

The Emerging of Dynamic Capabilities for Socially Responsible Operations and Innovation Development in the COVID-19 Pandemic Situation

Hadi Purnomo

Management Doctoral Program - Faculty of Economics and Business
Universitas Gadjah Mada (UGM), Indonesia
Department of Management - Faculty of Economics and Business,
Universitas Kristen Immanuel (UKRIM), Indonesia
hadipurnomo@ukrimuniversity.ac.id

Wakhid Slamet Ciptono

Department of Management - Faculty of Economics and Business
Universitas Gadjah Mada (UGM), Indonesia
wakhidciptono@ugm.ac.id

Hargo Utomo

Department of Management - Faculty of Economics and Business
Universitas Gadjah Mada (UGM), Indonesia
hargo_utomo@ugm.ac.id

Abstract

Attention to sustainability is important, along with the increasing pressure in organizations for sustainability programs. On its development, a number of researchers in the academic community argue on the understanding why and how corporations integrate the Triple Bottom Line (TBL) which includes social, environmental and economic performance.

The COVID-19 pandemic situation encourages companies to play a role in sustainable development. Socially responsible is a part of social responsibility activities referring to the business responsiveness to society. Socially responsible operations is a form of Corporate Social Responsibility (CSR) activities. On the other hand, the researchers argue that business organizations are the source of important innovation, has social responsibility to direct public issues related to sustainability, where responsible innovation has a contribution to sustainable development.

The aim of this study is to fill the literature gap by building a conceptual framework of socially responsible operation and socially responsible innovation during the COVID-19 pandemic. Another thing is also proposed the role of dynamic capabilities for sustainability.

Dynamic capabilities are attractive because of their potential to improve the performance of organizational outcomes. Dynamic capabilities in this case include dynamic managerial capability and dynamic innovation capability in the efforts to develop company sustainability.

Key Words:

Sustainability, Socially Responsible, Operations and Innovation, Dynamic Capabilities, COVID-19 Pandemic

1. Introduction

Life on earth is faced with sustainability mega-problems (Voegtlin and Scherer, 2017), so the need to sustain human life on the planet by protecting natural resources is fundamental. In this case, sustainability is important in the long term (Kuhlman and Farrington, 2010). Schandl and Walker (2017) reveal that sustainability efforts are an important factor for organizations. The focus of sustainability is done in the form of people, planet, profit (3Ps) or what is known as the Triple Bottom Line (TBL), so that for consistency purposes, it can be explained that TBL is a practice of sustainability (Waddock, 2004 and Wilson 2015).

Awareness of the importance of sustainability has led to the challenge of expanding the paradigm that focuses primarily on environmental and social issues (Montabon et al., 2016). This development of awareness encourages the concept of management to face new changes, one of which is called business sustainability (BS), which represents the company's efforts not only to focus on profitability, but also to focus on economic, social and environmental (economic, social and environmental) management that has an impact on the market and society. Another term is mentioned as corporate sustainability which directs sustainability by proposing a modification of functional capabilities for the economy, environment and social competences simultaneously (Svensson et al., 2016 and Wu and Duan, 2013). An understanding of the importance of sustainability becomes the basis for a sustainable operation management framework at the operational level of business processes. Sustainable operation management is expected to help companies become agile, adaptive and in harmony with the balance of people and the planet (Kleindorfer, 2005). The COVID-19 pandemic situation is a serious challenge for organizations implementing sustainability.

1.1. Objectives

The purpose of this study is to fill the literature gap by building a conceptual framework of socially responsible operation and socially responsible innovation during the COVID-19 pandemic. Understanding the importance of sustainability becomes the basis for a sustainable operation management framework at the operational level of business processes. Several researchers discussed socially responsible operations, while Voegtlin and Scherer (2017) proposed an important way to support efforts that contribute to sustainable development (SD) through innovation, including responsible innovation. Halme and Korpela (2014) call it socially responsible innovations. This paper proposes an integrated form of socially responsible operations and innovation.

Another thing is also proposed the role of dynamic capabilities for sustainability, especially the performance which consists of planet, people and profit (3Ps). Lange (2012) further states the importance of identifying the antecedents of adopting sustainability. Teece et al., (1997) suggested a theoretical perspective to facilitate companies to adopt sustainability by using the concept of Dynamic Capabilities View (DCV). DCV has the potential to provide a better understanding of how a company performs its capabilities for corporate sustainability (Hart and Dowell, 2010), so as to get simultaneous economic, environmental and social benefits (Wu and Duan, 2013). Dynamic capabilities are attractive because of their potential to improve organizational performance outcomes, particularly in the COVID-19 pandemic situation. Dynamic capabilities in this case include dynamic managerial capability and dynamic innovation capability in an effort to develop the company's sustainability. Managerial capability and innovation capability are believed to be capabilities that have a dominant role in socially responsible operations and innovation.

2. Literature Review

2.1. Sustainability Issues

Social and natural environmental issues are important for society and companies, as well as a concern for managers to realize the importance of sustainability in the organization (Lange, 2012). Awareness of the importance of sustainability has led to the challenge of expanding the paradigm that focuses primarily on environmental and social issues (Montabon et al., 2016). This is realized because of the interconnectedness of environmental and social aspects contributing to the decline in natural resources. The business world realizes the need for environmental protection, safety and welfare for present and future generations with economic benefits through sustainability (Gunasekaran and Spalanzani, 2011). For this reason, organizations take the initiative by using the concept of sustainability in their activities (McMullen, 2001). New changes to the management concept, one of which is called business sustainability (BS), which represents the company's efforts not only to focus on profitability, but also to focus on economic, social and environmental management that have an impact on the market and society (Svensson et al. al., 2016). Wagner and Svensson (2014) define business sustainability as an organizational effort in the economy, social and environment to implement and manage companies and business networks that have an impact on life on earth and the ecosystem. Another term is referred to as corporate sustainability which is defined as the

company's ability to direct changes in stakeholder expectations rapidly of sustainability by proposing a modification of functional capabilities for the economy, environment and social competences simultaneously (Wu and Duan, 2013).

2.2. Socially Responsible Operations

The company shifted its superficial focus from profit to expanding the "triple bottom line" (profit, planet and people). Companies adopt sustainability by combining profitability with the importance of social responsibility (Besiou and Wassenhove (2015). Social responsibility refers to business responsibility in society. Some researchers apply social responsibility in the field of operations. Sodhi (2015) conceptualizes social responsibility for operations management (OM) research by developing social responsibility, taking into account corporate social responsibility, sustainability, with a bottom of the pyramid and shared value approach. Therefore, operations must be socially responsible because the aim is to improve resource efficiency.

Meanwhile, Lankoski (2009) uses the term "socially responsible operations" in relation to the context of Corporate Social Responsibility (CSR). Lanfranchi and Pekovic (2014) apply the form of a company that carries out operations that include ethics and socially responsible. Tang and Zhou (2012) discuss "socially responsible operations" as operations that support financial flow (profit), resource flow (planet), and development flow (people) for ecosystems by involving producers in emerging / developing markets, global supply chain partners, consumers in developed countries and planets ". Sodhi and Tang (2014) also focus on socially responsible operations, with attention to micro-entrepreneurs in developing countries. Sodhi and Tang (2012) state that socially responsible operations include the main stakeholders being driven by the "triple bottom line": profit, planet, and people. Furthermore, Besiou and Wassenhove (2015) build references by defining "socially responsible operations" as operations that can be developed by stakeholders in an effort to contribute to society and reduce negative impacts in company operations.

2.3. Dynamic Capabilities View

Teece et al., (1997) suggested a theoretical perspective to facilitate companies to adopt sustainability by using the company's Resource Based View (RBV) and the concept of Dynamic Capabilities View (DCV). Due to the dynamics of the environment with complex sustainability issues such as the COVID-19 pandemic situation, several studies suggest that in the perspective of Dynamic Capabilities View (DCV). DCV has the potential to provide a better understanding of how a company performs its capabilities for sustainability (Hart and Dowell, 2010). Dynamic capability related to company sustainability, is a special type of organizational capability where the company can systematically sense and seize sustainable development opportunities for the fast changing expectations of stakeholders, so as to get simultaneous economic, environmental and social benefits (Wu and Duan, 2013).

In facing the demands of sustainability issues, companies make response efforts through Corporate Social Responsibility (CRS) activities. CSR is essential for running a business, which indicates companies to take an integrated approach that practices TBL and considers it on short and long term targets (Lonzano, 2008). Hart and Dowell (2010) in this case define dynamic capabilities (DC) for CRS management as firms' abilities to address the rapidly evolving CSR expectations by purposefully modifying functional capabilities for the simultaneous pursuit of economic, environmental and social benefits. In fact, there is a paucity of research on dynamic capabilities that can be applied to the context of corporate sustainability. Research on how companies develop and apply dynamic capabilities in dynamic environmental situations, such as pandemic situations in economic, environmental and social challenges in corporate sustainability have not been explored further.

3. Methodes

The literature review design consists of stages which include the research review stage, the results of the literature review and contextual.

3.1. Literature Review Stage

This stage is carried out by conducting a literature review based on the objectives stated in the instructions. The objectives include the importance of socially responsible operations and socially responsible innovation. The integration of these two things is a form of development in a dynamic environmental situation. Another important thing is the antecedents that have contributed to this integration, particularly sustainability performance. The paper is based on research and exploration using the main journal source data base, with the journal citation ranking level.

3.2. Literature Review Results Stage

This stage is carried out by the process of identifying and analyzing the material. The material analyzed is related to socially responsible operations and socially responsible innovation, as well as dynamic capabilities. The results of the literature review are presented in figures and tables.

3.3. Contextual Stage

Literature review focuses on conceptual basis, it needs to be directed to the contextual changes in organization, strategy and various things that are relevant and support with literature review analysis.

4. Results and Discussion

4.1. Socially Responsible Operations and Innovation Concept

Companies adopt sustainability by combining profitability with the concept of social responsibility (Besiou and Wassenhove (2015). Social responsibility refers to business responsibility in society. Some researchers apply social responsibility to the field of operations, it should be Table 1.

Table 1. Socially Responsible Operations

Researcher	Approach
Sodhi (2015)	Operations are “socially responsible”, therefore operation must be socially responsible because the goal is to improve resource efficiency.
Lankoski (2009)	Operations covering ethics and socially responsible in relation to the context of Corporate Social Responsibility (CSR)
Lanfranchi and Pekovic (2014)	Companies that carry out operations including ethics and socially responsible.
Tang and Zhou (2012; 2014)	Operations that support financial flow (profit), resource flow (planet), and development flow (people) for the ecosystem by involving producers in emerging / developing markets, global supply chain partners, consumers in developed countries, and planets”. Sodhi and Tang (2014) also focus on socially responsible operations, with attention to micro-entrepreneurs at developing countries.
Besiou and Wassenhove (2015)	Operations that can be built by different stakeholders in an effort to contribute to society and reduce negative impacts in company operations.

The concept of social responsibility put forward by several experts (Sodhi, 2015, Lankoski, 2009, Lanfranchi and Pekovic, 2014, Tang and Zhou, 2012, Sodhi and Tang, 2014, Besiou and Wassenhove 2015) leads to the important role or contribution of operations in corporate social responsibility (CSR). CSR activities are carried out to build connectivity with the ecosystem (Tang and Zhou, 2012), supply chain (Sodhi and Tang, 2012) and stakeholders (Besiou and Wassenhove, 2015).

The company's socially responsibility operations are carried out except for increasing resource efficiency and in an effort to contribute to society. These efforts are made through innovation. The concept of responsible innovation supports socially responsibility operations. Some researchers develop innovations on social responsibility it should be Table 2.

Table 2. Socially Responsible Innovation

Researcher	Approach
Voegtlin and Scherer (2017)	Responsible innovation which contributes to sustainable development (SD) through three key dimensions known as responsibility to avoid harm, responsibility to do good and governance-responsibility.
Porter and Kramer (2006, 2011)	The idea of strategic responsibility, that responsibility will encourage innovation.
Halme and Laurila (2009)	Responsible business practice and innovation, where responsible innovation refers to new or significant improvements to products, services or business models that are implemented with market solutions or to reduce environmental or social problems.
Halme and Korpela (2014)	Investigation of environmentally and socially responsible innovations in small and medium enterprises (SMEs) based on a resource perspective.
Álvarez (2011)	Shows a theoretical perspective of the relationship between CSR and innovation, in particular the effect of CSR practices on innovation.

Studies related to innovation were carried out by several researchers (Voegtlin and Scherer, 2017, Porter and Kramer, 2006, 2011, Halme and Korpela, 2014, Álvarez, 2011). Innovation activities will have an impact on improving products and services (Halme and Laurila (2009), so that they have a connection with CSR (Álvarez, 2011) which implements solutions to reduce environmental or social problems.

4.2. Antecedents of Dynamic Capability

Lange (2012) further states the importance of identifying the antecedents of adopting sustainability. In the previous literature, Teece et al., (1997) suggested a theoretical perspective to facilitate companies adopting sustainability by using the company's Resource Based View (RBV) and the concept of Dynamic Capabilities View (DCV). DCV has the potential to provide a better understanding of how companies utilize capabilities for corporate sustainability (Hart and Dowell, 2010), so that they can simultaneously obtain economic, environmental and social benefits (Wu and Duan, 2013). Wang and Ahmed (2007) conceptualize innovation capability as an important component for dynamic capability. As for Zollo and Winter (2002) further called dynamic innovation capabilities. Stronen (2017) describes the relationship between dynamic innovation capabilities, innovation capabilities, and dynamic innovation capabilities, by revealing how capabilities relate to innovation, as well as the premises that underlie dynamic innovation capabilities, and how they are built Antecedent Dynamic Capability

The relationship between innovation and DC is quite important, but the understanding is quite complex (Dixon et al., 2014 and Wang et al., 2015). Wang and Ahmed (2007) conceptualize innovation capability as an important component for dynamic capability. Breznik and Hisrich (2014) in their perspective explain innovation capability is seen as one of the dynamic capabilities in the company. As for Zollo and Winter (2002) further called dynamic innovation capabilities. Furthermore, Stronen (2017) describes the relationship dynamic capabilities, innovation capabilities, and dynamic innovation capabilities. Capability related to innovation, as the premise that underlies dynamic innovation capabilities. Leaders in the organization play an important role in developing these capabilities. Managers and their characteristics as important factors in the innovation process. On the other hand, Managers have an important role in implementing CSR. Managerial attention and resources in relation to stakeholders in CSR are based on the creations of managers. Breznik and Lahovnik (2014) explain that dynamic innovation capability is the key and dynamic managerial capability as a machine controlling the wheels of the company. This managerial role can be seen as an important nexus in facing environmental challenges.

4.3. Contextual

The rapid changes in the global environment encourage the creation of new ideas for innovation (Brink 2019; Fukuda, 2020). On the other hand, environmental change by Drnevich (2011) is referred to as environmental dynamism, often identified as hyper-competition conditions (Kriz et al, 2014) and unpredictability (Henri and Wouters, 2019). The situation of extreme environmental change faced by the world is a pandemic outbreak called Coronavirus Disease 2019 or COVID-19 (Harapan et al, 2020). Baldwin and Mauro (2020) called the COVID-19 outbreak an extraordinary event. The COVID-19 case has an impact on the global economy (Baldwin and Mauro 2020; Wing and Chan 2020; Wang et al, 2020). Martinelli et al. (2018) revealed the need for a proactive movement to create change with available resources, in facing crisis situations. Bharosa and Janssen (2009) stated that at high dynamic level conditions, such as disasters, it is necessary to configure various elements as a response to rapid change. Sune and Gibb (2015) reveal the need for dynamic capabilities to respond to changes. DVC assumes a condition of organizational adaptation, a capability to support and improve organizational performance. Teece et al. (2016) stated that to manage uncertainty, organizations need to have dynamic capability (DC). DC is very important and deals with a volatile external environment. Things related to understanding the positive influence of DC on organizational performance (Nedzinskas, 2013, Fainshmidt et al. 2016).Kontekstual

4.4. Discussion

Environmental changes such as the COVID-19 pandemic encourage companies to adapt through their capabilities. Sustainability efforts through socially responsible operations and innovation are closely related to DC. Eriksson (2014) conducted a meta analysis related to DC processes, their antecedents and their consequences or outcomes. Based on the synthesis, it is explained that the antecedents consist of two types, namely internal and external. This synthesis is then developed in an effort to sustainability, through the concept of dynamic innovation capability and socially responsible operations and innovation. Voegtlin and Scherer (2017) suggest the concept of responsible innovation contributing to sustainable development (SD) through three key dimensions called 'responsibility to avoid harm, responsibility to do good and governance-responsibility. It should be Table 3.

Table 3. Integration Concept

Researcher	Concept	Integration
Eriksson (2014)	Antecedents that contribute to organizational performance	Environmental factors, dynamic capability and operations.
Voegtlin and Scherer (2017)	Responsible innovation contributes to sustainable development (SD)	Responsibility to avoid harm, responsibility to do good and governance-responsibility

Furthermore, as a discussion on concept development based on meta-analysis conducted by Eriksson (2014) and responsible innovation by Voegtlin and Scherer (2017) it can be depicted as follows Figure 1:

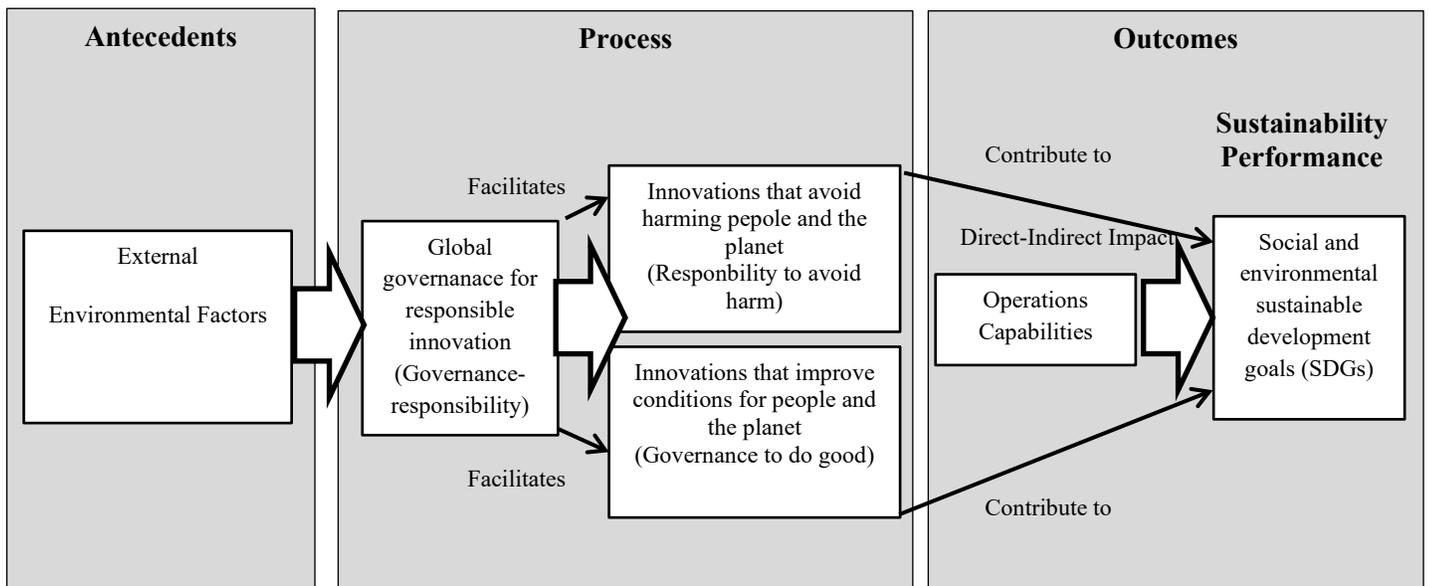


Figure 1: Concept Integration of Socially Responsible Operations and Innovation in A Dynamic Environment

This concept shows that organizational capabilities provide an understanding of organizational reconfiguration, to develop resources and capabilities (Eisenhardt & Martin, 2000). Studies in the field of operations management show a strong concern regarding how companies use operating capabilities, dynamic innovation capabilities in sustainability efforts. One of the company's capabilities is operating capabilities. Routine activities and company processes represent functional (operational) capabilities. Operational capability is a capability that is relevant for the company, because it relates to internal resources and capabilities that are important as the foundation for corporate strategy (Wu et al., 2010).

This concept is in line with the antecedents in the model developed by Eriksson (2014), Voegtlin and Scherer (2017) and Cepeda and Vera (2007) build a conceptual model of knowledge management processes behind dynamic capabilities in connection with dynamic capabilities and operational capabilities, with antecedents of environmental factors, especially pandemics. COVID-19. This relationship is seen as an antecedent perspective (input), processes, and outcomes, which Daft (2001) calls the contingency effectiveness approach.

5. Conclusion

Awareness of the importance of sustainability has led to the challenge of expanding the paradigm that focuses primarily on environmental and social issues (Montabon et al., 2016). This development of awareness encourages a management concept to face new changes, one of which is called business sustainability (BS). The COVID-19 pandemic situation is a serious challenge for organizations implementing sustainability. Environmental changes such as the COVID-19 pandemic encourage companies to adapt through their capabilities. The purpose of this study is to fill the literature gap by building a conceptual framework that combines socially responsible operations and socially responsible innovation during the COVID-19 pandemic. Another thing also explores the role of dynamic capabilities for sustainability. Dynamic capabilities are attractive because of their potential to improve organizational performance outcomes, particularly in the COVID-19 pandemic situation. Dynamic capabilities that focus on dynamic managerial capability and dynamic innovation capability in an effort to develop the company's sustainability.

Managerial capability and innovation capability are believed to be capabilities that have a dominant role in socially responsible operations and innovation. The results of this study on this concept indicate that organizational capabilities provide an understanding of organizational reconfiguration, to develop resources and capabilities (Eisenhardt & Martin, 2000). Studies in the field of operations management show a strong concern regarding how companies use operating capabilities, dynamic innovation capabilities in sustainability efforts. Sustainability efforts through socially responsible operations and innovation are closely related to DC. The concept of development is based on the synthesis of Eriksson (2014) and Voegtlin and Scherer (2017) which are aligned with the perspectives of antecedents (input), processes, and outcomes (Daft, 2001).

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Biographies

Hadi Purnomo, S.E., M.M., M.Si. is a lecturer in Economics and Business Faculty of Universitas Kristen Immanuel, and also student in Management Doctoral Program - Faculty of Economics and Business, Universitas Gadjah Mada. Management Graduate of UKRIM (2000). Master of Management STIE Arta Bodhi Iswara (2002). Master of Management Science, Economics and Business Faculty, Universitas Gadjah Mada (2007).

Wakhid Slamet Ciptono, M.B.A., M.P.M., Ph.D. is an Associate Professor in Department of Management - Faculty of Economics and Business, Universitas Gadjah Mada. Doctorandus, Faculty of Economics, Universitas Gadjah Mada, Indonesia (1987). Master of Business Administration and Master of Project Management, Western Carolina University, USA (1993). Doctor of Philosophy, University of Malaya, Malaysia (2011).

Hargo Utomo, M.B.A., M.Com., Ph.D. is an Associate Professor in Department of Management - Faculty of Economics and Business, Universitas Gadjah Mada. Doctorandus, Faculty of Economics, Universitas Gadjah Mada, Indonesia (1987). Master of Business Administration, University of Bridgeport, USA (1991). Doctor of Philosophy, The Australian National University, Australia (2001).