The purpose of this paper is to investigate intra-organizational structures of sustainable supply chain management (SSCM). The paper develops a conceptual framework of cross-functional integration with a focus on knowledge transfer.

SSCM, understood as the integration of supply chain management and environmental, social, and economic issues, has received increasing interest in research and in corporations (Carter & Rogers, 2008; Seuring & Müller, 2008). Analyzing SSCM in more detail uncovers various external and internal challenges a focal company (the company that controls the supply chain; Seuring & Müller, 2008) has to cope with: it seems unlikely that a company can control all processes of production of semi-manufactured parts and the related environmental and working conditions across the whole supply chain (Roberts 2004, 3; Piplani et al., 2008).
Another challenge is that customers and media are increasingly interested in product properties and services as well as in production conditions along the supply chains which can create pressure for companies to deal with SSCM (Carter & Dresner, 2001; Koplin et al., 2007). In turn, however, these topics can also create corporate opportunities. Companies which consider sustainability issues in their procurement or which offer innovative products and services can create business opportunities by fulfilling the demand for socially responsible products and services (Geffen & Rothenberg, 2000; Kassinis & Soteriou, 2003; Carter & Jennings, 2004). To cope with these challenges, the purchasing department is not only involved in an ongoing dialogue with its suppliers; but also – as supply chain processes are also relevant for functional units within the company (Lambert et al., 1998) – in a dialog with company-internal departments such as the environmental department, R&D, or marketing (in order to collect and discuss the – sometimes competing – sustainability-related demands by customers and other external stakeholders). In other words, an external and the internal supply chain can be distinguished. External supply chains are characterized by the flow of materials, capital and information between the different partners (suppliers, focal company, retail, consumers, disposal/recycling), whereas internal supply chains encompass the interaction between the different functional units in the (focal) company (Lambert et al., 1998; Seuring & Müller, 2008). This raises the following question:

*How can the activities of different functional units be aligned in SSCM?*

More specifically, this article deals with two detailed questions:

1) *From a SSCM perspective, which kind of knowledge has to be managed to improve cross-functional integration?*

2) *What are practices and tools to manage SSCM relevant knowledge?*

To answer these questions a conceptual framework is developed. When intra-organizational knowledge transfer (Grant, 1996; Sveiby, 2001) and cross-functional integration (Crittenden,
2011) are analyzed, such an integrated approach can help to respond to the above mentioned SSCM challenges. Building on this, the paper will concentrate on practices and tools which are beneficial for intra-organizational integration and for knowledge transfer between the different functional units to achieve SSCM goals. For instance, such goals are the development environmental friendly products or the reduction of waste across the supply chain.

Up to now, few papers discuss the necessity to address the intra-organizational alignment of departments to effectively manage the supply chain in sustainability terms (e.g. Pagell & Wu, 2009; Peters, 2010). However, they do not aim at building a theoretical framework with a focus on the transfer of knowledge within the organization. Further, various scholars underline the importance of cross-functional integration to manage environmental and sustainability issues, however, not in the context of SCM (e.g. Bannerjee, 2001). Other publications deal with cross-functional integration in conventional SCM, however, neglecting the environmental or sustainability management perspective (Sherman et al., 2000; Pagell 2004). To bring these different perspectives together, this paper focuses on the combination of literature from SSCM, cross-functional integration, and knowledge transfer.

Esper et al. (2010) deal with the internal demand-focused and supply-focused processes. This means, that the knowledge regarding the demand side (customer-oriented) and the knowledge regarding the supply side (supplier-oriented) can be transferred internally, in order to the overcome the isolation of both sides (Esper et al., 2010). From a SSCM perspective, therefore, departments such as environmental management, purchasing, marketing, R&D, and production can collaborate through cross-functional mechanisms.

As cross-functional interaction within companies is highly complex (Brettel et al., 2011) information and knowledge flows should be managed purposefully. In this context, knowledge means organized, synthesized, or summarized information (Liebowitz, 2003). The
knowledge-based theory (Grant, 1996) emphasizes the role and high relevance of knowledge for a company to create competitive advantage. In the context of SSCM and intra-organizational integration, knowledge sharing and distribution are crucial. Sveiby (2001) distinguishes between three types of knowledge distribution: knowledge has to be transferred across internal structures, external structures, and individual competences. In this context, one goal of an effective knowledge transfer is to secure a match of information and material flows along the supply chain. Thus, for SSCM, both literature streams can be merged to investigate cross-functional integration. For the development of the proposed approach Sveiby’s model will be used and extended conceptually. Finally, practices and tools of intra-organizational SSCM will be analyzed based on the developed conceptual framework.

References


Curriculum Vitae

Personal data

Dipl-Kffr. Dorli Harms
Born August, 5th 1978 in Uelzen, Germany

Centre for Sustainability Management (CSM)
Leuphana University Lüneburg
Scharnhorststr. 1
D-21335 Lüneburg, Germany
E: dharms@uni.leuphana.de
T: +49 (0)4131 677-2248, F: -2286

Academic education

10/09 – present PhD studies
at the Centre for Sustainability Management (CSM), Faculty of Sustainability Sciences, Leuphana University Lüneburg
Thesis “Forms of interaction in sustainable supply chain management. Inter- and intraorganizational perspectives”

08/09 – present Research assistant (half time)
05/08 – 03/09 at the Centre for Sustainability Management (CSM), Leuphana University Lüneburg

04/06 – 02/08 Masters’ Degree Business Administration (Diplom Kauffrau)
at the Leuphana University Lüneburg
Mayors Spanish and Environmental Management; Grade: 1.9
Thesis “Corporate Social Responsibility and Corporate Culture. Samples from the Chemical Industry”

09/07 Student assistant for the project “Latin American MBA programme”
at the Centre for Sustainability Management (CSM), Leuphana University Lüneburg

10/05 – 02/06 Visiting scholar within the Erasmus programme
at the Universidad de La Rioja in Logroño (Spain)

10/04 – 09/05 Basic studies in Business Chemistry
at the Westfälische Wilhelms-University Münster

04/03 – 09/04 Basic studies in Business Administration
at the Leuphana University Lüneburg, while working full time, B.A. (Vordiplom)

10/99 – 09/02 Dual study program Business Administration (Betriebswirtin)
at the Hamburg Academy of Business Administration and Shell & DEA Oil GmbH, Hamburg, Grade: 2.0

Professional experiences

05/08 – present Management assistant (half time)
at ifu Institut für Umweltinformatik GmbH, Hamburg
04/07 – 07/07 Internship in the international sales and marketing department at Carl Kühne KG (GmbH & Co.), Hamburg

06/05 – 09/05 IT-Trainer for Microsoft Office at Vastbau GmbH, Gronau

10/02 – 09/04 Administrator for remuneration and personal marketing in the HR department at RWE Dea AG, Hamburg

10/99 – 09/02 Trainee at RWE Dea AG, Hamburg in combination with the Hamburg Academy of Business Administration

10/01 – 12/01 Internship in the Controlling and Taxes departments at the German-Swedish Chamber of Commerce, Stockholm (Sweden)

Research projects:

- 10/09 – 12/10 Project “Corporate sustainability barometer” in cooperation with PricewaterhouseCoopers AG
- 08/09 – 09/09 Project “Compendium of sustainability management tools for the public sector” commissioned by the German Council for Sustainable Development
- 05/08 – 03/09 Project “Sustainable supply chain management – State of SSCM in German companies” funded by The German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

Publications:

Journals


Contributions in edited volumes

Monographs


Conferences

10/10 “VHB Herbst-Tagung, Kommission Nachhaltigkeitsmanagement”
September, 30th - October, 1st 2010 at the University Kassel
Presentation “Sustainable Supply Chain Management Empirische Studie bei DAX & MDAX – Praxis & Theorie”

03/10 “6th Environmental Management Leadership Symposium: Advancing the profession - Form environmental to sustainability management”
March, 20th - 22nd 2010, at the Centre for Sustainability Management (CSM), Leuphana University Lüneburg
Member of the organizing committee

11/07 “Business Case for Sustainability”
November, 16th - 17th 2007, at the Leuphana University Lüneburg
Member of the organizing committee

12/06 “First International Congress on Oasis and Sustainable Tourism”,
December, 14th - 16th 2006, Elche (Spain)
Attendance

Language skills

German Primary
English Conversational and written; TOEFL and SEFIC certificates
Spanish Conversational and written; Certificado Superior de Español de los Negocios
French Basic Knowledge

IT skills

MS-Office-Paket, SPSS, SAP, Lotus Notes, Gauss Intranet

Pre-professional qualification

07/99 – 08/99 Business English Courses
at Berlitz, London (UK) and Singapore

04/99 – 06/99 Internship
at the A. Gubbe, Uelzen

01/99 – 03/99 Excursion and language-learning travel through New Zealand

10/98 – 12/98 Laboratory assistant
at Nordzucker AG, Uelzen

07/98 – 09/98 Working student
at Volkswagen AG, Hannover

Further education

12/04 Local training course “Management Training”
Participant and member of the European student organization AEGEE Münster e.V.
02/02 Qualification course for instructors
at the Chamber of Commerce and Industry, Hamburg

Interests

Sports (Judo, Running), Traveling, Literature

Lüneburg, February, 28th 2011