



# ROLE OF DIGITAL TRANSFORMATION IN SUSTAINABLE BUSINESS PRACTICES

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## ABSTRACT

Pandemic COVID-19 has accelerated the emergence & adoption of digital technology & digital transformation in all spheres of life. Techceleration is in full swing and organizations adopted new digital platforms and applications, automated and updated workflows. Technology is transforming leaps and bounds and so is the business of technology. Sustainability has always been the most universal concern for business organizations. The unification of digitalization and business practices posed a great challenge for everyone and the sustainability of all business practices. The Digital Masters like Nike and Asian paints are successful in terms of innovation, creativity, design, customer engagement & managing their internal operations. This paper has highlighted on two very important aspects of digital masters i.e., the digital capabilities & the leadership capabilities. The digital transformation has become significant for every organization to keep up with the competition & survive with agility and competency by combining technology, business and human capabilities. This paper shall be highlighting on the concept of Digital Master and its constituents like Digital capabilities and Leadership capabilities & few related sustainability issues. Data collection is based on primary & secondary data sources. The primary data has been collected from observation methods and interview techniques.

Keywords: Digital transformation, Digitization, Technology, Digital Master, Digital Capabilities, Leadership Capabilities, Industry 4.0

## I.Introduction

### 1.Digital transformation in Industry 4.0 era

In last two decades, the world has seen an unprecedented growth in information and communication technologies along with many challenges like uncertainty, keeping up with the market, using the right systems, changing patterns of skills and attitudes and changes in the market scenario. Digitalization, availability of right human capabilities and automation are game changers to meet these challenges on the way to Industry 4.0. Industry 4.0, is also referred as 4th industrial revolution and is characterized by the digitalization and integration of industrial manufacturing and logistics processes, the use of internet and smart objects i.e. machines and products and combining physical and the virtual worlds by the adoption of information and communications technology (ICT) leading to shorter operational cycle times and prompt delivery systems, marketing of new products and services, improved quality of product & service customization, customer involvement and customer loyalty. Industry 4.0 helps industries to introduce new emerging markets by coming up with unique and differentiation strategy or a new disruptive business model. One of the important elements of digital transformation is exercising strong leadership, the right human competency and digital capabilities leading to multiple job opportunities and improvement in job creation along with the required skill enhancement. There will also be considerable job losses for Employees with low skill levels. Now a days companies need to adopt more transparent and responsible approaches for the holistic development of economic growth, manpower skill-enhancement, social progress, equity, respect, and awareness of the environment (Fonseca, et al., 2016). Industry

4.0 creates higher value-added chains and changes the classical human and production organization systems, the organizational business models, impacting the overall society and the environment (ACATECH, 2013). The use of advanced analytics will improve predictive maintenance, avoid equipment failures and downtime. Human workers can be used for tasks where they are essential, such as innovation, creativity and product improvement and quality assurance. The available data can be used to create and deliver 'smart' products. Employees with low skill levels risk becoming replaceable unless they are retrained, but those with the right competencies such as creativity, decision-making skills, and technical and ICT expertise will have more autonomy and interesting work. New Business Models and envisioned potential benefits of Industry 4.0 The organizations that adopt the industry 4.0 can expect to significantly improve their present competitive position, increasing value creation and minimizing risks. The adoption of more efficient and faster production systems and of innovative technologies will allow shorter operations, delivery times and faster time to market of new products and services.

Companies by effective execution and implementation of industry 4.0 and digital transformation, significantly improve their competitive position, increase value-creation and minimize risks, with the adoption of more efficient & faster production systems and innovative technologies. Amongst the main envisaged benefits are shorter operations cycle times, quick delivery times, faster pace to market new products and services.

### 1.2 Pandemic COVID-19 & digital transformation

Digital transformation is more apparent since 2020, when the COVID -19 Pandemic took hold of the world. Organizations were having a great challenge of survival during that time due to the lockdown imposition all over the world. Pandemic COVID -19 has changed the face of human interactions and posed a serious threat on sustainability of the organizations. The biggest challenge in industry 4.0 and digitalized era is the sustainability of business organizations in terms of sustainable transformation, balancing the need to keep business in motion, creating new business opportunities and a better future for the people. Technology emerged as a key driver to ensure business continuity. Organizations implemented and executed new digital platforms, automated and updated workflows. COVID-19 brought a shock-transition and that's the world we live in and work now. Organizations looked up to up-skill, re-skill and digitally skill their employees from top to bottom with more resiliency to deal with the pace and uncertainty of market developments to characterize market realities, market volatility & conditions continue to be unpredictable. Supply chain disruption is ongoing. Organizations need to be the 'Digital Masters' to drive significantly higher level of profits, productivity and to better perform. Organizations need to deploy various digital platforms using automation and analytics for more employee engagements, and efficiencies. Organizations need to focus on external and internal customers' needs and alignment of people, businesses, infrastructure, processes, strategies to achieve organizational as well as individual goals for organization's sustainable development. There is need to hire and set-up a multi-disciplined team to solve various organization's problems with sophisticated solutions and multi-faceted situations. It requires more reliance on the part of human capital and human inputs. Nike and Asian Paints represent excellence in two important dimensions i.e., digital dimensions and leadership dimensions as part of digital mastery. Digitalized companies know where and how to invest, and their leaders remain continuously engrossed in guiding the company powerfully into the digital future and exploit all digital advantages to remain in superior competitive positions.

### 1.3 Digital capabilities & leadership capabilities

The two critical elements of digital mastery i.e., digital capabilities and leadership capabilities are associated with different type of performance. Digital master companies using digital technologies and leadership capabilities earn higher profits, productivity and performance but those are very rare and most of the firms fall short of digital mastery. If organizations really want to be digital masters, they will have to develop digital capabilities by setting up a clear vision and mission and work upon it. Because the real success comes when organizations focus on both the elements. Digital master companies excel build digital capabilities by rethinking and improving their business processes, engaging their customers by any means and bringing modifications in their business models and also building leadership capabilities to drive transformations. ( George Westermann et al., " Digital Transformation: A roadmap for Billion Dollar Organizations," white paper ,Capgemini Consulting and MIT Centre for Digital Business , Nov 17,2011, [www.capegemini-consulting.com/digital-trasnformation-a-road-map-for-billion-dollar-organizations](http://www.capegemini-consulting.com/digital-trasnformation-a-road-map-for-billion-dollar-organizations), 14-15). Digital masters outperform their peers. Amazon, Airbnb & Alibaba, Uber and many multi-national companies, through digital transformation maintain wide range of activities. WALMART, TARGET etc. switched to curb the side delivery with apps and automated messages letting people know when to pick up their products via digital means. Nespresso, Capital One Clarion Technologies, Hakuna Matata Solutions, Info Vision Labs, Rapid Acceleration Partners, Mphasis, Genpact, Kelton Tech, Cognizant are few

examples of digital transformation companies. With the rapid digitization due to COVID -19, Augmented Reality (AR) and Virtual Reality (VR) gained prominence. It is predicted that nearly 75% of the world's population would be routinely engaged with AR by 2025. Digital Master companies follow the strategy of harnessing the recent waves of innovations, creativity, communication technology and to continuously having a close watch on the dynamic market and its patterns. Digital Masters outperform their peers and competitors. Based on a survey it was found that digital masters are 26 % more profitable than their average industry competitor's and generate 9 % more revenue with their physical capacities and drive more efficiency. We now live in a big data world and digital master companies grow in two dimensions i.e., digital capabilities and leadership capabilities. Digital technology, AR and VR is now getting evolved in leading brands who are adopting technology and upgrading themselves. These companies use all these technologies to be closer to customers, employee empowerment and to transform their internal business processes. According to one report on digital mastery by Capgemini Research Institute "Digital Mastery – How organizations have progressed in their digital transformations processes over the past two years" digital masters are increasing the distance between themselves and their competitors and peers as in 2018, there was a 38-percentage point difference between digital masters and all other organizations. This gap rose to 48% in 2020. Over one-third (34%) of digital master's plan to increase their transformation spending in the next 12 months because of COVID-19, compared to 28% of all other organizations

#### 1.4 An urgent need to develop human-centric skills and 'Augmentation of workforce'

There is no doubt that future of work is shifting and technology advances are continuously taking place so changing business and industry functioning pattern as well. Augmentation of workforce refers where humans and machines work alongside each other. Human-centric or soft skills are based on human qualities and the knowledge that is gathered often through shared social experiences and interactions with others and these skills can only be learnt by human. According to a 2020 study by LinkedIn learning the most demanded soft skills are creativity, collaboration, adaptability and emotional intelligence. Solving complex problems require creative and critical thinking, cognitive reflection and the ability to work as a team. In any situations where outcome is not known in advance it takes a skilled human to analyse and explore the right avenues of questioning to go on and solve a problem. As per the changes in dynamic market environment we need to be adaptable, changing and evolving ourselves helps us to adapt with those shifts specially evidenced since COVID -19 hit and many businesses moved to online and remote working ways. A successful way to take our learned technical and soft skills together and use them all at the same time is the right winning approach. EQ skill is most needed in present and future workforce. In last two decade we have seen an unprecedented growth in information and communication technologies. Digital technology brought lot of transparency in government policy framework also. Digital technology helps in creating high paying jobs and enforcing organizations re-skill and digitally skill their workforce, unlearn and re-learn, re-building systems, processes, strategies. People in organizations are to be skilled in technology, design thinking, analytics, story-telling, and artificial intelligence, robotics as per the need of the hour. People at grass-root level and working at lower profile are also required to be trained, competent and multi-skilled in a variety of technological areas.

#### 1.5 Work from Home (WFH)

Though pandemic seems to be far away at the moment but still risks of occurrence is always there. Under all these crisis situations, organizations had no options except working from Home. As the COVID- 19 pandemic situations improved, hybrid working started functioning. For many companies working from home (WFH) has been the most significant innovation to come out of the pandemic. In 2020, pandemic covid -19 turned to be the best year for new innovative and creative ideas. Companies invested in many new technologies and also enabled their employee's leadership capabilities. A wide spread adoption of remote working during pandemic crisis led to further innovation in future. The companies discovered that working from home worked very well and people became more productive in terms of saving travel expenses, working from anywhere of the globe and could devote more time in work bringing positive and productive reports.

Though work from home is more challenging when it comes to time management and striking a balance between mental and physical wellbeing while performing household chores and workplace amicably and peacefully. One of the biggest advantages of work-from-home is the time saved in commuting both ways. Technological advancements support work from home in a significant way. From a macroeconomic perspective, lesser commuting means a There is an urgent need is to understand the true emotions of employees, their recognition



and wellbeing and growth and various kind of developments . In modern hectic lifestyle employee wants 4Cs i.e., convenience, comfort, commute-less and cost of living saving time, money and giving more attention on health and mental wellbeing. On the other hand, employers and managers wanted 4Cs like client's servicing, cybersecurity, collaboration and cubicles. Today Indian homes also has grown from an offline comfort zone to an automated smart home that can be monitored, controlled and scheduled. New technologies like Metaverse are revolutionizing the space as it is an extension of the real world into virtual reality. communication technologies.

### 1.6 Digital Masters: Gaining Digital advantage requires leadership

Digital Master firms are those firms who believe in top-down transformation. For these firms' technology is just an enabling tool. The real source of digital transformation is to bring changes in working processes and organizational culture. Digital master companies mainly focus on understanding customers behaviour and then using technologies to reach out to the customers. They use metrics and analytics to understand product usage to create personalized experience by harmonizing physical and digital experiences. Digital Master companies not only invest in technology but how these changes lead that makes these companies digital masters. Digital Master companies excel in two critical dimensions i.e. The what of technology (digital capabilities) and how of leading change (leadership capabilities). Each one of them play a very significant role. Digital transformation's goal is to use technology as a way to get more closer to customers and understanding their behaviour on a priority basis, employee empowerment and employee engagement and thus bring transformation in organizations processes and operations. It's very essential to identify the right business areas to invest to attain higher revenues Organizations and industries are required to re-think again by anticipating what future skills and talents are needed. Re-structured and re-defined work roles coupled with re-skilling of human resources is the need of the hour. It is important for companies to ensure that the workforce is rebooted by being smarter through virtual acclimatization and virtual relationship management. Committed leadership is a lever that turns technology into transformation. Regular manager and employee communication, provide space and virtual tools to allow employees to feel seen and heard. In addition to this, organizations are also investing in soft-skills development such as emotional intelligence, adaptability, and collaboration. Research shows that only 45% of organizations are accelerating sustainability investments, projects, and commitment and less than half of organizations (49%) are investing in emerging technologies (e.g., AI, blockchain) to tackle sustainability and climate change challenges

### 1.7 Discovery -Driven Digital transformation

This approach mainly looks deep into the problem and tries to solve & explore the various causes of the problem and giving rise to innovative solutions with the help of digital technology. Discovery driven planning (DDP). Digital transformation requires new ways of approaching strategy. A Discovery Driven approach exploits rich knowledge of the customers and tries to understand their preferences, broad operational scope, deep talent pools and a new business model. The DDP process translates that challenge into transparent and clear projects goals.

#### II.. Objective:

- To develop an understanding on digital transformation, digital technology and various discovery driven transformation approaches.
- To emphasize the urgent need to incorporate digitalization and digital transformation in various organizations considering technology as a key driver for sustainability of organizations and industries and building human capabilities.
- To discuss the concept of Digital Masters and its two important elements i.e. Digital capabilities and Leadership capabilities & its applications in various organization's activities.
- Embed purpose and sustainability as a core part of the business.

#### III.Research methodology

This paper aims to present and develop a deeper understanding on digital transformation and sustainable development in business organizations & other various aspects related to it as well as its application in various industries. This research paper is exploratory, descriptive and analytical in nature. Data collection is based on

primary and secondary data sources. Primary data has been collected from observation methods and interview techniques.

#### IV. Discussions and Analysis

Digital transformation especially post-covid helping to address all social, environmental, and economic challenges all across the globe. Successful companies should always have a clear-cut vision and they should work towards it by finding new opportunities to digitalize problematic processes and their core operations, new metrics to use and new business models to introduce and to innovate new strategies to outperform their competitors. Digital transformation is the process of using the digital technology to fix various problems of the organizations by exploiting the rich knowledge of the customers and utilizing the brain and potential of deep talent pools existing in the company. There was a boundary between traditional companies and markets but now digital transformation has changed everything by making it possible to use markets for lot of work that once was done within the firms. Alibaba and Amazon outsource many functions like selection of suppliers, negotiating prices, payments managements online via UPI and other ways. Digital transformations has also cut out intermediaries and helped businesses more profitable.

Demonetization announced in India in 2016 has shifted people from physical mode of banking operations to digital mode and today about 80% of people in India use digital/cashless banking processes. Digital technology is not only the digitalization's of communications but an entire plethora of new processes and instruments. Maintenance of all the Governmental and personal records from physical form to digital mode have amounted to saving of tons of paper and other resources and saved the environment eloquently. In case of remote working, companies moved 40 times more quickly than they thought possible before the pandemic. Before then, respondents say it would have taken more than a year to implement the level of remote working that took place during the crisis. In actuality, it took an average of 11 days to implement a workable solution, and nearly all of the companies have stood up workable solutions within a few months. Organizations and industries are required to adapt to the dizzying pace of change in technology innovation and business model disruptions, rising expectations of markets, employees, and customers. The pace of technology innovation and digital disruption has only quickened, exacerbated by the COVID-19 pandemic forcing large organizations in all sectors to assess their digital transformation strategies. In last many years & specially during and post COVID-19, digital disruption took place at its maximum level and shopping trends of the consumes got completely changed from physical platform to online shopping activities. Libraries now are digital as compared to physical in the past Books in the past were in the physical form where students had to carry a heavy load of heavier books, but today people only subscribe to the online edition and get what they want from different sources. Now a days. Digital transformation has also taken place in banking systems. we do not need to visit our bank for anything, and by simply clicking of a mouse from our desktop computers, entire banking process could be handled as per our requirement and comfort. Mobile banking has further added to making the life simple and easy. Green banking, digital banking and carbon trading are the concepts of digital/information age. Today, people talk about ESG norms and standards where companies and businesses are being compelled to adhere to environmental, social and governance efficiency are the outcome of digitization of business operations.

Today, we hear of driverless cars, trains, pilotless planes, flying cars, robots etc. all are further going to revolutionize mechanical operations digitally and making human life more thrilling and fuller of adventures and joy. With the advent of internet on January 01, 1983, the digital developments have grown up leaps and bounds. Some studies observe, the main cause of growth of digitization is booming technology, constant development of internet, mobile applications and technologies based upon machine learning, artificial intelligence (AI).

So, business world has realized this fact very well that to remain relevant and competitive in the market digitization of every aspect of business is must. Digitalization of business started very early but its power was realized during pandemic era. As digitalization improved productivity, improved customer experience, increased resiliency, prompt decision making and competitive advantage and creates a win-win situation for all the parties: customers, employees and employers (Kaushik & Guleria, 2020). Digital Business Transformation (DBT) is a process of reinventing and reengineering business operations to capture the full potential of information technology across the supply chain management, communication, social networking, collaboration, content management, and access to analytics and also staff and customer satisfaction.

#### V. Recommendation

A wide spread adoption of remote working during pandemic crisis led to further innovation in future. The companies discovered that working from home worked very well and people became more productive in terms

of saving travel expenses, working from anywhere of the globe and could devote more time in work bringing positive and productive reports.

The digital transformation has become significant for every organization to keep up with the competition & survive with agility and competency by combining technology, business and human capabilities. So, organizations need to digitalize their processes, and bring forth modifications and transform digitally their organizations processes, strategies and emphasize on digital skilling.

- 1) In last two decades, the world has seen an unprecedented growth in information and communication technologies along with many challenges i.e. uncertainty, keeping up with the market, using the right systems, changing patterns of skills and attitudes and changes in the market scenario. Digitalization, availability of right human capabilities and automation are game changers to meet these challenges on the way to Industry 4.0 so digitalization and integration of industrial manufacturing and logistics processes is must. In digital transformation processes, the use of internet and smart objects i.e., machines and products and combining physical and the virtual worlds by the adoption of information and communications technology (ICT) is recommended leading to shorter operational cycle times and prompt delivery systems, marketing of new products and services, improved quality of product & service customization, customer involvement and customer loyalty.
- 2) digital transformation is must now a days for all sectors as it is exercising strong leadership, the right human competency and digital capabilities leading to multiple job opportunities and improvement in job creation along with the required skill enhancement. There will also be considerable job losses for Employees with low skill levels. Now a days companies need to adopt more transparent and responsible approaches for the holistic development of economic growth, manpower skill-enhancement, social progress, equity, respect, and awareness of the environment 6) The use of advanced analytics will improve predictive maintenance, avoid equipment failures and downtime. Human workers can be used for bringing innovative ideas, creativity and product improvement and quality assurance.
- 3) The available data can be used to create and deliver 'smart' products. Employees with low skill levels risk becoming replaceable unless they are retrained, but those with the right competencies such as creativity, decision-making skills, and technical and ICT expertise. Companies by effective execution and implementation of industry 4.0 and digital transformation, significantly improve their competitive position, increase value-creation and minimize risks, with the adoption of more efficient & faster production systems and innovative technologies. Amongst the main envisaged benefits are shorter operations cycle times, quick delivery times, faster pace to market new products and services.
- 4) Organizations need to up-skill, re-skill and digitally skill their employees from top to bottom with more resiliency to deal with the pace and uncertainty of market developments to characterize market realities, market volatility & conditions continue to be unpredictable. Organizations need to be the 'Digital Masters' to drive significantly higher level of profits, productivity and to better perform. Organizations need to deploy various digital platforms using automation and analytics for more employee engagements, and efficiencies.
- 5) If organizations really want to be digital masters, they will have to develop digital capabilities by setting up a clear vision and mission and work upon it. Because the real success comes when organizations focus on both the elements. Digital master companies excel build digital capabilities by rethinking and improving their business processes, engaging their customers by any means and bringing modifications in their business models and also building leadership capabilities to drive transformations. As per the changes in dynamic market environment we need to be adaptable, changing and evolving ourselves helps us to adapt with those shifts specially evidenced since COVID -19 hit and many businesses moved to online and remote working ways. A successful way to take our learned technical and soft skills together and use them all at the same time is the right winning approach. EQ skill is most needed in present and future workforce.
- 6) wide spread adoption of remote working during pandemic crisis led to further innovations in future. The companies discovered that working from home (WFH) and hybrid working worked very well and people became more productive in terms of saving travel expenses, working from anywhere of the globe and could devote more time in work bringing positive and productive reports.



## VI. Conclusion

VII. Digital transformation helps in disseminating information to anyone and that can be used for many purposes enabling individuals and communities to fully exercise their rights and take the advantage of public programs. So, data and information as a source from digitalization related to all fields, administration, commerce, education, finance, health, tourism, and technology used in shaping our dreams helping us in making some useful decisions. A wide spread adoption of remote working during pandemic crisis led to further innovation in future. Digital transformation is now essential for business can survive and growth. Without effective digitization, no business can survive let alone thrive in the future. Digital transformation includes automation, artificial intelligence, and machine learning is the future so the companies those have adopted early technology shall reap the benefit of it in future. The companies discovered that working from home (WFH) and Hybrid working worked very well. DT is the field in which the academic literature is most interested, but it still requires a deeper definition of the concept, a better understanding of the requirements, but also a strategic orientation in the long run.

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I acknowledge that this research paper has not been previously published and is not under consideration for publication elsewhere; and further, that if accepted, it will not be published elsewhere. I also acknowledge that no funding has been done for this research work. And no conflict of interest is there while submitting this paper has been found.

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