

# [Sustainability in om definitions business essay](https://assignbuster.com/sustainability-in-om-definitions-business-essay/)

[](https://assignbuster.com/)[Business](https://assignbuster.com/essay-subjects/business/)

## Introduction

Many studies in operations management (OM) has indicated that within the past ten years there is an increased interest in themes in relation to operations sustainability and its effects on operations strategy, supply chain management, measuring performance and lean systems (Taylor and Taylor, 2009; Pilkington and Meredith 2009; Pilkington and Fitzgerald, 2006). According to Gold et al. (2010), they argue that supply chain level competition and the designing sustainable operation challenges reflect on the ever growing global environmental and ethical awareness. With this fact, it encourages supply chains to function as pseudo meta-organisations, thus forming a favourable condition for creating a collective paradigm in supply chain management. In addition, many authors consider that a sustainable operation needs interaction that needs close attention amongst all actors who are involved, and at the same time, ensuring economic, environmental and social performance.

## Sustainability in OM Definitions

A growing emphasis on sustainability studies can be tracked back to a study conducted by The World Commission on Environmental and Development (1987), and defines sustainable development as " development that meets the needs of the present without compromising the ability of future generations to meet their own needs." In addition, Isaksson and Steimle (2009) noticed that sustainable development is not only a problem for many counties but for organisations as well. They point out how important it is for large organisations to drive sustainable development. The challenge that organisations face is not solely defined by driving down levels of pollution, but to be committed in behaving socially and being environmentally liable while fulfilling economic goals; this is known as Corporate Social Responsibility (CSR). On the other hand, Hutchins and Sutherland (2008) alternatively define sustainability as the " design and operation of human and industrial systems to ensure that humankind’s use of natural resources and cycles do not lead to diminished quality of life due either to losses in future economic opportunities or to adverse impacts on social conditions, human health and the environment.‟ However, both authors point out that this definition requires further clarification to determine the extent of sustainable development.

## The Scope of Sustainability

Linton et al. (2007) formed a series of questions that help to understand the scope of sustainability and its content, as follows: What will future generations need in terms of resources? What levels of pollutants can be released, without the negative effects on generations of tomorrow? What is the extent to which new resources of depletable resources can be discovered in the future? What is the possible level of renewable resources being exploited while at the same time making sure these resources stay renewable? What are the extents to which technology can address sustainable utilisation of resources with ongoing growth of material wealth? What are the extents to which market forces can drive sustainability? Is there a need to change lifestyles, if so, how can this be achieved and why? What policies are needed to fulfil sustainability? Seuring and Muller (2008) mention the development of sustainable supply chain management (SSCM) and their future directions, and over seeing that sustainability is usually reduced to environmental improvements and the fact of background theory based on this issue is missing: SSCM has to consider a much broader range of issues, therefore, looking at a lengthier section of the supply chain. SSCM deals with a broader range of performance objectives, thus the need to consider the environmental and social aspects of sustainability. There is a huge demand for cooperation between partnering companies in SSCM. Kleindorfer et al. (2005) stated that sustainable technologies and their investments, operations, and supply chains can be explained via the proceeding factors: The ongoing growth in costs of materials and energy as the global economy expands and rapidly changing countries such as India and China, suggest high levels of demand for resources. The likelihood of public pressure for environmental, health and safety performance will stay strong, resulting in supported property rights, additional regulations, worldwide agreements on handling negative externalities and conserving resources with a reduction in subsidies. Growing awareness of 3BL issues may improve consumer demand on company products through subscribing to 3BL practices. Societies growing opposition to globalisation, leading to increased non-government activity in regards to many businesses sustainability performance. In accordance to Kleindorfer et al. (2005) sustainable operations management (SOM) can be seen as skill sets and concepts, which enable organisations to shape and manage their business processes in order to gain competitive returns on capital assets without the need to sacrifice the need of internal and external stakeholders, as well as the impacts on operations on the environment and society. Furthermore, Wilkinson et al. (2001) mentions that sustainable methods addresses two distinct challenges for businesses. Firstly, present commercial pressures as a result of environmental demands, consumer pressure for renewable energy and responsible citizens in society. Secondly, present internal pressures in relation to human resources sustainability, which are surrounded by an environment of growing staff turnover, deteriorating firm loyalty, increased work hours and levels of stress, and reducing levels of satisfaction. Therefore, the huge demand for sustainable methods in OM could be down to pressures used by internal and external stakeholders in multinational organisations, who reveal a huge concern in regards to environmental and social conditions in worldwide supply chains, more specifically in development counties (Andersen and Skjoett-Larsen, 2009).

## Sustainable Operations Strategy and Performance

A well valued plan is needed for developing theory based foundations of a sustainable operations strategic management system (SOSMS). Porter and Kramer (2006) mention that many organisations do not operate their business to achieve full cooperation in regards to society’s long-term goals and demands. Organisations should consider a value proposition that incorporates sustainability models and ideas to their business strategy, forming a realistic plan of corporate social integration. Seliger (2007), on the other hand, suggests a value proposition for sustainable development on basis of improving human living standards. In addition, Seliger (2007) also mentions that sustainable economic, political and social stability can be fulfilled if humankind can create jobs and good living conditions that are in favour of human dignity. Therefore, one of the most important aspects of sustainability is that it is a systematic notion. Operational elements that define operations systems should withstand each other. The same notion applies to the organs of the human body playing a vital role to sustain human living (Cabezas et al., 2003). Moreover, sustainability, looking at the proposed definition is considered a progressive concept that depends on particular contexts, in the aspects of culture, economy and the environment, in past, present and future circumstances. In addition, this raises other issues such as democracy, environmental protection and biodiversity conservation that underpin the notion of sustainability (Ratner, 1999). Therefore, sustainability value proposition should be integrated in a management system, in the condition that will be developed as a foundation for SOSMS.

## Operations Strategy Model

The proceeding discussion attempts to assimilate operations strategy models to performance measurement system requirements, through the mean of sustainability as a regulating factor. Hart (2005) had created a sustainable operations strategy model that was inspired by the proposed framework of Hayes and Wheelwright (1984) that is ordered in the proceeding levels: Current internal strategies are used to enhance internal operations with ongoing process improvements in relation to sustainability e. g. employee involvement, reduction in waste, a conservation in energy and emission control. Current external strategies are used to enhance extended supply chains through analysing upstream supply chains in order to form trade-offs in the selection of materials and processes, besides following closed-loop supply chains for remanufacturing and safe removal. Future internal strategies include investing in capabilities in order to mend pollution causing chemicals throughout manufacturing, to form substitutes for inputs that are non-renewable, besides the shaping of products to reduce material content and the consumption in energy throughout manufacturing and use. Future external strategies include the development of core capabilities in products, supply chains and procedures for long-term sustainability and to follow strategies to facilitate it. Moreover, Margolis and Walsh (2003) claim that it is relevant to form a better understanding based on social performance and the realistic benefits to society, which should be questioned based on corporate social performance and organisational competition.

## Sustainable Operations Strategic Management

Glaser (2006) challenges the amount decision maker’s considerations in terms of the stakeholder interests as opposed to stockholders and the wider community. Therefore, this begs the question, does the legal framework of today persuade or dissuade decision makers regarding non-stockholder interests? Aras and Crowther (2008) state that organisations are enhancing their level of responsibility and accountability in regards to their stakeholders. A suitable governance must be developed, as well as covering the four aspects of sustainability as follows: Societal influence: this is a measurement of impact that society creates upon the organisation in regards to social contract and the influences on stakeholders. Environmental impact: this is the effect of organisational actions based on its geophysical environment. Organisational culture: this is the relationship amongst the organisation and its internal stakeholders, in particular, employees and all aspects associated with the relationship. Finance: this is the sufficient return for undertaking significant risk levels. Reflecting on the determination of regulating and forming recommendations for environmental and social matters, several standards and recommendations have been thought of. For instance, Accountability (AA 1000), Social Accountability (SA 8000), Global Reporting Initiative (GRI), Environmental Management Standards (ISO 14000) and the International Guidelines for Social Responsibility (SR ISO 26000) (Castka and Balzarova, 2008; Mitra and Webster, 2008; Porter and Kramer, 2006). Castka and Balzarova (2008) pictured that organisations can cultivate an evolutionary development from designing and implementing management based systems, that of ISO 9000 and ISO 14000 standards, using the principals of accountability outlined by SA8000 and AA1000, near forming a stakeholder orientated organisation as defined by IS0 26000 recommendations. Boyd et al. (2007) found that when forming an organisational notion for social responsibility, its development establishes corporate social responsibility (CSR) in a holistic sense, which reflects on the obligations to society and stakeholders that are impacted through the firm. In response to customer and shareholders worries for CSR, a number of organisations are applying programs that covers all of their supply chains. These programs are in favour to making sure that suppliers behave in a liable and respective manner in sake of respecting labour practices and environmental issues. Moreno et al. (2010) recognises CSR as a process that organisations develop to think of responsibilities for their operational consequences in regards to economic, environmental and social aspects. Organisations also develop instruments for reporting business activity and to form dialogues between their stakeholders. Pedersen and Neergaard (2009) had previously studied managers insights based on sustainability issues, which were discovered in their ideological systems. In particular, they attempt to build an understanding amongst managerial ideologies and CSR behaviour. Moreover, based on Pedersen and Neergaard (2009)’s empirical study, the data obtained from their survey suggested that managers showed some of their most fundamental responsibilities that relate to: Products: the survey showed that participating managers tended to link the idea of responsibility with the establishment of environmentally-friendly products. People: the issue for employee is considered as an important priority. Communities: managers also pointed out the importance of being a valued member within their local community where their organisation operates.

## Operations Strategy Framework

On the other hand, Hutchins and Sutherland (2008) established a framework for arranging sustainable performance measurement in regards to social aspect, and proposed the following points: Labour equity: the want to form some measures that describes the delivery of employee compensation within a company. The closer the ratio is to one, better the compensation equity within the organisation. Healthcare: metrics are required to illustrate an organisation’s role in giving and supporting employees’ and families healthcare. A more reliable measure could be health maintenance expenses for every employee. Safety: the definition of safety within the workplace of organisations. Indicators are required that increases as social sustainability enhances. Philanthropy: organisations’ play important financial roles within their community and to the greater society, which have no relationship to its core functions as a business. It is suggested to describe a company’s philanthropic commitment through the ratio of charitable donations to market capitalisation. A framework that revolves around the measures selection process can be founded in the competitive scopes of manufacturing or service operations: price e. g. cost or operational efficiency; quality, flexibility and innovation e. g. process and product; and time e. g. dependability and agility. Sustainability issues may form novel performance dimensions such as the environment e. g. pollution and sustainability; and society e. g. quality of life and working life. Consequently, a model of operations strategy that is line with performance dimensions and areas of decision establishes a rudimentary building block for the beginning of studying issues of sustainability and operations strategy. Environmental and social responsibility can be demonstrated, defining associations with performance dimensions and areas of decision, in the same manner that Porter and Kramer (2006) sort out for the value chain. Fig. 1 illustrates schematically three axes that show categories of performance, associated with a simple input output model. These classes define sustainability in regard to economic, environmental and social aspects: C: UsersMarkDesktopUntitled. jpg

## Figure 1: Sustainable Performance Dimensions (Platts, 2007)

Moreover, areas of decision make up and complete the entire operations strategy model, which are seen in the tables illustrated in Appendix 1. These are customised for manufacturing and service production procedures.

## Recommendations

Contrary to the frameworks and strategies suggested by Platts (2007), and Porter and Kramer (2006), in order to fully establish an absolute definition of strategic management systems, it is necessary to define performance dimensions and recommendations. The tables shown in Appendix 2 represent a series of recommendations for sustainable performance. In reflection to the tables illustrated in Appendix 1 and 2, while the areas of decision statements are established based on traditional manufacturing and service operations, sustainable performance is properly defined and does indeed support areas of decision policies and activities. Therefore, a possible recommendation could be formed, as stated in an operations strategy analysis by Rodriguez Fernandez (2006). Moreover, he saw, based on the assumptions by Stiglitz (2004) that maximising the results of shareholders do not entirely lead to economic efficiency, nor social justice performance, environmental protection or human rights defences

## Conclusion

Suggesting a sustainable strategic management model is not a small task as the likes of complexity and dynamics are solid intervening variables amongst forming strategies and the demands of stakeholders. So, looking back at the literature and especially the work of Porter and Kramer (2006), there are many questions that need answering in regards to emerging a sustainable approach for operations management, specifically those in association with social responsibility and its assimilations to operations strategic management systems. However, Wilkinson et al. (2001) concluded that in order to develop sustainable operations, it is paramount to be aware of what are the enterprise value creation drivers, coining novel performance scopes or competitive patterns; rethinking and defining operational concepts, improving economic approaches in order to focus on stakeholder benefits; define capabilities that operations systems should establish in order to be socially responsible; forming design recommendations for OSMS, that are associated with social responsibility, as well as being aware of the standards and recommendations such as AA 1000 (Accountability), SA 8000 (Social Accountability), GRI (Global Reporting Initiative), ISO 14000 (Environmental Management Standards), and SR ISO 26000 (International Guidelines for Social Responsibility), as pointed out by Castka and Balzarova (2008); Mitra and Webster (2008); and Porter and Kramer (2006). Moreover, the author can conclude that sustainable operations strategic management implies reviewing the design of enterprise strategic management systems, regarding a novel operations strategy vision, and to recommence operations capabilities and competences in order to fully implement a sound operations strategy. Thus, the bottom here is being aware of the aspects associated with operations strategic management to fully appreciate how it works and how it can benefit the real world in the long-term.