

Chapter 10

Reflection of Digital Transformation on Corporate Sustainability and a Theoretical Perspective

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ABSTRACT

With its high process automation and digitalization, Industry 4.0 provides new opportunities to actualize more flexible, higher quality, speedy, cheap, and productive manufacturing and services. Containing numerous technology and paradigms, Industry 4.0 is expected to transform the industrial manufacture and society by aiming at economic, social, and environmental gains. The facts that natural resources are running out, lifecycle of the world is diminishing, and society has increasing anxiety on this situation. These have been the propulsive power for the development of Industry 4.0. By means of the technology and innovations that Industry 4.0 brings along, it is clear that it could also contribute to the recent popular and emphasized concept: sustainability. In this chapter, after giving information about the paradigms related with Industry 4.0, the theoretical frame of corporate sustainability and the effect of digital transformation on corporate sustainability have been evaluated. And then, constructing sustainable digital business models and focusing on value proposal have been discussed.

INTRODUCTION

Digitalization certainly being one of the most important trends that orient the present and the future, exists as a subject that all sectors should be following. Seizing the opportunities created with technology and digitalization ensures the firms both an important competing advantages and benefits in various fields from increase in productivity to employee satisfaction.

Sustainable development, on the other hand, is described as fulfilling the needs of today's shareholders by directly or indirectly showing respect to their living rights (Dyllick & Hockerts, 2002) This description was indeed performed in UN Brutland Report in 1987 and covers a fairly broad meaning. The goal of this report was to create a common future for the humanity and being able to provide answers to the question of how social and economic development could be achieved without endangering the natural living conditions. With the description from this report, to make contribution to the sustainable development by means of an emphasis on foundational equality is aimed (Ehnert & Harry, 2012).

In order to annihilate poverty, save the universe and make all people live in peace and prosperity, 17 goals have been designated within the scope of UN 2030 Sustainable Development Goals. The importance given to information and communication has been mentioned in context of 9th Goal titled 'industry, substructure and innovativeness'. It has been emphasized that to eliminate digital inequality has critical significance in light of providing equal access to information globally and improving innovation and entrepreneurship. Digital transformation and innovation having crucial role in reaching this 17 goals has been urged on.

EU 2020 strategy report has embraced the principle of "Wise, Sustainable and Inclusive Development". In the strategy, the aim is the concepts of strategical innovation and better usage of the resources, an entry to a new, sustainable social market economy having information as the most important player; to a wiser and greener economy. Within this context, for Europe, digital agenda goals and economically growing goals based on data have been determined and to make the people and firms have benefit from advantages of digital market together with generalizing high speed internet has been aimed.

In the light of these developments, It is to the point to state that the necessities and expectations of digitalizing world has been included in the sustainability concept and to fulfill these requirements is an universal goal. In today's world in which concepts like economy and digitalization; data and economy; freedom and internet access, and many more interwine, It will be a missing situation to think the contrary and to talk about a sustainability that does not cover achievements of informatic world.

Reflection of sustainable development on the science of business has been approached as corporate sustainability. Corporate sustainability could be described as dealing with the economical, social and environmental extents besides corporate management principals, managing the risks by entegrating these into firm's all processes and decision mechanism, in order to create value in long run. There are four elementary powers that direct firms according to this understanding to decide and manage their activities. These four powers; legitimacy, gaining social reliability, providing answer to customer demands and the desire to act in harmony with expactations of investors. Beyond these powers, the biggest truth that is faced is to force the firms to act with understanding of sustainability. Namely, the fact that the resources world is offering for one year usage period is being consumed in less than eight months stands as the biggest indicator that tomorrows are in danger. In that case, to be able to talk about the sustainability of a firm; a management performing in a conscious of economical, social and environmental responsibilities is required.

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