14 years by 2026 while it was 20 years in 1990 and 33 years in 1965.

Study of organizations which have undergone and going through downward slide reveals that workforce in these organizations typically exhibits either of the two approaches - 'Passive Approach' or 'Progeria Approach'.

Passive Approach is the situation in which the workforce fails to come out of their inertia and reinvent themselves amidst the fast-changing business environment and technological transformation. Progeria Approach, on the other hand, is the situation in which workforce or organizations with hyper-quick clock speed move too fast disregarding the organizational processes and thus collapse. This is a corporate parallel of a rare genetic condition in humans called Progeria, in which the patient suffers from an overactive biological clock thus inducing dramatic, rapid ageing and deterioration of the individual. On the same lines, workforces in organizations suffering from Progeria Approach get too overcharged and involve in products/technologies pre-maturely or too ahead of their time, thus leading to the collapse of a different kind.

While it is true that organizations must have the required speed to be nimble, agile and responsive, it is equally essential from organization's strategic perspective to create a delicate balance between 'focus' & 'alignment'. Here, we refer to 'focus' as clarity of the task, project, product & technologies to be worked upon by the organization. This 'focus' needs to be common and must be communicated to the entire workforce on a priority basis.   The 'alignment' refers to creating an ecosystem where employees are encouraged to question, discuss, debate and innovate. However, there is much understanding which goes into achieving the right focus and alignment in a workforce. A survey of some prominent Indian organizations reveals that adoption of Industry 4.0 is a classic example of the situation where the industries are being blinded by the speed and quantum of change it is bringing about. Due to this, the 'focus' and 'alignment' are not clear.

This paper shall deep dive into the theme of 'Future Ready Workforce' in a rapidly changing business landscapeInnovation which happens to be the buzz word today is a cusp of three elements – Desirability, Feasibility and Viability. The paper will explore how an organization can stimulate this process while keeping an eye on grooming workforce for unseen, unprecedented tomorrow. This paper will also talk about how organizations can focus & align their rate of learning and rate of adoption of new technology at a faster pace by using the Design Thinking paradigm & explore new ways to engage employees, encourage entrepreneurial mindset and innovative leadership style.

Jim Collins in his book 'How the Mighty Fall' writes – 'If a company as powerful and well positioned as Bank of America in the late 1970s can fall so far, so hard, so quickly, then any company can fall. If companies like Motorola and Circuit City- icons that had once served as paragons of excellence- can succumb to the downward forces of gravity, then no one is immune. If companies like Zenith and A&P, once the unquestioned champions in their fields, can plummet from great to irrelevant, then we should be wary about our own success. **Every institution is vulnerable, no matter how great.** No matter how much you have achieved, no matter how far you have gone, no matter how much you have garnered, you are vulnerable to decline. **There is no law of nature that the most powerful will inevitably remain at the top. Anyone can fall, and most eventually do.'**

Keywords: Future ready workforce, VUCAD, Passive Approach, Progeria Approach, Organization, People and Technology (OPT), SMAC.

In line with the AIMA Academic Conference Theme 2018 (Managing in the Age of Disruption: Future of Organizations), this paper looks into the theme of 'Future Ready Workforce' which is one of the sub-themes of this conference. The paper explores the future-ready workforce from a strategic perspective using Design Thinking framework, which is increasingly becoming crucial for the growth and survival of any organization. Based on the data collected from various primary & secondary sources the paper presents a framework of developing **Future Ready Workforce as interconnected gears at three levels: Organization, People and Technology (OPT).** Any attempt to build a 'future-proof organization' cannot happen in isolation – without touching these three inter-connected gears. *Workforce breathes & operates in a given context; hence it is essential to address all the related dimensions, more so in VUCA times.*
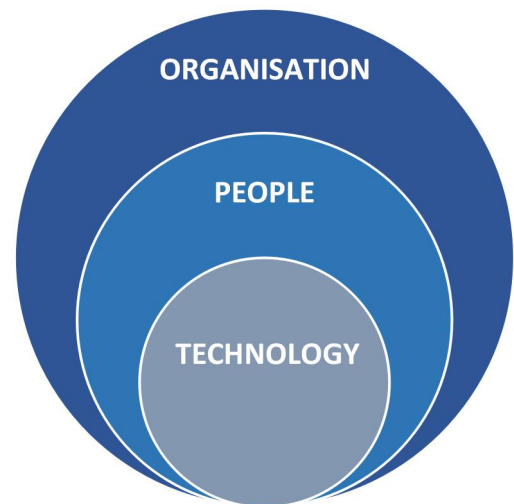
*Readiness Required
at Three Levels -OPT*

BACKGROUND STUDY OF THE BUSINESS LANDSCAPE

Disruption is the New Normal. The very term VUCA which used to signify the rapid scale of changes in the environment has undergone a change and is now referred to as **VUCAD^2** where D^2 refers to Digital Disruption.
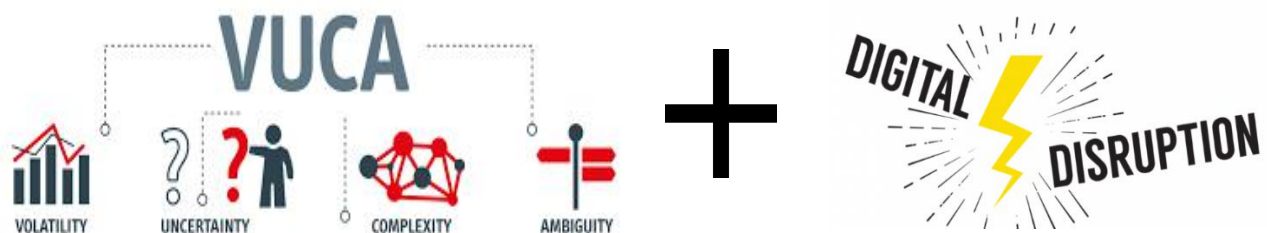
The advent of technologies such as the Internet of Things, Artificial Intelligence, SMAC (Social, Media, Cloud, Analytics), are not just making the organizations smarter & efficient but also bringing about a fundamental shift in business models & leadership requirements of organizations across the sectors. As a result, the fundamentals of business is being re-defined, and lifespan of organizations are continuously on decline.

The following studies validate the above-stated points in all the three areas of **OPT** – Organization, People & Technology:

1. The average tenure of companies on the S&P 500 will shrink to just 12 years by 2027 from the present 33 years in 1965. [1]

The analysis further reveals that at the current churn rate, about 50 per cent of S&P 500 companies will be replaced over the next ten years.

This picture of extreme volatility is further substantiated by the facts below.
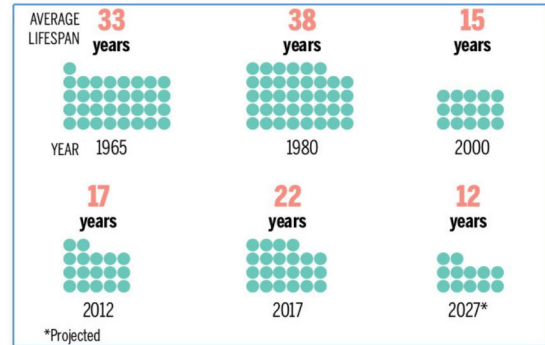
Shrinking Lifecycle of Organisations
Source: S&P 500 Ranking

2. Some examples of the changes in the relative ranking of the organizations as revealed from the 2018 Fortune 500 Ranking [2] are presented below:

- Digital companies like Google, Apple, Amazon, Microsoft have replaced positions held by traditional companies like General Electric, ExxonMobil and Pfizer. The four most valuable companies on the Fortune 500 list are all technology firms—Apple, Alphabet, Microsoft and Amazon.

- Startups are relying on unconventional business models like Uber, Airbnb and others using 'As a Service Model' are fast impacting traditional businesses.

- Organizations which are unable to keep pace with technological shifts affecting their businesses are fast becoming redundant. For Eg. Kodak, Nokia, Motorola, Sony etc. which have lost their positions in the recent past. Xerox has also taken the biggest plunge in this year's ranking.

3. A study by Deloitte titled "Culture and Engagement-The Naked Organization", 2015 [3] remarks that **Employee Engagement** and **Culture** issues exploded onto the scene, rising to become the No. 1 challenge around the world. The study further highlights the pointers given below which can be an essential piece in building the Future Ready Workforce:
   - Employees are now like customers; companies have to consider them volunteers, not just workers

> ➢ Leaders lack an understanding of and models for culture
> ➢ The new world of work changes the way we engage people
> ➢ Employees' motivations have changed

4.   In the same line, Studies reveal that organizations which have suffered downfall have typically exhibited either of these two kinds of approaches in managing the disruption:

a) **Passive Approach**- It is the situation in which the workforce fails to come out of their inertia and reinvent themselves amidst the fast-changing business environment and technological transformation. For example- Downfall of various organizations like Nokia, Motorola, Kodak which insulated them to the changing scenario in business.

b) **Progeria Approach**- This approach, on the other hand, is the situation in which workforce or organizations with hyper-quick clock speed move too fast disregarding the organizational processes and thus collapse. This is a corporate parallel of a rare genetic condition in humans called Progeria, in which the patient suffers from an overactive biological clock thus inducing dramatic, rapid ageing and deterioration of the individual.

A look at these trends reveal that the disruptions in the business landscape have mainly occurred as a result of the following factors:

✓   Digital Disruptions,
✓ Technological Transitions,
✓ The explosion of Start-ups using novel Business Models

At the base of these three dimensions mentioned above is the ***People Factor*-the most unique and defining dimensions** of any organization to survive and grow in modern times.

"To Survive in today's fast-changing market place, every business large or small, start-up or long established- must be capable of a continual process of transformation & renewal," writes Irving Wladawsky-Berger in an article published in CIO Journal[4]. This successful transformation and renewal are only possible with the help of proper alignment of the workforce with organization strategy & technological assimilation. It is essential to mention here that Technology which is successful in Company A maybe not so relevant for Company B hence contextual appreciation is essential.

Thus, in today's rapidly changing times, where tomorrow is not only blurred but completely unknown, the **only competitive advantage** which an organization can leverage is in understanding and investing in its most potent resource, i.e., People who will act as a fuel for driving Organizational Renewal & Technology adaptation & Innovation. How as an organization - we are making them future ready by re-looking existing

DRIVEN

DRIVE

Organization & Technology
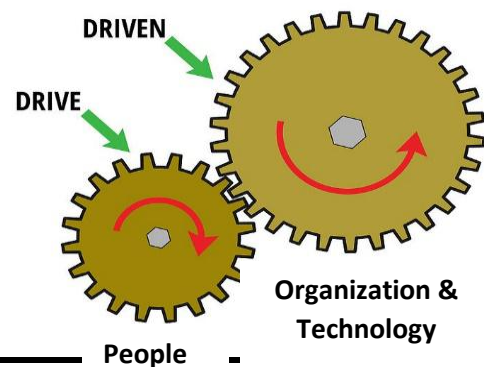
People

competency framework can be a vital link.

We are At Crossroads

Moving from **Global to Local Perspective**, we find a strong case of disruption in the country's Manufacturing sector. Adoption of Industry 4.0 is a classic example of the situation where the industries are being blinded by the speed and quantum of change.

Fostering growth in the Manufacturing sector has been one of the key focus areas of our Government. Make in India program of the Govt. launched by our Hon. Prime Minister in 2016 intends to make India a global manufacturing hub, by encouraging both multinational as well as domestic companies to manufacture their products within the country.
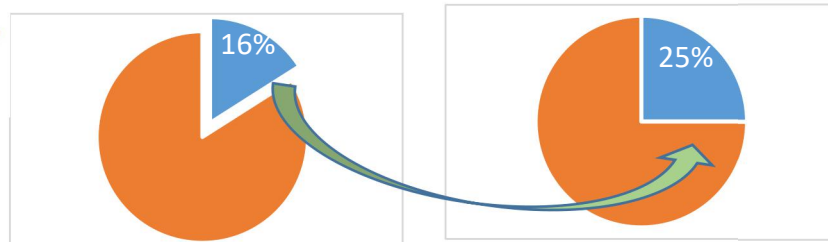
Through the Make in India Program, Government of India plans to Increase the Share of Manufacturing Sector in India's GDP from 16% in 2016 to 25% by 2025[5]

To make Manufacturing as a centrepiece of our national economy, we need to upgrade our Manufacturing Process to make it of global standards. The manufacturing sector, which was hitherto considered slow to change is passing through a significant disruption in the form of Industry 4.0. In simple terms, "Industry 4.0 is defined as a meeting of real and virtual worlds in manufacturing and involves the full integration of manufacturing technologies and systems to make a 'smart factory" [6].
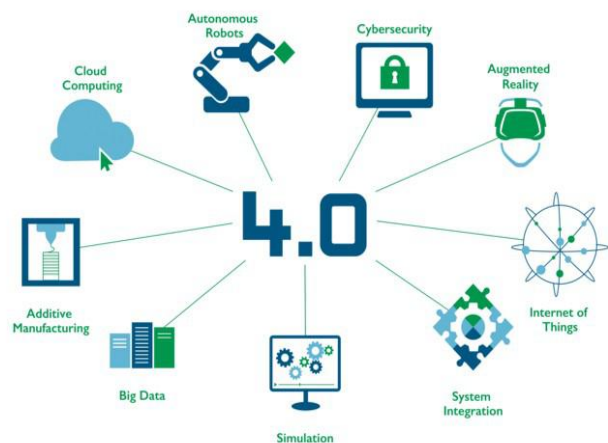
Technologies in Industry 4.0 (Source: Deloitte)

Technologies such as Artificial Intelligence, 3 D printing, Machine Learning, Advanced Robotics, etc. offer various benefits like productivity growth, superior product quality & better safety standards that are driving fast adoption of Industry 4.0 across geographies.

However, adoption of Industry 4.0 is a complex task as it disrupts the whole ecosystem of the organization. Implementing Industry 4.0 requires the networking of the entire value chain right from Product Design, Engineering, Manufacturing, Inventory Control, Logistics, Maintenance, etc. which makes it a truly challenging task.

➢ At the same time, a recent study [7] by PWC reveals that 9 out of 10 Industrial leaders in India are digitizing essential functions within their internal vertical operations processes and are focused on driving both revenue growth and operational efficiencies by adopting Industry 4.0. Hence, it becomes imperative to study the state of readiness of Indian industries in the adoption of Industry 4.0 and find solutions to the challenges being faced by the Industries.

➢ A whitepaper titled Skill Development for Industry 4.0 published by BRICS Skill Development Working Group [8] reveals that adoption of Industry 4.0 has been slow in India. This goes against the fact that India is already counted as one of the major hubs of IT industry which has a crucial role in the adoption of Industry 4.0.

➢ In the article, "Preparing India for a Fourth Industrial Revolution", TV Mohandas Pai & Shobha Mishra Ghosh [9] state that one of the prominent reasons for low adoption of Industry 4.0 in Indian economy is low readiness level of our workforce in adopting to Industry 4.0.


'Readiness' & 'Willingness' in the adoption of Industry 4.0 moving in Opposite Directions

This dichotomy of willingness and readiness is something which needs deep probing and understanding. Our study reveals that adoption of Industry 4.0 is a highly complex problem for the Organization due to the following factors:

a) Overwhelming quantum of Changes is required in various facets of Organization- Operations, Supply Chain, Production processes, HR, etc.

b) No clear cut points to initiate & end the adoption process - Even as Executives recognize the benefits of those technologies, Executives at most companies are bewildered by the vast array of technologies which are involved in adopting to Industry 4.0 & from where to begin and where to end.

c) Unique prescription for each organization- As Industry 4.0 involves re-imagining the entire business environment, each organization needs to evolve its own roadmap for the Industry 4.0 journey.

If we look at the above-expressed concerns from a macro perspective, adoption of Industry 4.0 broadly throws two challenges- **Finding solutions in the Chaos (Focus) and In-depth Understanding of the firm's Need & Requirement (Alignment) at all the three levels of Organization, People & Technology is the need of the hour.**
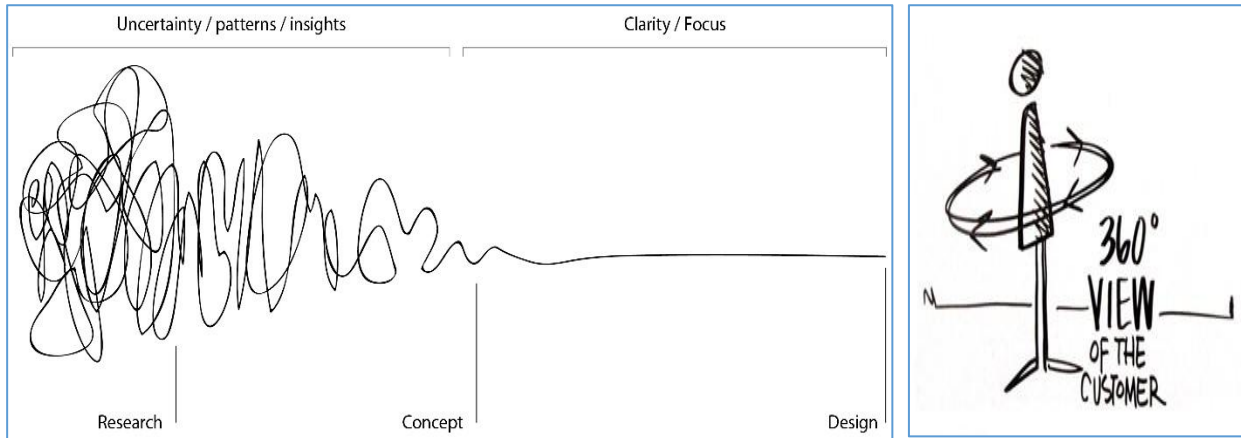
Challenges involved in the adoption of Industry 4.0- Chaos & Customer Centricity
Picture Source: IDEO

Design Applying Thinking Paradigm

Design thinking is a problem-solving methodology that is used to address highly ambiguous problems such as the one we have at hand, i.e., preparing for the adoption of Industry 4.0.

In terms of Design Thinking, such problems are referred to as 'wicked problems'. Horst Rittel (1930-1990), a design theorist and university professor, first coined the term "wicked problem" in 'Dilemmas in a General Theory of Planning' (1973)[10] and gave the characteristics of this type of problem depicted in the adjacent picture.

Design Thinking is a novel methodology which is increasingly being used by different organisations to come up with innovative solutions to their 'wicked problems'.

Traits of 'Wicked Problem'
Source: Freebalance Int. Steering Committee, USA

- Design Approach moves through five different stages – Empathy, Define, Ideate, Prioritize and Prototype & Test. These five different stages lead us to possible solutions, deeply rooted in the organizational challenge & context – be it human, technological, operational or strategic. It is essential to mention here that these five stages are not linear in nature, and there is continuous feedback & feedforward mechanism, so as to evolve towards a better solution.

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- Empathy Stage deals with developing a deep sense of empathy towards the people for whom we are trying to search/seek a solution. What kind of need, want, desire they have; how they think/feel/behave & what kind of solution will help in answering the expressed/unexpressed need.

- Define Stage helps in focusing on identifying Problem Statement based on the input gathered from stage one.

- The third stage (Ideate), as the name suggests, sparks off multiple ideas – with the help of various ideation techniques (like – brainstorming, brainwalking, post-it, how-might-we, now-how-wow matrix etc.).

- Next two stages (Prototype & Test) are about conceptualizing & developing a economical & straightforward model of the process/system/product which is closest to the solution. This stage brings 'life' to all the homework done so far. Thus, the whole process moves from divergence to convergence, generating multiple layers of possibilities and solutions to specific problems.

In simple words, Design Thinking helps to unravel the innovation sweet spot which is the cusp of a) Desirability, b) Feasibility and c) Viability. The critical point to note here is "desirability" which is the starting point.

When we look at the rapidly changing VUCD^2 scenario, the sliding curve of giant organizations, emerging pressure of Industry 4.0 for manufacturing organizations and divergence of willingness and readiness level for Workforce – Innovation and Design Thinking comes as an essential and most relevant & timely Strategic Intervention.
We applied Design Thinking (DT) framework to approach the Industry 4.0 problem in the following way:

Design Thinking
Source: IDEO
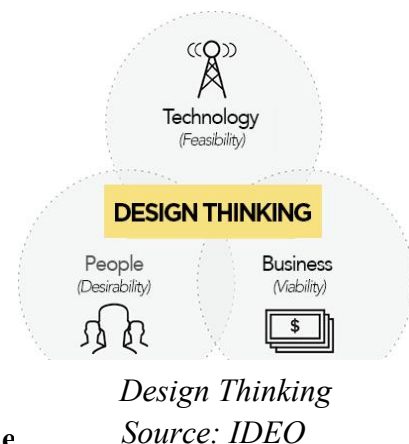
| 1st Stage Empathy | To understand the needs/requirements of our Industry colleagues, we interacted with a number of our industry colleagues from different sectors. Based on the interaction with the colleagues and after understanding the requirements of industry 4.0, we framed a discussion-instrument (placed in Annexure-1) to gather broader perspective and responses from more colleagues. |

The instrument has been developed/conceptualized to understand the readiness level of the industry on four key parameters- Strategy, Business Model, Leadership and People dimensions.

The Define stage in DT approach envisages asking HMW question, i.e., "How Might We". **'How Might We'** statement, which is an integral part of Design Spirit/Workshop helps the team to focus on a specific problem at a time and

2nd Stage Define

deep dive into it to search for possible/alternate solutions. The critical point here is – asking the most unique and specific and pointed question. The process (HMW) was initiated way back in the 70s by Proctor & Gamble[11] and popularized by design agency – IDEO.

As part of our deliberation, we looked at different HMWs, based on the data captured at Stage 1.
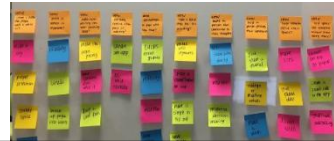
> HMW
> Develop a new set of competencies for different levels of the workforce
>
> HMW
> Select tools/technology relevant to our business
>
> HMW
> Redesign organization (structure/policy) for increased effectiveness
>
> HMW
> Define 'future-readiness' framework for the organization
>
> HMW
> Capture market-signals which may pose a challenge/threat to the

3rd Stage

Ideate

Using Design thinking framework on our theme, using the Ideation stage we have looked at different ideas on our three key strategic elements of Future Ready Workforce, i.e., Organisation, People & Technology. The ideation discussions around HMW statements have also re-affirmed the belief that future-ready workforce cannot and does not exist in isolation, instead, it has to move in sync with the technological adaptation & assimilation relevant for the organisation as well as organization's overall architecture, systems, policies & structure.

So, the discussion of Future Ready Workforce is converging on three action pointers: O-P-T, i.e., Organization, People & Technology.

'OPT FRAMEWORK' TO DEVELOP FUTURE READY WORKFORCE

The Ideation on the HMWs revealed the following actions on three levels of Organization, People & Technology (O-P-T) which are explained below.

a) **Organizational** – Our study reveals that at the Organizational Level, action

needs to be taken in three key domains to prepare a Future Ready workforce: Structure, Strategy & Culture. The Action pointers in each of the domain are presented in the table below.

Domain	Pointers for Action
Structure	Need for fluid and project-based empowered teams for quick decision-making, in place of rigid & hierarchal structure. Need for Close linkage & integration platforms between various Strategic Business Units and Functions of the organization. Need to involve key customers, suppliers, vendors and other vital stakeholders in the organization's policy-making process A well laid out mechanism for crowdsourcing of ideas at all levels (workers to senior management) and its implementation Need to have a cross-functional team of Market Intelligence, Innovation Team and Customer Interface departments working together - in every Strategic Business Unit
Strategy	The VUCAD^2 business environment is characterized by non-linear future. Thus, a need to have space for innovation and experimentation. Re-visit Customer Base, Product sourcing, Service Offerings, Distribution Channels Strategic thought & intervention is required not only in terms of technological innovation but also in the realm of business model innovation. Challenge Industry Assumptions and think of new/different ways of doing things For large organizations (working on multiple products/areas/geographies), the structure needs to be different as per market dynamics. *No common dress code!*
Culture	An unambiguous understanding of Organization's values which shall remain sacred in the fast-changing business environment. Values get transmitted by how we practice & not by how we preach. Hence, expressed behaviour on 'organization's values' is the differentiating factor. Embedding the spirit of questioning & lifelong learning as part of

	the organization's DNA
	Promoting Customer-centric culture at both the levels- internal customer centricity and external customer centricity
	Team & Project based Reward mechanism to promote the spirit of Collaboration in the organization
	Encouraging employees to think on new horizons thus encouraging experimentation & promoting independent thinking

b) People

Among all the different factors of production of the organization, it is the "People factor" which is most unique, unpredictable and irreplaceable (to a great extent). The price of a wrong person in a crucial/ not-so-crucial job is much more damaging than the price of the latest tool/ software.

The Person behind the tool/software and his/her ability to take 'right decision' in the interest of the organization (& not self) is the real success mantra of any organization.

Through our HMW (How Might We) exercise, we have detailed out focus on distinct competencies on different levels- Senior Management, Middle Management and Front Level employees. The fundamental belief while working it out has been 'One size does not fit all', and there is a need for the organizations to think on this direction on a periodic basis. Most of the organizations do not re-visit their competency levels on a defined periodicity — **the emerging market, cutthroat competition, non-linear future demands continuous revisiting and rethinking competency model framework also.**

➢ **Senior Management**- Role of Senior Management in the VUCA2 environment is to envision the Future, Sense the Weak Signals, spend time for organization's policy, structure, strategy and give direction & energy to the team & encourage innovation & Customer centricity. A leader defines the **INTENT** (where the organization is headed), **INITIATES** (a new process/idea/thinking), **INFLUENCES** (people within & outside organization) and **INVOLVES** everybody (in the interest of the organization and based on their talent/capability).

The Servant Leadership Model [12], fits appropriately as a guiding tool in generating discussion within organizations to sharpen leadership competency. The first building block of Design Thinking is EMPATHY – which primarily talks about 'sensing, touching, feeling, understanding' the issue/dilemma of user/customer/stakeholder.

Competencies of 'Servant Leadership' Model
Source: Centre for Servant Leadership (Greenleaf.org)

A servant-leader focuses predominantly on the growth and well-being of people and the communities to which they belong. Servant leadership is a timeless concept, which was coined by Robert K. Greenleaf in The Servant as Leader, an essay that he first published in 1970. This model places a primary focus on Empathy, Building Community and Listening as the main competencies of Leader which is one of the primary determinants of Engagement level.

➢ **Middle Management** – Middle Management is a crucial link to enable the Organization to meet its strategic goals. The role of this cadre in these times is to Innovate & Collaborate for new systems, processes, products & solutions.

Focus on Innovation requires us to place more focus on cross-functional learning. It is imperative to develop their competencies using T-Approach. This terminology apparently originated at McKinsey & Company in internal conversations about what kinds of consultants to hire [13]. One can be shaped either like an "I" (think narrow and tight) or a "T" (think extended). The I-shaped professional is highly versed in a specific area of expertise and learns by drilling more deeply into a particular field. The T-shaped person has broader skills and knowledge and learns by linking up different perspectives from different specialities.
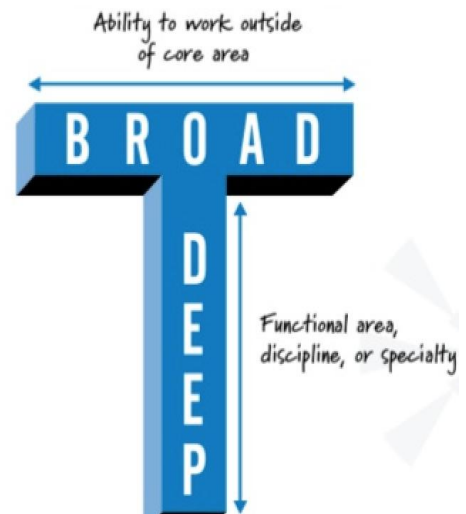
'T' Leadership Model

Source: McKinsey & Co.

Both types are essential in any organization. However, T people are better at fostering the diverse connections and conversations that bring exceptional ideas to the surface. Hence, grooming middle management on T-model is a way forward in the Industry 4.0 scenario.

➢ **Front Level Employees**: The ultimate delivery of the products, services depend on the skill, competency & engagement level of the front level workforce. As Industry 4.0 is going to disrupt the entire value chain, the operations at the ground level are going to be disrupted which will spark fear and feeling of uncertainty in the workers.

Ideation process of Design Thinking approach reveals that we need to use **FIT** approach for developing the Front Level employees.

- **F**- Focus on continuous Skill upgradation (to prepare the front level employees to adapt to new technologies and ward off the feeling of insecurity)
- **I** - Igniting Innovation Streak- Innovation in system, processes, products, service are going to be the way forward for organizations to survive & grow
- **T**- Technology- a savvy attitude so that the workforce is ready to think on their feet with regard to adaptation & assimilation of new/emerging technology

c) **Technology** – The third dimension in OPT framework is Technology. Technology has both tangible and intangible benefits and impacts the organization's operations in a big way. How an organization is able to make use the technology decides the fate & future of organizations. In the Industry 4.0 scenario, technology will play a vibrant role.

Gartner Hype Cycle [14] which is widely used to measure maturity and adoption of technologies and applications, cites two significant pitfalls of technology selection:
Separating hype from the real benefits of technology and Reducing the risk of technology investment decisions.

Our ideation on Technology revealed three critical dimensions which need to be deeply deliberated in Technology selection step:

| Customer Centricity | Creative Imitation | Collaboration |
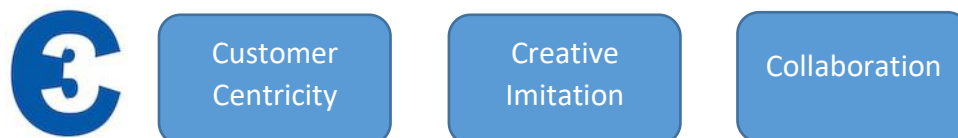
These three dimensions of technology need to be strengthened and streamlined by organizations:

- Customer Centric technology - An exact assessment of what Customers need is a must. There are umpteen examples in which Organisations trying to offer too futuristic technologies for which market is yet not ready to have met with failures. For Eg. Google Glass is a case in point.

- Creative Imitation to think of relevant use of existing technology- It was not Google who invented 'search engine technology' but Google could sense a vast potential in it and mastered this art and created a unique signature of its own.

- Collaboration with Customers-Competitors Suppliers- Creating a Boundary-less Organization in which competencies, expertise and skills can flow smoothly.

Roberto Verganti in his book 'Design Driven Innovation' [15] talks about two significant findings that have characterized management literature in the past decades on – Strategy of Design-Driven Innovation.

Design Driven Innovation by Roberto Verganti

- The first aspect is Radical Innovation. It is seen as a significant source of long term competitive advantage.
- The second finding is that people do not buy products but "meanings".
- Therefore, innovation has focused on two strategies – quantum leaps in product performance enabled by breakthrough technologies and improved product solutions enabled by better analysis of user's needs.
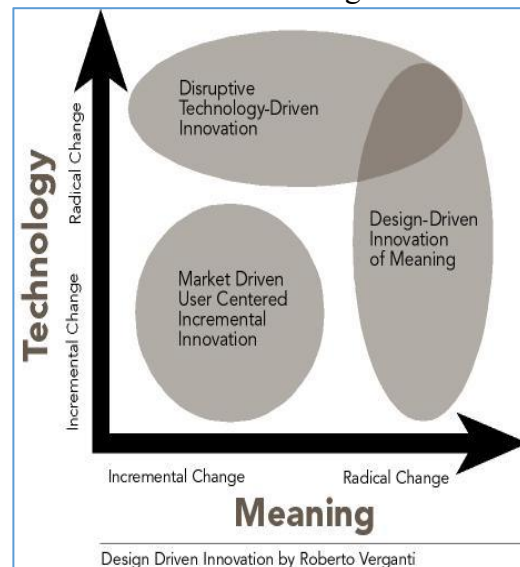
Artemide (an Italian company) works on creating a 'radical innovation of meaning'. It has not provided people with an improved interpretation of what they already mean by, and expect from, a lamp: a more beautiful object. Instead, the company has proposed a different and unexpected meaning: a light that makes you feel better. This meaning, unsolicited, was what people were actually waiting for.

The paper has touched upon the themes of Organization-People-Technology based on the first three stages of the Design Thinking framework (Empathy, Design, Ideate).

The next two stages of Prototyping & Testing will vary from Industry to Industry and the context in which an organization is working.

Hence, the Organization may like to use the above-mentioned approach, summarized in the table given below:

Organisation
- Structure
- Strategy
- Culture

People
- Sevant Leadership for Top Managers
- T-Approach for Middle Managers
- FIT Approach for Front level Employees

Technology
- Customer Centricity
- Collaboration with Customers-Competitors Suppliers
- Creative Imitation

Summary of Proposals at O-T-P Level

Conclusion

Heraclitus, a Greek philosopher, born in 544 BC said, *"No man ever steps in the same river twice, for it is not the same river and he is not the same man."* Organisations are experiencing what Heraclitus said centuries ago as the very nature and existence of the organization is in flux with continuous upheavals and unpredictability wrapped in emerging technologies and new business models.

AIMA Academic conference has provided a platform for practitioners and academicians to debate on a topic which is of considerable significance from a global perspective of Industry 4.0 as well as Make in India program of Govt. of India. This paper has made an attempt to look at preparing the future-ready workforce with a harmonious balance of focusing simultaneously on Organization, People & Technology- using Design Thinking framework.

The paper puts forward following five strategic pointers for taking ahead of the discussion regarding the Future Ready Workforce, in different organisations:

- 'Think Global, Act Local'

- 'Inject Customer Centricity as one of the Core Values of the Organization.'

- 'Ignite the flame of experimentation, innovation at grass root level in the organization.'

- 'Create an environment of Dialogue & Discussion Involve, Inspire & Engage People'

- 'Think & work on strategic tie-up with Customer-Competitor-Vendor-Supplier'

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The instrument to Understand Industry 4.0 Adoption Readiness							
Dimensions	**Sub-Dimension**		**Rating**				
For adoption of Industry 4.0, my Organization has…			**1**	**2**	**3**	**4**	**5**
Strategic Readiness	a)	**Implementation Roadmap**	Industry 4.0 is recognised but does not appear in the business strategy or list of organisational priorities	Industry 4.0 is included as part of business strategy but has yet not percolated down	Application & Implementation Roadmap of Industry 4.0 has been prepared at Departmental Level	Industry 4.0 strategy & objectives have been communicated to the individuals and is widely understood	Activities and Performance Indicators-KPIs/KRAs/BSC is measured in terms of Industry 4.0 objectives
	b)	**Risk Plan**	Risks in Industry 4.0 has not been identified or assessed	Risks identification process currently in the process	New risks identified and assessed but no mitigations planned	New risks identified, assessed and mitigations planned	Risk mitigations already placed in departmental procedures
	c)	**Investment Plan**	No discussion on Investment in Industry 4.0 going on	No ongoing review of cost/benefit analysis for Industry 4.0	No sizeable Industry 4.0 investment	Industry 4.0 investments in multiple business areas	Industry 4.0 investments across the entire business

Dimensions	Sub-Dimension		Rating				
		For adoption of Industry 4.0, my Organization has…	1	2	3	4	5
Leadership Readiness	a)	**Urgency/ Need**	Leadership does not recognise the benefits of Industry 4.0	Leadership is getting itself acquainted with Industry 4.0	Leadership recognises the financial benefits to be obtained through Industry 4 and are developing plans to invest	Plans for implementing Industry 4.0 have been developed and is being gently pursued	Leadership has widespread support for Industry 4 and are pursuing it with a sense of urgency
	b)	**Competence**	Adoption of Digital tech is still low	Use of digital tech is limited to administrative requirements	Digital tech is being widely used for process control but in silos in different departments/ functions	We have an enterprise level digital platform for integrated application	We use the digital and data-driven way of collecting data from customers and delivering personalised services/products
	c)	**Attitude**	Most of the decisions are taken by the Leadership & communicated down the line for implementation	Decisions are finalised in consultation with the senior colleagues	Leaders provide the space to question the understanding, assumptions and decisions	Alternative Perspectives, Questioning and Reasoning, are welcomed by the Leaders	Leaders provide the mandate and budget to test new solutions for continual improvement.

Dimensions	Sub-Dimension		Rating				
For adoption of Industry 4.0, my Organization has…			**1**	**2**	**3**	**4**	**5**
Business Model Readiness	a)	**'As a service' business model**	No awareness	Aware of concept but plans are still in the initial phase	High awareness and implementation plans are in development	Implementation of 'As a service' is underway	'As a service' has been implemented and is being offered to the customer
	b)	**Level of Automation**	Equipment maintained manually	A few machines alert operators of a maintenance issue which enables them to schedule a maintenance task manually	Some machines are self-diagnosing, automatically passing information to the maintenance scheduling system	Machines are generally self-diagnosing, and the maintenance schedule adjusts itself based on real-time data inputs	Data is also fetched from connected machines at vendor's & customer's end for prompt action
	c)	**Data-driven decisions**	Data from various sources are not yet captured	Data is captured but not widely analysed	Some data is analysed and features in the key business report to review performance	Most data is analysed, and the result is considered when making business decisions	All relevant data is analysed and informs business decisions.
Dimensions	**Sub-Dimension**		**Rating**				

For adoption of Industry 4.0, my Organization has…			1	2	3	4	5
People Readiness	a)	**Collaboration**	Each function/department works in silos	Level of interaction between departments is limited	Departments are open to cross-company collaboration	Vendors/Suppliers are taken into the loop in improvement initiatives	Departments are open to cross-company collaboration to drive improvements
	b)	**Knowledge sharing**	Company does not provide a structured platform to share knowledge	Knowledge sharing is not a structured, regular practice	Knowledge sharing is done for separating employees	Knowledge sharing is part of the organisation's culture	Knowledge sharing appears as one of the KPIs/KRAs of the Seniors
	c)	**Innovation Quotient**	Company does not have a mechanism to promote Innovation	The company promotes Innovation through its policies, but not really in practice	Innovations are promoted through time to time interventions like workshops, Quality circles, etc.	Employees are encouraged to take up projects related to Innovation & are provided necessary resources	Innovation is measured as one of the KPIs of employees