

# Sustainable Supply Chain Management: A Simple Review and Research Direction

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Abstract: Sustainable supply chain management (SSCM) is management that integrates economic and non-economic problems in the supply chain. They found it difficult to adopt high influence in other practices to adopt SSCM. These practices are effectively identified and applied, enabling many other practices; the company can then follow all required SSCM practices.

## 1 BACKGROUND

Oliver and Weber found definitions for management systems and Supply Chain (SC) is a part of it (Oliver & Webber, 1982). Since then, SC has been developed at the research and industry level, and SC is now a basic system in any organization (Barbosa-Póvoa, da Silva, & Carvalho, 2018). Sustainable supply chains have caused changes to activities that have strong relation with environment. (Acquaye et al., 2018).

SSCM providing positive advantage in the world of business. (Ansari & Kant, 2017). Finally sustainability management (SM) is influence to the continuity of business.. (Bastas & Liyanage, 2018).

Supply chain management has become a strategic tool for all companies seeking the positive grow of economic, service and time (Eskandarpour, Dejax, Miemczyk, & Péton, 2015). The real system shows the fact that there is a growing concern to social and environmental performance of company's partner.. (Genovese, Acquaye, Figueroa, & Koh, 2017).

## 2 LITERATURE REVIEW

### 2.1. Sustainable supply chain

Sustainable supply chains are related to planning and controlling each of the flow of capital, information and also materials. And each of that management

process must be have good link with social, economic, and environmental. (Dubey et al., 2017).

### 2.2. First Section

According to the growth of government, customer and social pressure and also their expectations, there must be a continuous improvement in manufacturing industry (Esfahbodi, Zhang, & Watson, 2016).

### 2.3. Thinking about Sustainability in Supply Chain Research

CSR is an implication of the sustainability responsibilities. The economic and responsibilities view is become important. (Castillo, Mollenkopf, Bell, & Bozdogan, 2018).

### 2.4. Sustainable Supplier Selection

The social penetration responsibility in Traditional supplier selection literature is very limited, and the role of suppliers to ensure a sustainable supply chain has recently been the focus of research. Drawing from the latest literature, the selection of sustainable suppliers characterizes the extent to which purchasing social and environmental dition to economic criteria when choosing new suppliers (Davis-Sramek, Thomas, & Fugate, 2018).

## 2.5. Characterization of the supply chain

SC management are divided into downstream and upstream. If the system use multi-tiered SC, there will be different boundaries. (Sauer & Seuring, 2018)(Su et al., 2016) (Lin, Tseng, & Pai, 2018).

## 2.6. Analyze of Some Papers on SSCM

In Table 1 could be seen some previous SSCM studies.

Table 1: Some studies about SSCM

Paper by	Contain	Factor	Place
Ali Bastas, Kapila Liyanage	<ul style="list-style-type: none"> <li>Collective investigations.</li> <li>Integration of social, economy and, environmental</li> </ul>	<ul style="list-style-type: none"> <li>Integration and management of Supply chain</li> </ul>	United kingdom
Vincent E. Castillo, et.al.	<ul style="list-style-type: none"> <li>Supply chain has interdependence</li> <li>This research effort develops a more sustainable supply chain.</li> </ul>	<ul style="list-style-type: none"> <li>Sustainability thought in supply chain research</li> <li>Supply chain integrity</li> <li>Exploratory analysis of the SCI construct</li> </ul>	United States
Beth davis-Sramek, Rodney W. Thomas, and Brian S. Fugate	<ul style="list-style-type: none"> <li>Empirical revision in examining SSCM</li> <li>The manager's perspective trade-off</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable supplier selection</li> <li>Behavioral decision theory</li> </ul>	United States
Vivek Roy	<ul style="list-style-type: none"> <li>Adoption, implementation, expansion, development and results of supply chain management (SCM).</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable supply chain management</li> <li>Conceptual</li> <li>Comprehensive</li> <li>Research themes</li> <li>SLR</li> </ul>	India
Adolf Acquaye, et.al.	<ul style="list-style-type: none"> <li>Perspective of supply chains</li> <li>The Supply chain related with life cycle of industry.</li> </ul>	<ul style="list-style-type: none"> <li>Operational Research in Environment and Climate Change</li> <li>Sustainable Performance Measurement</li> <li>Industry Lifecycle Thinking</li> <li>BRICS</li> </ul>	UK
Kuo-Ping Lin, Ming-Lang Tseng	<ul style="list-style-type: none"> <li>Using estimation to Fuzzy Trial Making Trial (AFDEMATEL.)</li> </ul>	<ul style="list-style-type: none"> <li>Approximate fuzzy arithmetic and DEMATEL</li> </ul>	Taiwan
Deepak Mathivathanan, et. al.	<ul style="list-style-type: none"> <li>The best method for applying SSCM.</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable supply chain management</li> <li>Automotive industries</li> <li>Emerging economies</li> <li>Sustainable supply chain management</li> </ul>	India
Rameshwar Dubey, et. al	<ul style="list-style-type: none"> <li>Research by using deductive empirical.</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable supply chain</li> <li>Total interpretive structural modeling</li> <li>MICMAC</li> </ul>	United Kingdom
Andrea Genovese, et. al.	<ul style="list-style-type: none"> <li>Emerging of Sustainable and Green supply chain management for best practices.</li> </ul>	<ul style="list-style-type: none"> <li>Environmental sustainability</li> <li>Decision support</li> <li>Product lifecycle analysis</li> <li>Circular economy</li> </ul>	UK
Chu-Mei Su, et. al.	<ul style="list-style-type: none"> <li>Applying Gray is related</li> </ul>	<ul style="list-style-type: none"> <li>Grey theory</li> </ul>	Taiwan

	with preference ratings.	<ul style="list-style-type: none"> <li>• DEMATEL</li> <li>• Sustainable supply chain management</li> <li>• Supplier selection</li> </ul>	
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### 3 METHODS

The next section are the methods for this study. (Ansari & Kant, 2017):

**Step 1. Material collection:**

Gathering is analyzing, limiting, and defining the unit of analysis. stage various activities can be carried out that can produce a data that can help research.

**Step 2. Descriptive analysis:**

Description of analysis, namely access to information collected from theoretical analysis.

**Step 3. Category selection:**

Selection of topics to get a method of understanding SSCM.

**Step 4. Material evaluation:**

Material analysis according to the problem and interpreting the evaluate paper samples according to the selected categories and dimensions.

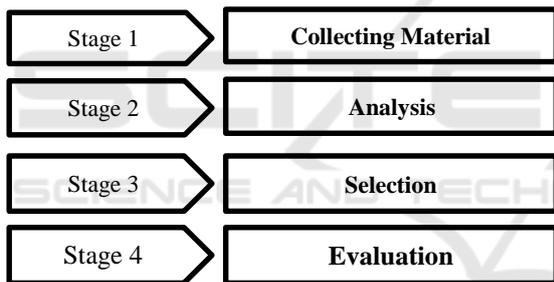


Figure 1: Methodology of Research

### 4 RESEARCH DIRECTION

The aim of developing SSCM is to create an awareness of the importance of sustainable supply chains (Roy, Schoenherr, & Charan, 2018). Stage identify and classify is summarized by involving personal opinion. (Mathivathanan, Kannan, & Haq, 2018).

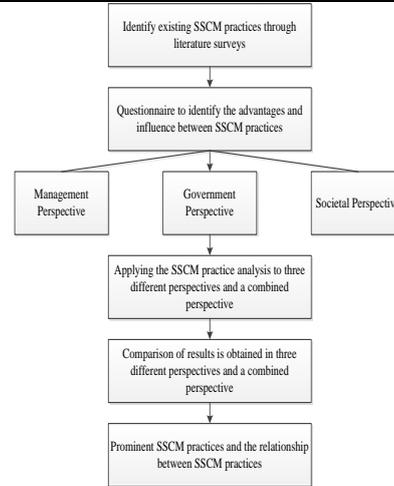


Figure 2: The research framework proposed to identify prominent SSCM practices

### 5 CONCLUSIONS

The Sustainable Supply Chain has become the basis for any company to achieve sustainable goals. SSCM is a new paradigm for company’s success. Paper’s categories that analyzed is organized using years (time), authors, variables, country that research was done. The opportunities of next research could be specified clearly.

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