

Digital Transformation of Indian Organizations: An Empirical Study of Challenges and Opportunities for Management

MEGHA BATOLA,
Department of Commerce, Graphic Era Hill University,
Dehradun, Uttarakhand, India 248002
DOI:10.48047/pne.2019.56.1.25

Abstract

The digital transformation of organizations has been a key area of research, considering its significance in the development of economy of a country. When it comes to Indian context, the digital transformation of industries and organizations, both private and public, face several challenges unique to the existing digital barriers of the nation. Digital transformation, that aims at incorporating digital technologies at all aspects of an organization requires persistent upskilling, reskilling and update of knowledge about the ever-expanding advancement of technology. The process of transforming digitally put forward several challenges at the operational and management level as well as in organizational change in order to be able to facilitate the resources and investment for the same. However, despite all these challenges, the digital transformation of Indian organizations, undoubtedly, contributes to increased productivity and economic growth. Thus, extensive study and research is required in this area to comprehend effective methods to tackle the challenges in digitally transforming Indian organizations for better development and economic advancement. Sample of 192 respondents involved in digital transformation of Indian Organization were surveyed to know the Challenges and Opportunities for Management in Digital Transformation of Indian Organizations and found that Persistent upskilling and update of knowledge needs expand advancement of technology and Challenges are found at operational and management level and organizational change

Keywords: Digital Transformation, Challenges, Indian Organizations, Operation, Management

Introduction

Digital transformation refers to the incorporation of digital technologies and skills into all the arenas of an organization, be at the operational, management as well as consumer experience

aspect. In a digital era that we are currently living in, transforming organizations digitally plays key role as it paves way to economic advancement and development at a holistic level, in turn improving the per capita income of a nation. Many renowned companies at global level have successfully engaged in transforming their organizations in order to be able to accommodate resources, infrastructure and investment that contributes to formulating digital transformation strategies at them. However, when it comes to India and the transformation of Indian organizations to a digital manner, there are several unique challenges to the same.

Empirical studies conducted by collecting data from various Indian organizations suggest the unique challenges in transforming these organizations digitally, considering the existing digital divide that the nation faces. Henriette and co-researchers on 2015, conducted a study to emphasize that digital transformation incorporates or integrates every aspect of an organization, rather than just focusing on the technological side. Here, then comes a significant need for the organizations to transform in a way to be able to fit in to the resources and infrastructure that is unavoidable in the process of digital transformation. The complexities associated with transforming the already existing organizations is a primary challenge that appears in the path of digital transformation. Apart from this, the requirement to organize upskilling programmes and introduce various training activities that develop the knowledge on growing area of artificial intelligence and cybersecurity also raises the necessity to cope up with the rising technological development.

Despite these challenges, the digital transformation of Indian organizations can change the face of the nation and its economic growth in a positive manner. The integration of innovative digital technologies will help in organizing the management such that it helps making the communication and collaboration much easier, creating a network of retailers, suppliers and customers. But, in order to ensure this positive outcome, there is an urgent need to reskill the employees as mentioned above to help them raise themselves to the new advancement. If it is not addressed, in a country like India, the digital transformation can cause challenges where employees resist to cope up with the change in fear of losing their opportunities. Thus, effective communication is the most integral part in introducing and developing digital transformation in India. Also, with existing digital divide, that evidently expose the socio-economic inequalities in the nation, huge efforts need to be put to make the benefits of digital era reach people irrespective of their backgrounds. Making the

organizations, specifically public ones, digitally innovative is a crucial part in ensuring a digital inclusive society for the future generations.

Literature Review

Simon Chanias and fellow authors (2019) conducted extensive research on digital transformation strategies in which they highlight how digital transformation is a persistent process in making, particularly dynamic in nature. Considering same, the study also addresses how several pre- digital organizations aim at implementing digital strategy at theirs, looking forward to development at a holistic level. However, the digital transformation of these traditional industries raise integral concerns and challenges since formulation of digital transformation is a process that requires continuous learning and applications. The study by Chanias and co-researchers help develop an integrated model of digital transformation strategy and its techniques in converting the traditional industries to fit by the modern requirements in a digital era.

Buyya and Palaniswami (2013) present a different model, resembling free market economy, where they propose the working of intense network of wireless sensors in an autonomous manner. Interestingly, this network system proposed by the researchers depict a developed version of free market economy model that facilitates the demands of global human society. The digital transformation innovation strategies implemented here with respect to the concept of internet of things at a global manner extends scope to the growth of market systems in a more digitally oriented structure. Hanninen and Smedlund (2019) also notices the interesting take of digital marketplaces and their significance in the competitive arena of market economy by exposing the effective connection it helps establish between suppliers. This possibility of opening a complete global market space for various suppliers at diverse levels, just like for the customers, directly coincides with altering face of retailing. The study of these digital marketplaces, evidently successful in places like US, Japan, China etc. put forward similar effective methods to be considered in transforming Indian organizations.

Henriette and fellow authors (2015) focus on the different aspects of digital transformation strategy, particularly on the impacts these transformations create on business, operation and at consumer levels. The research advocates the necessity to look at the digital transformation

strategies from wider angles rather than just technologically innovative side. Apart from that, the study tells how digital transformation affect all arenas of an organization and extends the scope of research on the same. Iansiti and Lakhani (2014) also have already talked about how a lack of understanding remains when it comes about the core of digital transformation and innovative. In their study they put forward the necessity to bring an integrated approach and conceptualization in comprehending digital innovative strategies by focusing on various disciplines associated with it as well as by forming a framework for research on digital transformation.

Kokkinakos (2016) talks about how digital transformation of organizations paves way to revolutionize traditional industries in such a way that it brings modernity in all aspects of an organization; be it operational or at consumer level. At the same time, the study also investigates if the digital transformation techniques are implemented in the public sector at the same intensity as it is formulated at the private firms and organizations. Kontic and Vidicki (2018) tests the readiness of traditional industries and organizations in transforming digitally through their research work, in which they find out the significance of investment and active leadership in helping implement digital strategies in organizations. Liu and fellow researches (2011) have created a framework for the same by enhancing the significance of digital transformation for organizations in order to fit in the competitive world of digital era. Matt, Benlian and Hess (2015) did a study to explore how various organizations implemented several strategies to transform digitally in order to reap better benefits as well as investigated challenges they face in the process at operational and management levels.

Sanchez and Zuntini (2018) talks about the capabilities and availability of resources in transforming organizations to digital, where they also focus on the dynamics of the change in the existing environment. The study determines how rapidly advancement happens in the technological aspect and tries to look upon ways to counter the challenges in digital transformation and implementation. Nambisan and co-authors (2017), in their study focusses on the significance of organizing theories that analyze and comprehend the updates on digital technologies in order to support the innovation and digital transformation strategies. These existing discourse of literature and research works address various challenges pertaining to the organization, operation and management of digital transformation. In the process of analyzing these challenges, the existing study that explores digital innovative across various arenas on a global level definitely extends

scope in comprehending, developing and implementing digital transformation techniques for Indian organizations.

Objective

1. To measure Challenges and Opportunities for Management in Digital Transformation of Indian Organizations

Methodology

Sample of 192 respondents involved in digital transformation of Indian Organization were surveyed to know the Challenges and Opportunities for Management in Digital Transformation of Indian Organizations. The study is empirical in nature. A checklist question was used to analyze and interpret the data. In a checklist question respondents choose “Yes” or “No” for all the questions.

Data analysis and interpretation

Table 1 Challenges and Opportunities for Management in Digital Transformation

S. No.	Challenges and Opportunities for Management in Digital Transformation	Yes	% Yes	No	% No	Total
1	Persistent upskilling and update of knowledge needs expand advancement of technology	142	74.0	50	26.0	192
2	Challenges at operational and management level and organizational change	156	81.2	36	18.8	192
3	Digital transformation facilitates resources and investment	131	68.2	61	31.8	192
4	Digital transformation contributes to increased productivity and economic growth	149	77.6	43	22.4	192

5	Digital transformation requires continuous learning and applications	157	81.8	35	18.2	192
6	Extends scope to growth of market systems in digitally oriented structure	134	69.8	58	30.2	192
7	Digital transformation opens global market space for various suppliers at diverse levels	150	78.1	42	21.9	192
8	Transformations create opportunities for business, operation and consumer	166	86.5	26	13.5	192

Table above is showing Challenges and Opportunities for Management in Digital Transformation. It is found from the table that around 86.5% of the respondents say “yes” to the statement that Transformations create opportunities for business, operation and consumer followed by Digital transformation requires continuous learning and applications (81.8%), Challenges at operational and management level and organizational change (81.2%), Digital transformation opens global market space for various suppliers at diverse levels (78.1%), Digital transformation contributes to increased productivity and economic growth (77.6%), Persistent upskilling and update of knowledge needs expand advancement of technology (74.0%), Extends scope to growth of market systems in digitally oriented structure (69.8%) and Digital transformation facilitates resources and investment (68.2%).

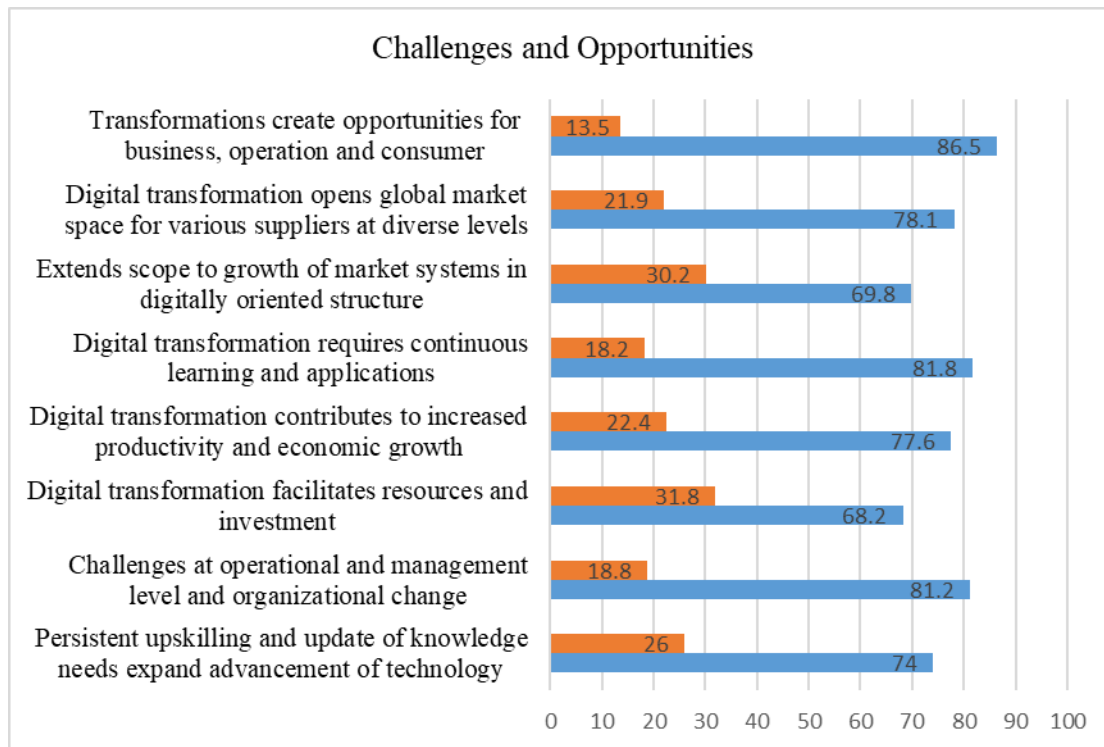


Figure 1 Challenges and Opportunities for Management in Digital Transformation

Conclusion

The digital transformation of Indian organizations poses various challenges particularly with respect to its implementation, operation and management. In a digital era, in the backdrop of a free-market economy system that caters to the demands of global human society, it is an adequacy to implement digitally innovative techniques and strategies in the market places and organizations; be it private firms or public realms. The formulation of digital transformation in these industries help develop customer relationship, build connection with suppliers, enhance operations, management, and result in holistic progress of the organization. However, the persistent update and complexity about the technologies and existing digital divide in India, makes it very difficult to bring the vision of transforming Indian organizations to digital at practical manner. It is only through effective upskilling and continuous promotion of digital inclusive programs and innovative, one can develop the digital transformation strategy in a country like India. Further research is required to enhance knowledge pertaining to the methods to effectively tackle these

challenges and allow formulation of digital transformation and implementation across Indian industries and organizations. The study was conducted to know the Challenges and Opportunities for Management in Digital Transformation of Indian Organizations where it is found that Transformations create opportunities for business, operation and consumer, Digital transformation requires continuous learning and applications, Digital transformation opens global market space for various suppliers at diverse levels, Persistent upskilling and update of knowledge needs expand advancement of technology and Challenges at operational and management level and organizational change.

References

1. Chanias, S., Myers, M. D., & Hess, T. (2019). Digital transformation strategy making in pre-digital organizations: The case of a financial services provider. *Journal of Strategic Information Systems*, 28(1), 17–33.
2. Gubbi, J., Buyya, R., Marusic, S. and Palaniswami, M. (2013). “Internet of Things (IoT): a vision, architectural elements, and future directions”, *Future Generation Computer Systems*, Vol. 29 No. 7, pp. 1645-1660.
3. Hanninen, M. and Smedlund, A. (2019), On retail digital platforms suppliers have to become responsive customer service organizations. *Strategy and Leadership*, Emerald Group Publishing, Vol. 47 No. 1, pp. 37-43.
4. Henriette, E., Feki, M., Boughzala, I. (2015) The shape of digital transformation: a systematic literature review. *Information Systems in a Changing Economy and Society*, p. 431.
5. Iansiti, M. and Lakhani, K.R. (2014), “Digital ubiquity: how connections, sensors, and data are revolutionizing business”, *Intergovernmental Panel on Climate Change Harvard Business Review*, Cambridge University Press, Cambridge, Vol. 92 No. 11, pp. 90-99.
6. Kokkinakos, P., Markaki, O., Koussouris, S., Psarras, J. (2016). Digital transformation: Is public sector following the enterprise 2.0 paradigm? *Digital Transformation and Global Society*, pp. 96–105.
7. Kontic, L., & Vidicki, D. (2018). Strategy for digital organization: Testing a measurement tool for digital transformation. *Strategic Management*, 23(2), 29–35.

8. Liu, D. Y., Chen, S. W., & Chou, T. C. (2011). Resource fit in digital transformation: Lessons learned from the CBC Bank global e-banking project. *Management Decision*, 49(10), 1728–1742.
9. Matt, C., Hess, T., & Benlian, A. (2015). Digital transformation strategies. *Business & Information Systems Engineering*, 57(5), 339–343.
10. McDonald, M., Rowsell-Jones, A. (2012). The Digital Edge: Exploiting Information & Technology for Business Advantage. *Gartner Inc.*
11. Muller, E., & Hopf, H. (2017). Competence center for the digital transformation in small and medium-sized enterprises. *Procedia Manufacturing*, 11(June), 1495–1500.
12. Nambisan, S., Lyytinen, K., Majchrzak, A., & Song, M. (2017). Digital innovation management: Rein-venting innovation management research in a digital world. *MIS Quarterly*, 41(1), 223–238.
13. Sanchez, M. A., & Zuntini, J. I. (2018). Organizational readiness for the digital transformation: A case study research. *Revista Gestão & Tecnologia*, 18(2), 70–99.
14. Sebastian, I. M., Ross, J. W., Beath, C., Mocker, M., Moloney, K. G., & Fonstad, N. O. (2017). How big old companies navigate digital transformation. *MIS Quaterly Executive*, 16(3), 197–213.
15. Zinder, E., Yunatova, I. (2016). Synergy for digital transformation: person’s multiple roles and subject domains integration. *Digital Transformation and Global Society*, pp. 155–168.