

e-ISSN: 2319-8753 | p-ISSN: 2347-6710

TEDIA

International Journal of Innovative Research in SCIENCE | ENGINEERING | TECHNOLOGY

# INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

Volume 11, Issue 6, June 2022

INTERNATIONAL STANDARD SERIAL NUMBER INDIA

### Impact Factor: 8.118

9940 572 462

6381 907 438

 $\bigcirc$ 



| e-ISSN: 2319-8753, p-ISSN: 2320-6710| <u>www.ijirset.com</u> | Impact Factor: 8.118|

Volume 11, Issue 6, June 2022

DOI:10.15680/IJIRSET.2022.1106123

## An Effort to Enable Continue Sustainability with Digital Transformation in an Organization

Patange Vidyut Chandra<sup>1</sup>, Hitesh Sai Patange<sup>2</sup>

Founder and CEO, SRH Management Consultants and Trainers, Malkajgiri, Hyderabad, India<sup>1</sup>

U.G. Student, Department of Mechanical Engineering, IIT Ropar, Rup Nagar, Punjab, India<sup>2</sup>

**ABSTRACT**: Many companies are feeling heat to manage drastic change in working environment at 360 degree to mitigate risks in their supply chain from customers, investors and regulators.

Time has come make way for digital transformation, businesses are making an extra effort to adapt to the "new normal" to stay competitive with limited on-the-ground impact, Tasted lockdown and disruptions in 2022, now executives top prioritize is to change rules of entire existing battleground with massive changes adopting innovative key ways to its entire supply chain cloud platforms for digital transformation for developing a systems to manage right data with business/ artificial intelligence, so that different functional units within an organization can translate raw data into insights across various touch points

**KEYWORDS**: Digital Transformation, Systems, Change Management, Digital Platform, Digital Systems. Digital organization.

#### I.INTRODUCTION

While many organizations' immediate efforts is to scrutiny existing systems and methodology mitigation on disruptions to ensure growth strategies, with economies as 64% of CFOs believe that an Environmental, Social, and Governance (ESG) program can improve their company's financial performance.

A serious efforts should be given to balance costs against services provided both on and offline due to supply chain volatility, its sustainability standards manageable with a high-level digitalization and data management, instead of being bottlenecked in daily based operational way existing methodology.

The need of the hour is to re-develop an organization's digital landscape. Companies will have to reinvent their operations through the entire lifecycle, starting from customer acquisition and operations, to post-sales service and customer service: through embedded intelligence, supply chain cloud platforms leverage smart business rules to optimize around return time windows or alternative carriers across the repair and replacement flow management

Paper is organized as follows. Section II describes experts inputs Section III terms and definitions, Section IV vision of organization 2022, Section V survey and analysis, Section VI Modelling for Digital Transformation, Section VII implementation of digital transformation, Section VIII benefit of digital transformation, Section IX challenges of digital transformation, Section X presents conclusion, Section XI reference

#### II. LITRATURE

A meta-review by Blume et al. (2010) found that training transfer is positively related to cognitive ability, conscientiousness, motivation, and a supportive work environment, while factors such as motivation and work environment had a stronger relationship to transfer based on the focus of training (e.g., leadership development versus computer software training).



#### | e-ISSN: 2319-8753, p-ISSN: 2320-6710| <u>www.ijirset.com</u> | Impact Factor: 8.118|

#### Volume 11, Issue 6, June 2022

#### DOI:10.15680/IJIRSET.2022.1106123

In the face of technological change and digital transformation, it is essential to consider the adverse impacts of technology on work-related stress and wellbeing since these will have bearing on employee performance and job satisfaction. In general, stress is often found to be associated with lower levels of performance (Kazmi et al., 2008).

MNEs are faced with contradictory forces in which digital transformation requires investment and a standardized global approach, while improving local resilience and tailoring sustainability initiatives may require delegating power and inviting local decision-making. Geopolitical tensions further complicate the organizational context as companies decouple value chains and build-out their "China strategy", even at the cost of redundancies and higher costs (Delios et al., 2021). By integrating new technologies into strategic processes, digital transformation aims to change business operations, processes, and services (Matt et al., 2015; Hess et al., 2016). In turn, these new digital capabilities can improve performance and expand products, services and customer bases (Westerman et al., 2014; Verhoef et al., 2019), leading to increased sales and profits (Warner and Wäger, 2019). There is consensus that industry-leaders in innovation and digital transformation have a greater competitive advantage and can attract a wider range of customers and employees (Berman, 2012; Chanias et al., 2019). Moreover, organizations that are more responsive to market trends and can adapt quickly to customer demands will also have the "first choice of talent, partners and resources" (Berman, 2012, p. 22). Indeed, competing for skilled employees is often cited as a key challenge to industry and workforce digital transformation (Karacay, 2018).

#### **III TERMS** AND DEFINITION

"Digital transformation" refers to using technology to transform your operations to ensure that you can meet the needs of customer along with all stakeholders throughout journey of supply chain.

Also another prospects says Digital transformation or digitisation is defined as the use of digital technologies in a well thought out manner that simplifies and speeds up the company's operations (from the business model to the in-house processes). Digitising a business will enable a company to enhance customer experience, gain a competitive advantage and increase revenue.

What does it look like in practice? If organization is offering any kind of digital experience to constituents (self-service application information or live chats on your website, automated recruiting email journeys or online platforms where students can build community), digital transformation is already underway in many organization.

#### IV. VISION 2022 FOR ORGANIZATION OF RESOURCES

Digital transformation is no longer just a buzzword. It's a necessary disruption that nearly every business must embrace, the goal of forward-thinking enterprises is to build a foundation that can quickly respond and adapt, no matter where the digital wave takes us next.

Understanding how employees experience workplace culture is helpful in creating a culture workers want to be a part of. An ideal workplace culture:

- o Flexible
- o Inclusive
- o Supportive
- o Collaborative
- Caring

Also from customer angle understanding and contextualizing the behaviours of connected customers via existing network can be a formidable roadblock to digital transformation. also the vendors and supplier who are in lean system with real time delivery find very difficult to match people and process to act with new architectural structure and risk of security to data is ever increasing with new mode to communication arrival to information need security built in from security aspect. Online gave very good opportunity to customer as well as organization to create new solutions to speed up growth for our customers by improving end-to-end online shopping experiences.



| e-ISSN: 2319-8753, p-ISSN: 2320-6710| <u>www.ijirset.com</u> | Impact Factor: 8.118|

Volume 11, Issue 6, June 2022

#### DOI:10.15680/IJIRSET.2022.1106123

The process need clear matching the new vision with business process re engineering to play real working platform in cyber space, as past implemented process have no value to organization not ready to go change management with new learning and unlearning things for survival.

	тр	CRM/DMP operator	Data analysis company	Digital marketing company	Social media/ listening agencies	New retail consult ancy
Platform operation	~					
Platform marketing (for example, in-platform media solutions, traffic generation)	~	~	1	~		
Digital marketing, such as content marketing, KOL development				~	~	
Online member management (for example, ECRM)	~	✓	1			
Platform data analysis (for example, databank)	~	×	×			
New retail capabilities (for example, smart store setup, O2O campaign)				1		~

#### V. SURVEY & ANALYSIS

✓ Primary service areas ✓ Secondary service areas

Notes: TP is Tmall Partner. CRM is customer relationship management. DMP is data management platform. KOL is key opinion leader. ECRM is electronic customer relationship management. O2O is online to offline. Source: A.T. Kearney analysis

#### Fig 1 Survey Report - www.kearney.com (Courtesy)

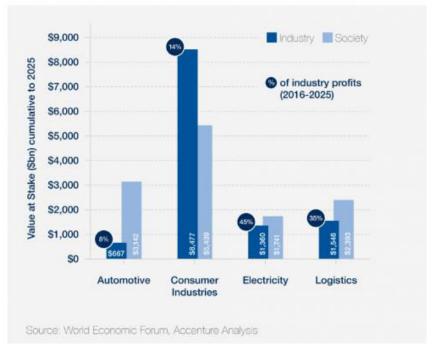
Success starts with companies building internal capabilities and making full use of external professional service providers to grow and thrive in the digital age. Building a strong partnership model and enabling effective collaboration between all parties are crucial elements for any company that wishes to operate successfully within a digital ecosystem

| e-ISSN: 2319-8753, p-ISSN: 2320-6710| <u>www.ijirset.com</u> | Impact Factor: 8.118|

||Volume 11, Issue 6, June 2022||

DOI:10.15680/IJIRSET.2022.1106123

Digital transformation has the potential to create greater value for society than industry



#### Fig 2. Digital Transformation Potential (World Economic Forum)

#### VI. MODELING FOR DIGITAL TRANSFORMATION

The Digital Transformation requires both Digitization and Digitalization. In addition it requires a reconsideration of the business model(s) to adapt the company biz strategy to the new environment and, hopefully, leads to the creation of new business opportunities.

Drivers / Tensions	Geopolitical(Regulatory, executive, and judicial branches of government)	Organizational(Employees and supply chain partners)	Market(Consumers and investors)
Pandemic	Nationalism, deglobalization (L)	Decentralization of the Workspace (G)	Realization of physical interconnectedness and increasing environmental awareness (G)

If focused on Core areas based on need of time and resources available

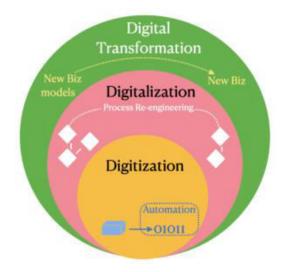
- Process Transformation. ...
- o Business Model Transformation. ...
- o Domain Transformation. ...
- o Cultural/Organizational Transformation.



e-ISSN: 2319-8753, p-ISSN: 2320-6710 www.ijirset.com | Impact Factor: 8.118

||Volume 11, Issue 6, June 2022||

DOI:10.15680/IJIRSET.2022.1106123



#### Fig 3 Models for Digital Transformation (IEEE Future Direction)

The organization execute the Digital Transformation from the point of view of business value and economics (change in cost of supply/production/delivery, based on the actual needs of the customer and reengineering of process to match the digital space is prime need of time, otherwise the loss is assured in the limited cyberspace with huge competition. Lean and six sigma can help to optimize and reduce wastage in systems and working with proper streamline, but the architecture and network sure to give edge with future prospective of vision 2022 make in India project a success. Risk of supply and demand, rates fluctuation, risk of transportation and delivery, supply chain with vendors, and finally employee's role with make this digital chain as real challenge, but it's a new era to sustainability in market.

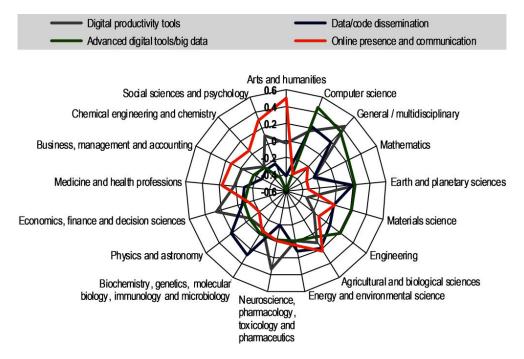


Fig 4. The Scope of Digital Transformation (www.oecd-ilibrary.org)



| e-ISSN: 2319-8753, p-ISSN: 2320-6710| <u>www.ijirset.com</u> | Impact Factor: 8.118|

Volume 11, Issue 6, June 2022

DOI:10.15680/IJIRSET.2022.1106123

#### VII. IMPLEMENTATION FOR DIGITAL TRANSFORMATION

#### 7.1 DATA MINING

Data Mining techniques in over all working process systems for ensuring effective inputs to built the cloud systems for efficiency with customized environment build in to create real value to all stakeholders without major loss to sustainability.

This events need to be conducted at

- Micro level : internal and external satisfaction with systems, job satisfaction , employee retention time.
- **Meso Level** : Effectiveness of service, compliance to guidelines, contract by referral, customer retained and their loyalty to organization.
- Macro level : Access , effective and appropriate , responsiveness, safety , equity..etc

To ensure strategy and vision is correctly built in with policy available with validation in present re engineering phase to match future business prospects.

Also if any grey area, need to work in event to get the true data output on decision making, networking prospects, policy, value ...etc, rushing in my cause the real problem in future, white integrating with developed digital transformation systems.

Also centralized server to be established for networking with real time to ensure data source is updated and retrieved in fraction of seconds, but due care for security management with restricted accessibility and secure back in event of crash and update without much loss to business.

#### 7.2 CLOUD COMPUTING



Fig 5: Cloud Computing (Courtesy scribd.com)

The Organization can adopt to cloud storage solution for great scalability, rapid development and establish information management systems without investment on hardware, with access to flexibility to increase and decrease information need based on demand with global access.

This solution also provide real help to mobile working employees like retail/ remote / traveller to access real time storage data on need for keeping track with flow of work systematically.

New Platforms are sure to help organizations built the armour resilience with real balance in cost as well as meeting their consumer requirement to Management of your company's supply chain depends on accurate data collection and reporting but many companies are dissatisfied with the high cost of in-person social audits



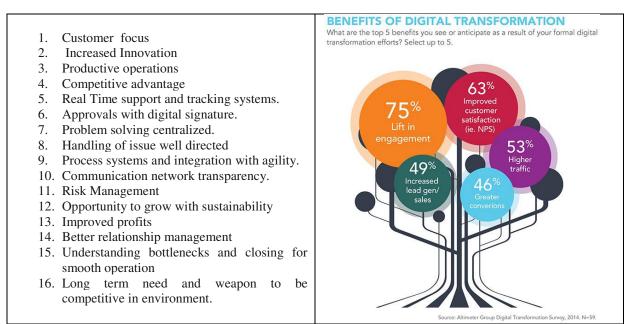
| e-ISSN: 2319-8753, p-ISSN: 2320-6710| <u>www.ijirset.com</u> | Impact Factor: 8.118|

||Volume 11, Issue 6, June 2022||

DOI:10.15680/IJIRSET.2022.1106123

#### VIII. BENEFITS OF DIGITAL TRANSFORMATION

Digital supply chain management aims to minimize the amount of wastage and, instead, help enterprises earn better profits while remaining efficient in multiple processes.



#### Fig 6.Altimter Group Digital Transformation Survey Report

#### IX. CHALLENGES DURING DIGITAL TRANSFORMATION

- The technology market is evolving quickly and the project remains vigilant, looking out for accelerators and/or disruptors
- Traditional process do not support the digital transformation
- Short term benefit to be ignored, only for long term
- Platform used if not be compatible to organization need, may lose the market share.
- Learning and unlearning at employee levels.
- Investment in resources costly affair
- Traditional process may act as bottleneck du e to compatible need of new digital technology
- Change management and investment of resources on technology
- Short time sustainability
- Learning and unlearning by people working
- Network and relation management.
- Supply chain Management with stakeholders

Disruption has put heavy pressure on executives and boards to find answers to difficult problems. Many of these digital transformation problems are pricing and revenue management related. Denying price improvements is a death sentence for even the best business model.

#### X. CONCLUSION

With latest mode of digital transformation and platform mode of real time communication, trust will be sure built-in with unity among the workforce, breaking down their social divides and age gaps. Most importantly, it is vivacious always to remember that the system's capabilities are anticipated to evolve due to the dynamic nature of the business



| e-ISSN: 2319-8753, p-ISSN: 2320-6710| <u>www.ijirset.com</u> | Impact Factor: 8.118|

#### Volume 11, Issue 6, June 2022

#### DOI:10.15680/IJIRSET.2022.1106123

setting, Organization strive to uncover risk and mitigate with partnership, and third party support as part of long term strategy to sustain successfully in competitive environment with pro active change management.

These learn-together and earn-together behaviours make digital transformation easier and vice-versa. This is a win-win situation for stakeholders, the company as well as its employees. Strong management representative should bind new working systems inter as well as intra department's level form a real key for successful digital transformation, but a lot of business revealed that their digital applications and services are failing several times a month. Thus, affecting user experience and productivity negatively, and reducing their pricing power.

#### REFERENCES

- 1. Roberto Saracco- Blog titled Digital Transformation of ... Digital? X In IEEE Future Direction
- 2. Oliver F. Nandico A Framework to Support Digital Transformation- Springer link First Online: 24 September 2016
- Samuel Chng, Zainal Shah Suhaila, Sun Sun Lim2, Han Yu Lu1 and Peng Ho Oh, "Preparing Workplaces for Digital Transformation: An Integrative Review and Framework of Multi-Level" Factors Front. Psychol., 23 March 2021
- 4. "Andre M.Carvalgo ", "Paulo Sampaio", 'Eric.S.Rebentisch", "Josef Oehmen" "Technology and Quality Management – A Review of concept in Digital Transformation " Conference Paper 2020 https: //www.researchgate.net/publication/ 344413219

#### BIOGRAPHY

**Mr. Patange Vidyut Chandra** holds a Bachelors degree in Mechanical and Masters degree in Industrial engineering and management, with specialization in Management information systems, Post Graduation Diploma in Operations Management; He is Ex Manager –TQM and Management Representative from Davangere Cotton Mills and Ex. Regional Manager of NQA-QSR Bangalore., Ex Mechanical Engineering Faculty of Sreenidhi Institute of Science and Technology, Ex Quality and Audit Manager for ICFAI & Caledonian Uk University, He worked as Senior Consultant and Trainer for Quality management, Industrial Engg and Productivity projects for over 22 years of which 6 years visiting Saudi Arabia and Oman and accumulated rich expertise in multi facet products in sectors supporting services to organization, Professionally Qualified Lead Auditor for ISO 9001, Master Black Belt for Lean Six Sigma Quality, Corporate Leadership Certified and Certified Quality Manager from Qimpro, Data Analyst for Lean Six Sigma, Presently a Founder and CEO for SRH Management Consultants and Trainers, His subject of interest for ISO, Research and Teaching on Industrial engineering, Operations Research, Production Planning and Control, Information Systems, Total Quality Management, 5s and Visual Management, VSM, SCM, Lean Six Sigma Tools and Projects.

**2. Hitesh Sai Patange** is presently doing UG study in Mechanical Engineering in IIT Ropar, Punjab is inclined for research and development with innovative approach. He presently focusing on further study on Process Automation, Python, Artificial Intelligence, Robotics and Renewable Energy





Impact Factor: 8.118





## INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY





www.ijirset.com