

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

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Keywords: Sustainable Supply Chain Management, SSCM.

Abstract: Sustainability and field of supply chain management is an interesting topic. This paper shows some paper issued from 2009 to 2011 in the Sustainable Supply Chain Management area. An analysis of some cases are discussed and presented. Some theories and methodologies are reviewed. After that step, simple conclusions are made.

## 1 INTRODUCTION

Providers are required to supply communities with the required results, parts, materials, and services in successful way to help preserve an aggressive profit. Nowadays, this become growing high as proceed industry, and have relationship with environment. Controlling provider can bring a common three launched operation, choosing, assessing, and then further expanding these providers (Bai, Sarkis, & Wei, 2010).

Increasing significance of SSCM is known well to firms. Some reason for this such as: market-pressure, globalization; improving cost; etc.

Supply chain management is influenced by new information technologies and the fast growing consumer in the whole markets (Qian, 2011).

With deep analyzed of some sustainable supply chain management (SSCM)'s paper that published from year of 2009-2011, with the purpose of recognizing progressions, possible agreement in discoveries and methods across researches, and ranges, new vision could be achieved (Carter & Easton, 2011).

## 2 LITERATURE REVIEW

Supply chain design has wider progress. It's not enough if the supplier using ordinary designs. (Bai et al., 2010).

Supply chain management is related with logistic systems and transportation. (Qian, 2011).

This paper describe some good ideas of sustainable supply chain management.

Section 2 shows how the procedure of review this paper. Section 3 show what is the achievement of this paper. From section 4 we could know sustainable supply chain management research.

Table 1 is a review of some paper that related to SSCM from 2009-2011.

## 3 METHODS

Starting with research in current state, some paper were studied. (Winter & Knemeyer, 2013) Figure 1 make us clear with the used methodology.

### Step 1 – choosing period of paper publication

Several studies in the Period between 2009 and 2011 have been chosen as the main references. The selection of this period of time is considered to have sufficiently represented thinking that is a developing science.

### Step 2 – choosing journal

Some important area and disciplines are chosen such as: *Corporate Social Responsibility and Environmental Management*, *Int. J. Product Lifecycle Management*, *Sustainable Supply Chain Management*, *International Journal of Physical Distribution & Logistics Management* selected as references. These journals contain disciplines *Sustainable Supply Chain Management*.

### Step 3 – choosing article

The specific characteristic for influential paper to be included in the analysis is the clear relationship of the

content of the article to the framework of the previously defined text.

**Step 4 – analysis**

The next step is to study and examine selected articles to find out how research has developed over time. This analysis need input and specifications.



Figure 1: Methodology of Research.

Table 1: Reviews from Previous Paper

Time	Paper by	Contains	Model and framework	Place
2009	(Badurdeen et al.)	<ul style="list-style-type: none"> <li>Total base life cycle method, 3R’s of reduce, reuse and recycle to 6R’s that involves recover, redesign and remanufacture</li> </ul>	<ul style="list-style-type: none"> <li>The SCOR model</li> <li>The GSCF framework</li> <li>PLM and SSCM</li> </ul>	U.S.
2009	(Krause, Vachon, & Klassen)	<ul style="list-style-type: none"> <li>Cutting price</li> <li>Dynamic and good.</li> </ul>	<ul style="list-style-type: none"> <li>Strategic , Noncritical, Bottleneck and Leverage items</li> </ul>	Canada
2009	(Stock & Boyer, 2009)	<ul style="list-style-type: none"> <li>Achieve better activities; benefits; and materials.</li> <li>Focus to the theory, and research hypotheses testing</li> </ul>	<ul style="list-style-type: none"> <li>A simple and good methodology</li> </ul>	U.S.
2010	(Gold, Seuring, & Beske)	<ul style="list-style-type: none"> <li>Wider level achievement of business behaviour</li> <li>The model that applied is collaboration</li> </ul>	<ul style="list-style-type: none"> <li>Environmental care</li> <li>The supply process must green</li> </ul>	Germany
2010	(Michelsen & Fet)	<ul style="list-style-type: none"> <li>Creative and always doing better</li> </ul>	<ul style="list-style-type: none"> <li>The performance of the supply chains</li> </ul>	Norway
2010	(Bai et al.)	<ul style="list-style-type: none"> <li>Having standard and device for assessment</li> </ul>	<ul style="list-style-type: none"> <li>Database of suppliers exists</li> <li>Alternative suppliers</li> </ul>	China
2010	(Gold et al.)	<ul style="list-style-type: none"> <li>Consist to analyse the sustainable supply chain management</li> </ul>	<ul style="list-style-type: none"> <li>Supply strategy</li> <li>Focus to Customer</li> <li>High management</li> <li>Technology</li> </ul>	Germany
2010	(Nagurney & Nagurney)	<ul style="list-style-type: none"> <li>Investigate capacities of operational costs</li> </ul>	<ul style="list-style-type: none"> <li>Controlling plants, distribution centres and the movement of product’s link</li> </ul>	U.S.
2010	(Ramudhin, Chaabane, & Paquet)	<ul style="list-style-type: none"> <li>consider the market</li> <li>Supply chain managers concentrate of supply chains duty</li> </ul>	<ul style="list-style-type: none"> <li>Number of units of product shipped</li> <li>Number of units of product manufactured</li> <li>Binary variable equals</li> </ul>	Canada
2011	(Qian, Carter & Easton, Paulraj)	<ul style="list-style-type: none"> <li>Focus to cost management and the supply chain relationship both social and environmental fields</li> </ul>	<ul style="list-style-type: none"> <li>Monetary and Physical EMA</li> <li>Occupying strategy</li> </ul>	Australia
2011	(Lee, Winkler)	<ul style="list-style-type: none"> <li>supply chain management of automobile</li> <li>economic and environmental goals</li> </ul>	<ul style="list-style-type: none"> <li>Carbon footprint</li> <li>Companies</li> <li>Employees</li> </ul>	Australia, Austria
2011	(Wolf)	<ul style="list-style-type: none"> <li>Cost around Sustainable supply chain integration</li> </ul>	<ul style="list-style-type: none"> <li>Sample firms</li> </ul>	Germany

## 4 RESULTS AND DISCUSSION

In this part, a near choice of using traditional and sustainable SCM is showed. Choosing between traditional SCM or SSCM are according the problem and the objective of the company. The decision is based on the government regulation, costumer pressure and the benefit that want to achieved.

## 5 CONCLUSIONS

According to all the paper that reviewed, there are two type research, the first is case study and the second, content review. Collect existing theories to obtain a first intuition into the occurrence considered underlines the needs inside the case study to expand a theoretical.

These analyses produce the next major perception are forces from ruling figures, consumers and investors are part of SSCM, growing the provider production can be reflected on a significance impartial for firms applied supply chain. Corporate risk management, social view of sustainability must be another main attention.

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