



# Policy, Development and Freedom: Strengthening Innovation Through Sustainable Digital Transformation for Global Challenge

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**Abstract.** In most of the cases sustainability is associated with environment. Since the era of digitalization has started, the world is getting transformed digitally on each and every moment. The transformation of digitalization has characterized by the technology which helps to increase the speed and vastness of knowledge turnover within the economy and society. The pattern of digital transformation is getting updated each and every day. People are working on more advanced digital transformation because world does not want to stuck in one place rather this world is moving forward very fast. People are working on these for a better world, society, economy. Digital transformation should be benefic for large number of people. Though digital transformation is a constant changeable process and it requires a large amount of investment it would be better if people get benefitted by the digital transformation for a longer period of time. Innovation is key of digital transformation. Innovation is a process which leads to the development of new technology. Through the process of innovation business is getting modernize, efficient workflows are getting accelerate, increase profitability and security. A Conceptual framework for innovation is very important in the process of digital transformation. Digital transformation has many benefits such as it reduces inefficiencies, improved productivity, lower production and maintenance cost while increasing system flexibility. But due to lack of proper framework many times organization has face many challenges when it found to move forward towards digital transformation. The challenges are lack of proper implementation of standard protocol, giving emphasis on new technologies without assessing its role within the business, investing money on digital implementation without a realistic view of return on investment. We must remember that machine serving the cause of man. Machines with inputs from human side took perform quasi human actions. In this study we are going to explore how digital transformation can be more sustainable by strengthening the innovation to face the global challenge.

**Keywords:** Sustainability · Digital Transformation · Digital Technology · Innovation

## 1 Introduction

Digital transformation is a process by which world is transforming the existing traditional and non-digital business processes and services or creating new ones to meet with

evolution of the market. Though digital transformation is a constant changeable process and it requires a large amount of investment it would be better if people get benefitted by the digital transformation for a longer period of time. Changes in the process, structure and system inherent in business, corporate and governmental activities throughout the world. As soon as the society faced with any kind of hindrance, obstruction or a major problem leading debacle, the world looks for an identifies options which are otherwise new in system. It is sometimes in the form of changes in the content, at times as changes in structure, system and procedure. Usually the process keeps up to need and demand of the society at any given point of time. In the current context the world has gone in favour of transformational technology, caused the digital technology, restructure, processes and content having tuned to the new technology has embraced by the new way of functioning spelled out through the term of digitalized transformation. In most of the cases sustainability is associated with environment. Since the era of digitalization has started, the world is getting transformed digitally on each and every moment. The transformation of digitalization has characterized by the technology which helps to increase the speed and vastness of knowledge turnover within the economy and society. The pattern of digital transformation is getting updated each and every day. People are working on more advanced digital transformation because world does not want to stuck in one place rather this world is moving forward very fast. People are working on these for a better world, society, economy. Digital transformation should be benefic for large number of people. Though digital transformation is a constant changeable process and it requires a large amount of investment it would be better if people get benefitted by the digital transformation for a longer period of time. Innovation is key of digital transformation. Innovation is a process which leads to the development of new technology. Through the process of innovation business is getting modernize, efficient workflows are getting accelerate, increase profitability and security. A Conceptual framework for innovation is very important in the process of digital transformation. Digital transformation has many benefits such as it reduces inefficiencies, improved productivity, lower production and maintenance cost while increasing system flexibility. But due to lack of proper framework many times organization has face many challenges when it found to move forward towards digital transformation. The challenges are lack of proper implementation of standard protocol, giving emphasis on new technologies without assessing its role within the business, investing money on digital implementation without a realistic view of return on investment. We must remember that machine serving the cause of man. Machines with inputs from human side took perform quasi human actions. In this study we are going to explore how digital transformation can be more sustainable by strengthening the innovation to face the global challenge.

**Innovation:** Innovation has formed a central place in a functioning of the digital transformation. There are certain areas of observation, actualization and appropriation that correctly fit in the system of the new technology. These required innovative contributions towards the system restructure and processes for making the functional feasibility, appropriate with the objective of the functional area. In this context innovation place pivotal role in the process of digital transformation. Following factors are important for accomplishing innovation in the context of digital transformation.

### 1.1 The Robot in Workplace

Mega activities to be accomplished through transformational machines with the automated process design and multiplied functional abilities. The work process needs to be robotic with power of perception and gross dynamic of senses. There are two different opinions on robot in workplace. The first one is robotic power or the automation of work is destroying the human intent. The second opinion is automation is creating as many jobs as it destroys overtime. The employees who know how to access the machine are more productive than those employees who do not have knowledge about the machine. Automation of work reduces both cost and price of goods and services and make consumers feel richer. So while automation of work displaced unskilled employee, it has also created new job opportunities for the machinist, advanced welders, and other technicians who maintain the machines or use them to perform new task.

### 1.2 Policy Implications

If we want to keep pace with this digitalized age, we must first change our learning process by creating more machine experts. New and better policies should be adopted in education and training. The breadth and quality of education and training must be improved. To become complementary to AI (Artificial Intelligence) policies should be implemented in education system which will create workers who have communication, complex analytical skill that often require careful judgements of multiple factors, and creativity. Organization should arrange retraining process for displaced worker to perform new task or changing job.

## 2 Literature Review

[1] Authors have worked on the process by which small business enterprises can achieve sustainable development through digital transformation. They have identified the steps by which digital transformation can enable the sustainable development. This study mainly focused on technological aspects of digital transformation, sustainable development mainly focusing on 3 aspects economic, environmental and social aspects and the business characteristic of small business enterprises.

[2] Author has mainly focused on fourth industrial revolution. He has mentioned how fourth industrial revolution has enabled the technologies in manufacturing sector. Also author has mentioned in the limitations of digital transformation especially in manufacturing sector and proposed few conceptual frameworks to overcome this limitations.

[3] Author has aimed to identify the relationship between digital transformation and sustainability improvement. The objective of this study was how to use of digitalization to achieve goals related to sustainability. Author has identified this relationship is emerged as extremely fragmented into sectors, functions and methodologies.

[4] The purpose of this study was to understand the trends on the digital transformation of higher education and also analyze the effect of the adoption of new technologies by higher education institutions. This study highlight that digital learning through strategic and personalized approach has an inclusive impact. New trends in digital education

allow student to acquire relevant information related to their specific needs, in addition to collective participation in the digital classroom.

[5] This study has aimed to identify the relationship between digital transformation and economic environmental dimensions of sustainable performance. The author has done the survey on the data gather from 223 Chinese companies. This study has explained the inconsistent relation between digital transformation and sustainable performance. Through this study author has given some suggestion to the company in re-evaluating their digital strategy. (Research Gate)

[6] This paper has proposed a new model for sustainable digital transformation. This paper is basically focused on role of sustainable oriented innovative business and looking at a fundamental socio-economic variable such as inequality, unemployment and inflation change.

[7] This paper has aimed to explore the relationship between digital transformation and green innovation in the context of a developing country. This study has examined that how firms can accelerate organizational digital transformation to enhance their green innovation performance.

This research aims to (1) To identify the role of innovation in sustainable digital transformation. (2) To check the nature of relationship between digital transformation and sustainability. (3) To check digitalized technology to get appropriate opportunities for reaching out to windows and corner of human mind.

### **3 Research Methodology**

As digital transformation has many aspects influencing the functionalities of the business, system, structure and process. It requires a logical explorative dimension of the study suited to the kind of samples and nature of samples. The current study is primarily based on the secondary data available through the web source in different focused area with highlighting on the process of sustainable digital transformation in education sector.

This study analyzes the role of digital transformation in today's world. How this world is getting drastically change through automation of work. In every aspects of life digital transformation is needed. Through the analyses of different literature this has proved that the digital sustainability and digital transformation can happen at the same time through conceptual framework. Also the analysis shows that innovation can be strengthening by increasing the sustainability of digital transformation.

The limitation of the study is this study has done on the basis of secondary data which includes different literature reviews. The choices made in a literature review can be disputed in multiple ways. For example selected sample highly depends on the search keywords.

### **4 Conclusion**

This paper aimed to investigate innovation is the continuous process through incremental and continuous changes. Innovation can be strengthening through sustainable digital transformation by fitting in the design of transaction, translation and making. Machine serving the cause of man. Machine with inputs from human side took perform quasi

human action. Not a conflicting identity but as a collaborative identity machines to work as a transformational agent of human existence and progress.

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