HOW TO CREATE MORE SUSTAINABLE SCM?

Vojko Potočan, Ph. D.
Zlatko Nedelko, B. Sc.
UM, Faculty of Economics and Business
Razlagova 14. SI-2000 MARIBOR
Phone: +386 2 22 90 255
Fax: + 386 2 25 16 681
E – mail: vojko.potocan@uni-mb-si,
E – mail: zlatko.nedelko@uni-mb.si,

Abstract

Organizations in modern environment are able to assure its existence with the entire satisfaction of needs and demands of end-customers. Producers can be competitive on the market, when they offer suitable: price, quality, range, uniqueness, and contribution to sustainable development. For this reason they are confronted with the constant dilemma, how to re-form their work in order to reach the desired target results. Innovative performing of purchasing operations and physical distribution has also an important role in business. To deal with the whole supply process many different integrated concepts of managing across the traditional functional areas of purchasing operations and physical distribution were developed, such as supply chain management (SCM). SCM presents strategically significant concept, which can be defined as managing of the entire chain of raw material supply, manufacture, assembly and distribution to the end customer. It faces the same natural and market conditions as all other areas of business, including the requirement for consideration of sustainable development (SD). SCM can succeed, if stakeholders of SCM do understand (and implement in operation practice) important business trends on the basis of sustainable development (SD) of supply chain (e.g. green logistics), and appropriate business ethics, which means sustainable SCM ethics.

Key words: green logistic, logistics, supply chain management, sustainable development, sustainable supply chain management.

1. INTRODUCTION

Organizations in modern environment are able to assure its existence (and long-term development) with the entire satisfaction of needs and demands of end-customers. For this reason producers are confronted with the constant dilemma, how to re-form their work (and behavior) to reach the desired target results. Entire and suitable (this is efficient and successful) organizational work can be assured on the following basis: permanent dynamic adaptation of intentions and aims, use of suitable business concept and innovative work (and behavior) (Daft, 2003; Murphy, Wood, 2004; Ballou, 2007; Schermerhorn, 2008; Potocan, 2008).

Organizations with entire and innovative (understanding) forming and performing purchasing operations and physical distribution define the (possible) level of suitability when assuring the needs (and demands) of end-users. The use of logistic and material management in an organization enables (partly) improvement of work, but not (also) "optimization" of the whole production process of products and/or services (in which more organizations collaborate). To deal with the whole supply process many different integrated concepts of managing across the traditional functional areas of

purchasing operations and physical distribution were developed (e.g. materials management, merchandising, logistic, supply chain management).

SCM presents ambitious and strategically significant concept, which can be defined as "managing the entire chain of raw material supply, manufacture, assembly and distribution to the end customer" (Blanchard, 2006; Bolstorff et al., 2007; Potocan, 2008; Potocan, 2009).

Therefore we would like to shift attention from a general-based discussion about SCM to more practical issues: how to implement SD concept in SCM operation. We offer some new suggestions about: understanding of role and importance of SD in the framework of logistics and SCM, how to implement concept of SD in SCM operations, and how to understand new starting points for working of SCM in the current environment.

2. THE SUPPLY CHAIN MANAGEMENT

2.1. BASIS FOR UNDERSTANDING OF SC AND SCM

A dominant logistics philosophy throughout the 1980s and into the early 1990s involved the integration of logistics with the other functions in an organization in an effort to achieve the enterprise's overall success. The early to mid-1990s witnessed a growing recognition that there could be value in coordination the various business functions not only within organizations but across organization as well – what can be referred to as supply-chain management philosophy. In general, "the SC concept originated in the logistic literature, and logistics has continued to have a significant impact on the SCM concept" (Stock et al., 1999; Murphy, Wood, 2004; Potocan, 2004; Stank et al., 2005; Slack et al., 2006; Ballou, 2007).

Since the early to mid 1990s there has been a growing body of literature focusing on SCs and SCM, and this literature has resulted in a number of definition for both concepts. As was the case when defining logistics, it's important that we have a common understanding of what is meant by SC and SCM (Porter, 1998; Murphy, Wood, 2004; Potocan et al., 2005; Potocan, Mulej, 2006; Slack et al., 2007; Schermerhorn, 2008).

A SC "encompasses all activities associated with the flow and transformation of goods from the raw material stage (extraction), through to the end user, as well as the associated information flow. In reality there exist several types of SCs, and it is important to note several key points. First, SCs are not a new concept: organizations traditionally have been dependent upon suppliers, and organizations traditionally have served customers. SCs can be much more complex (in terms of the number of participants parties) than others, and coordinating complex SCs is likely to be more difficult that doing so for less complex SCs. Moreover, complex SCs may include "specialist" companies, to provide coordination among various SC parties.

SCM can be defined as "the systematic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses in the SC, for the purpose of improving the long-term performance of the individual companies and the SC as a whole" (Lummus, Vokurka, 1999; Kauffman, 2002; Daft, 2003; Cole, 2004; Dessler, 2004; Potocan, 2004; Blanchard, 2006; Bolstorff, Rosenbaum, 2007).

Successful SCM requires companies to accept an enterprise-to-enterprise point of view, which can cause organizations to accept practices and adopt behaviors that haven't traditionally been associated with buyers-seller interactions. Moreover, successful SCM requires companies to apply the systems approach across all organizations in the SC, for the same reasons. When applied to SCs, the systems approach suggests that companies must recognize the interdependence of major functional areas within, across, and between firms. In turn, the goals and objectives of individual SC participants should be compatible with the goals and objectives of other participants in the SC. For example, a company that is committed to a high level of customer service might be out of place in a SC comprised of companies whose primary value proposition involves containment.

How SCM changes relations between companies? Conventional wisdom suggests that company-versus-company competition will be superseded in the twenty-first century by supply-versus-supply-chain competition. While this may occur in a few situations, such competition may not be practical in many instances because of common or overlapping suppliers or the lack of a central control point, among other reasons. Rather, a more realistic perspective is that individual members of a SC will compete based on the relevant capabilities of their supply network, with a particular emphasis on immediately adjacent suppliers or customers.

2.2. Key attributes of SCM

A number of key attributes are associated with SCM, including customer power, a long-term orientation, leveraging technology, enhanced communication across organizations, inventory control, and interactivity, inter-functional, and inter-organizational coordination (Coper et al, 1997; Stock et al., 1999; Galbraith, 2002; Murphy, Wood, 2004; Potocan, 2004; Potocan et al., 2005; Stank et al., 2005; Hugos, 2006; Slack et al., 2006; Potocan, 2008; Schermerhorn, 2008; Potocan, 2009). Although each of these is discussed in literature as discrete entities, interdependencies exist among them. For example, advances in technology could facilitate enhanced communications across organizations, while a long-rang orientation could facilitate inter-organizational coordination.

Customer power: SCs recognize the power of consumers and view customers as assets. In recent years, a clear shift of power has moved away from the manufacturer and toward customer power. The increasing power of customers has important implications for the design and management of SCs. Because customers needs and wants change relatively quickly, SCs should be fast and agile. Fast encompasses a speed/time component, while agile focuses on an organization's ability to respond to changes in demand with respect to volume and variety.

Long-term orientation: A long-term orientation tends to be predicated on relational exchanges while a short-term orientation tends to be predicated on transactional exchanges. At a minimum, relational exchange may result in individual SC participants having to rethink (and rework) their approaches to other SC participants. We must mention here also partnerships, as long-term relationship between SC participants. Some partnerships can be informal, while others partnerships involve ownerships. Alternatively, partnerships can be formalized by some type of contractual agreement among the various participants.

Leveraging technology: It is argued that technology has been at the centre of changes taking place that affect the SC, and that two key factors – computing power and the Internet – have sparked much of this change. With respect to the former, SCs can be complex entities consisting of multiple organizations, processes, and requirements. As such, attempts at mathematical modeling of SCs in an effort to maximize shareholders' wealth or minimize costs. However, the introduction and continued

development of the computer chip now allows for fast, low-cost mathematical solutions to complex SC issues. With respect to SCs, the Internet can facilitate efficiency and effectiveness of service and reduce their logistics costs.

Enhanced communications across organizations: Because SCs depend on huge quantities of real-time information, it is essential that this information can be seamlessly transmitted across organizations. It is also important that all member of SC understand, that the enhanced communications across organizations is dependent upon both technological capabilities as well as a willingness to share data and make it influential, i.e. information.

Inventory control: Another attribute of SCM involves various activities that can be lumped under the inventory-control aspect. A second aspect of inventory control in SCM involves a reduction in the amount of inventory in the SC, or what some authors have termed a JAZ (just about zero) approach.

Interactivity, inter-functional, and inter-organizational coordination: Until the past 30 years, managers tended to be concerned with optimizing the performance of their particular activities, particular functions, or particular organizations. By contrast, SCM requires managers to subordinate their particular activities, functions, or organizations in order to optimize the performance of the SC. The interconnected nature of SCs suggests that optimal performance will be elusive without coordination of activities, functions, and processes. Additionally, there's little question that inter-organizational coordination is more challenging and difficult than either inter-functional or interactivity coordination. Some possible methods for improving of inter-organizational co-ordinations are: supply-chain councils, placing personnel, coo petition, etc.

2.3. Barriers to SCM

While SCM my sound attractive from a conceptual perspective, a number of barriers block its effective implementation (See: Stock et al., 1999; Rushton et al., 2001; Kauffman, 2002; Dessler, 2004; Murphy, Wood, 2004; Potocan, 2004; Stank et al., 2005; Ballou, 2007; Potocan, 2008; Schermerhorn, 2008; Chesbrough, 2009; Potocan, 2009). Some of them are:

Regulation and political considerations: Several decades ago, many of the SC arrangements in international economy would have been considered illegal under certain regulatory status. Long-term commitments, which are one of the bedrocks of SCM, may stile competition to the extent that they make it more difficult for others to enter particular market. Political consideration such as crises (all types and sorts) and governmental stability can also act as a barrier to SCM.

Lack of top management commitment: Top management commitment is regularly cited as an important component when individual companies attempt to initiate and implement new initiatives, programs, and products. Because of SCM's inter-organizational focus, top management commitment is absolutely essential if SC efforts are to have any chance of success. Unfortunately, top management is sometimes hesitant to fully commit to SCM because it is uncomfortable with one or more of its underpinnings.

Reluctance to share, or use, relevant data: The business bromide "Information is power" can make information (data) sharing somewhat problematic, particularly with data that companies might regard as proprietary. However, a reluctance to share data likely decreases the overall effectiveness and efficiency of SCs because other members may be making decisions based on erroneous data and/or assumptions.

Incompatible information systems: One barrier to inter-organizational coordination in the past was incompatible computer hardware. It's more likely today, by contracts, that software compatibility is the more pressing issue, particularly with the growing popularity of enterprise resource planning (ERP) systems. Although ERP systems offer tremendous potential for increasing organization effectiveness and efficiency, the installation of ERP systems can cost a lot of money and take several years to complete.

Incompatible corporate cultures: Because SCM emphasizes a long-term orientation and partnerships between various participants, it is important that participants be comfortable with the companies that they will be working with. In broad sense, corporate culture refers to "how we do things around here" and reflects an organization's vision, values, and strategic plans. The possible manifestations of a company's culture are (for example): company brochures, company rituals, and dress codes. All manifestations of corporate culture may provide important clues about the ability of companies to work together.

3. SCM AND SUSTAINABLE DEVELOPMENT

3.1. Criteria for SCM to become Sustainable SCM

In both theory and practice there is no model of business and/or SCM, which would provide for a harmonized and target-oriented development of organizations and/or SCM toward sustainable development (SD). The SD concept offers a possible solution, trying to carry out common goals of humankind with a sustainable orientation of human activities at all levels of our common living and behavior (Ackoff, Rovin, 2003; Lester, Piore, 2004; Bolstorff et al., 2007; Potocan, Mulej, 2007).

On the basis of much theoretical cognition and our own experiences in business practice, we can define SCM as a sustainable SCM (SSCM), most generally, as a SCM that tries to work, as much as possible, to attain a synergetic whole of: economic, ecological, social, and ethical objective of its business (see also Potocan, Mulej, 2007; Potocan, 2009).

The basic direction (and objectives) of SCM's being SSCMs working are depicted in Figure 1.

DIMENSION	FOCUS
Economic imperative	Competitiveness
Ecological imperative	Habitability
Social imperative	Community
Ethical imperative	Legitimacy
All dimension	Combined focus

Figure 1. BASIC DIRECTIONS (AND MAIN GOALS) OF SSCM

A SCM as a SSCM tries to conceive and run its working in a way, which meets needs and requirements on levels of: enterprise, its closer natural and social environments, and its broader (i.e. global) ones.

These needs require SCMs as SSCM to define and use suitable criteria, too, to evaluate operation in critical levels of working (See Figure 2).

Criteria Dimension	Corporate Performance	Societal Performance	Global Performance
Economic Imperative	Corporate profitability	Societal wealth	Global wealth
Ecological Imperative	Corporate Eco-efficiency	Societal eco-efficiency	Global eco-efficiency
Social Imperative	Corporate reputation	Societal quality of life	Global quality of life
Ethical Imperative	Corporate values	Societal values	Human values
All dimensions	Sustainable management index	Sustainable development index	Sustainable development index

Figure 2. BASIC CRITERIONS FOR EVALUATING SSCM OPERATIONS

Hence a SCM as a SSCM attains the highest level of requisite holism and destroys the human conditions of survival the least of all enterprises. A SCM as a SSCM does not command with the most modern and comprehensive knowledge only, but with ethics as well allowing it to do no harm, i.e. the SD ethics.

3.2. SSCM Ethics of Interdependence Linking the Selected Important Viewpoints in SCMs

Ethics is a feeling rather than a part of the left-brain rationality/knowledge/skill. It enables us to distinguish right from wrong (Potocan, 2005; Mullins, 2006; Potocan, Mulej, 2006; Sheshimski et al., 2007; Potocan, Mulej, 2009). Empirical researchers consider ethics a synergy of behaviors, which tend to be preferred in a society or community, as a social group, for long enough periods of time to become codified (Potocan, 2005; Potocan, 2008). Moral rules result, as a formal next step (Potocan, Mulej, 2007; Potocan, Mulej, 2009).

Rules express norms to co-create a culture, and ethics be it the one of social sub-groups, of organizations units (like SCM), and of organizations as wholes (Lester, Piore, 2004; Potocan, 2005; Mulej, 2006; Kuratko, 2008) as sustainable culture. Thus, something, which is originally an individual attribute, comes to be objectified as a component of the objective conditions (i.e. out of impact of tackled individuals). It becomes a part of broader requirements imposed over the individuals, and tends to return, in this way, back to individuals as a part of their (socially obligatory!) values, i.e. their emotional perception of the objective needs or requirements they face (Potocan, 2005; Potocan, Mulej, 2007).

Thus it enters (or re-enters) the individual's starting points, which influence perception, definition of preferences, their realization in the form of goals, later on of tasks, of procedures of realizing the tasks, and achievements etc. It means that for any human activity ethics is equally essential as

professional knowledge and skills, creativity and co-operation capacity. We have, as we said above, even found all of them mutually interdependent (Mulej, 1979; Francois, 2004; Mulej, 2006; Potocan, Mulej, 2007; Potocan, 2008).

If we now devote a minute to SD, as defined by United Nations (UN) in its Rio de Janeiro documents (see: Potocan, Mulej, 2007), we see, that these documents:

- Put economic development and sustainability in interdependence to provide for a holistic care for humankind's natural environment; the wording SD expresses this fact very briefly; and
- Require humans to behave as citizens of the entire world rather than single countries only; the wording "Think global, act local" expresses this fact equally well and briefly.

This means, that ethics of interdependence is extremely close to principles of SD that is supposed to be the basis of the modern management as well as of its governance. These principles had to be proclaimed by UN as the highest political level of the entire humankind, because they are so crucial for all of us, and because they have been so much neglected over the last several decades and centuries. During these times, a narrow specialization of knowledge and values has been growing. This brought humankind in danger of self-destruction.

A new way must be found (Potocan, Mulej, 2007; Potocan, Mulej, 2009). They are all influential members (or contributors) of business (i.e. corporate management, governance) that must and can help market and government impose such principles. Otherwise, the one-sided actions, both individual and by enterprises, may cause the nature to be unable to carry humankind.

A crucial innovation of the management style is unavoidable, and it is e.g. corporate governance and management and societal governance, which is able to make it happen. The entire World needs a transition of ethics along with the transition of conditions and preconditions of life, SD being a part of the process. The changing, both experienced in the West, and expectable with the other 80 % of humankind (and partly going on with them, too) now, may include change in a number of attributes of ethics.

This requires much more of ethics of interdependence, as has been the habit so far. Owners, managers, and workers (i.e. all influential stakeholders of organization) must include this fact in order to be requisitely holistic and hence successful, effective and efficient. Our understanding how these influence on SCM is briefed in chapter 4.

3.3. The rising role and importance of environmental management in organizations and consequently in SCM

The important part of SSCM concept is also the ecological imperative. The desire for "greenness", in the early 1990s led to the concept of reverse SCM and more recently to the green SCM (Geroliminis, Daganzo, 2005; Blanchard, 2006; Ballou, 2007).

In last decade the practice of responding to environmental (i.e. green) issues in a socially responsible manner has become an important business issue, even though that first important initiatives regarding sustainable development, emerged a few decades ago (i.e. several conferences on sustainable

development) (Murphy et al. 1996; Kenda, Bobek, 1997; Ackoff, Rovin, 2003; Murphy, Wood, 2004, Bolstorff et al., 2007).

Organizations in contemporary business environment are continuously trying to develop new (and/or innovative) ways to enhance their competitiveness. Recently is one among most important way for enhancing organizational competitiveness through improvements in organization's environmental performance (Ackoff, Rovin, 2003; Murphy, Wood, 2004, Rao, Holt, 2005; Bolstorff et al., 2007).

According to the above presented cognitions we can conclude that green SCM promotes efficiency and synergy among parties involved in SC and (also) helps (i.e. business partners in supply chain) to enhance environmental performance (i.e. minimize waste), which leads towards more green logistics (in broader sense).

In that context, is green SCM, form of environmental improvement, which many organizations are adopting to tend more to "green logistics" (in broader sense). Therefore the concept of green SC management must encompasses environmental initiatives in inbound logistics, production or the internal supply chain, outbound logistics and in some cases also in reverse logistics.

4. HOW TO CREATE MORE SUSTAINABLE SCM: CASE OF GREEN SCM IN THE FRAMEWORK OF GREEN LOGISTICS

4.1. What is green SCM and green logistics?

SCs are nowadays formed in order to achieve a sustainable advantage for all parties involved. Emphasized concerns on environmental issues in last decade have encouraged parties involved in SC to "green" their SCs (Cheng et al., 2008). Therefore green SCs (and in that context green logistics) have emerged to comply with regulations for environmental protection (Cheng et al., 2008). This mean that external costs of logistics associated mainly with air pollution, nose, climate change are taken into consideration when conducting business in order to achieve more sustainable balance between economic, environmental and social objectives. See Figure 3 (for details about figure see: Bolstorff et al., 2007; Cheng et al., 2008; Greenlogistics, 2008).

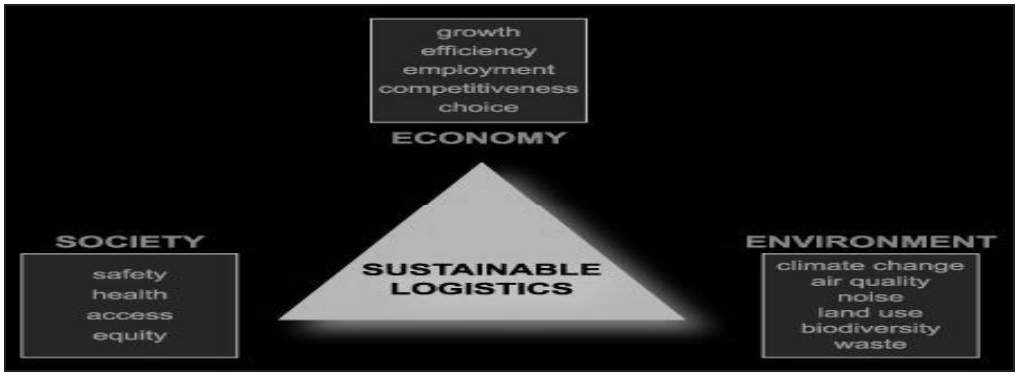

Figure 3. GREEN LOGISTICS

Green logistics in business practice mainly encompasses company's actions aimed at making their own global SC more energy efficient and less environmental harmful. Recently is green logistics also concerned with steps and/or actions to bring company's products into compliance with foreign regulations (e.g. initiatives for reducing use of toxic or hazardous materials) (Bolstorff et al., 2007; Ioma, 2008, Chermerhorn, 2008).

The basic reasoning for investment in greening can be resource saving, waste eliminating and productivity improving. As a result, green initiatives besides lowering negative impact of a business on environment also raise efficiency and contribute to the company's competitive advantage (Hoek, 1999; Cheng et al., 2008; Potocan, 2009).

Business organizations started to realize that green logistics can save money. Available survey reveals (Ioma, 2008) that well over half (59 %) of responding companies consider green issues either important or very important to them. Just 6 % of responding companies claim that green issues are not important for them. In addition, almost 70 % of respondents expect green issues to become more important to their logistics processes over the next three years, what is more 9 % of them expect that green issues will become company's number one logistics priority (Ioma, 2008).

In the field of green SC are many opportunities for empirical researching. For example Rao and Holt (2005) in their research investigate if green SC initiatives lead to enhanced organizational competitiveness and economic performance. Another study about green logistics issues reveals that many companies view green logistics as an important area to cut cost and achieve efficiency through outsourcing (Ioma, 2008).

In contemporary business environment, especially manufacturing organizations and their SC partners are enthusiastic about conducting environmentally friendly actives in order to maintain and promote their competitiveness. In that context is important that manufacturing organizations encourage their SC partners to develop an environmental management system consistent with ISO 14000 standards and to obtain certification. In that context is emphasized the need for inter-organizational knowledge sharing among parties involved in SC (See: Cheng et al., 2007; Ballou, 2007).

In literature and also in business practice various approaches to environmental management exist and in that frame tendency towards more green logistic. Three basic approaches are (Potocan, Mulej, 2007; Potocan, 2008; Potocan, 2009):

- reactive – where company's initiatives are limited only to the requirements of environmental legislation;
- pro-active – company's initiatives towards environmental issues are well above requirements of environmental legislation; and
- value-seeking – the main purpose of this approach is that company integrate environmental activities into a business strategy and operate the firm to reduce its impact on the environment. Therefore management of an organization must establish strong environmental commitment in an organization.

In the context of above presented value-seeking approach to environmental management in company and according to the purpose of our paper we suppose that managers have crucial role in establishing

green logistics in organization. In that context are of huge importance manager's attitudes towards different green logistics issues. In that frame we are focusing on examination of manager's attitudes towards different environmental issues which most comprehensively explain their attitudes towards green logistics issues.

4.2. Manager's attitudes towards green logistics

Environmentalism has been characterized as one among most important factor shaping the economy, which in turn importantly influence on business organizations during last decade (Geroliminis, Daganzo, 2005). The growing importance of environmentalism has major impact also on logistics management. Especially important is a broadening the scope of logistics which in turn importantly influence the way logistics managers (and also other managers in organization) perform their jobs (Murphy et al., 1996; Geroliminis, Daganzo, 2005; Murphy, Wood, 2004; etc.).

Event thought that literature about green logistics is expanding lately, several important issues about management of environmental issues still remains open (Murphy, Poist, 2003). In that frame we put our focus on manager's attitudes towards issues about green logistics, since those importantly influence on manager's decisions concerning green logistics and adjacent issues.

According to the purpose of our paper we can suppose that manager's attitudes towards green logistics importantly influence company's initiatives and/or actions regarding green logistics. Our presumptions are based on cognitions that people's behavior is mainly guided and/or driven by their personal values (see: Rokeach, 1973; Musek, 1993; Schwartz, Blisky, 1987). Therefore manager's personal values are most important factors and/or influencers of manager's behavior (Megginson et al., 1992). In that context manager's personal values importantly determine manager's attitudes towards green logistics, which in turn influence manager's decisions about green logistics issues. Also past research about management of environmental (i.e. green) issues in logistics showed that differences exist among different countries regarding their response to the management of green logistics issues (Murphy, Poist, 2003).

5. SOME CONCLUSIONS

A supply chain is a strand, or chain, of operations within an organization's supply network which passes through the organization. There are many different terms (and the concepts describes by them – e.g. purchasing and supply management, physical distribution management, logistics, merchandising, material management, and SCM), some of which overlap, which are used to describes various parts of the SC. They represent an increasing degree of integration between the linkages of SC.

SCM is a broader and strategically more significant concept which includes the entire SC from the supply of raw materials, through manufacture, assembly and distribution to the end customer. It includes the strategic and long-term consideration of SCM issues as well as the shorter term control of flow throughout the SC.

In last decade the practice of responding to environmental (i.e. green) issues in a socially responsible manner has become an important business issue. In that frame concerns on environmental issues in last decade have encouraged parties involved in SC to "green" their SCs. Therefore green issues are

taken into consideration also in the frame of logistics, in order to achieve more sustainable balance between economic, environmental and social objectives. In that context, logistics managers have crucial role, since they influence implementation of green initiatives towards more green logistics though their decisions. Therefore manager's attitudes towards issues about green logistics importantly influence on manager's decisions concerning green logistics and adjacent issues.

REFERENCES

Ackoff, E., Rovin, S. (2003). Redesigning Society. Stanford University Press, Stanford.

Ballou, R. (2007). The evolution and future of logistics and supply chain management, European Business Review, 19 (4), 332-348.

Blanchard, D. (2006). Supply Chain Management Best Practices, Wiley, New York.

Bolstorff, P., Rosenbaum, R. (2007). Supply Chain Excellence. AMACON, New York.

Cheng, J.-H., Yeh, C.-H., Tu, C. (2008). Trust and knowledge sharing in green supply chains. Supply Chain Management, 13(4), 283-295.

Chesbrough, h. (2009). open innovation. harvard business school press, boston.

Cole, G. (2004). Management theory and practice. Thomson, London.

Cooper, M., Lambert, D., Pagh, J. (1997). Supply Chain Management. The International Journal of Logistics Management, 8 (1), 1-14.

Daft, R. (2003). Management. South-Western, Mason.

Dessler, G. (2004). Management. Pearson – Prentice Hall, New Jersey.

Francois, C. (ed.) (2004). International Encyclopedia of Systems and Cybernetics. SAUR, Munich.

Galbraith, J. (2002). Designing Organizations. Wiley & Sons, New York.

Geroliminis, N., Daganzo, C. (2005). A Review of Green Logistics Schemes Used in Cities Around the World. Available online: http://repositories.cdlib.org/its/ [3.11.2008].

Greenlogistics. (2008). Green Logistics: Research into the sustainability of logistics systems and supply chains. Available online http://www.greenlogistics.org/ [4.11.2008].

Hoek, R. (1999). From reversed logistics to green supply chains, Supply Chain Management, 4(3), 129-134.

Hugos, M. (2006): Essentials of Supply Chain Management, New York: Wiley.

IOMA (2008). Companies Realize "Green Logistics" Can Save Money. Available online:

http://www.ioma.com/supply_chain/ [3.11.2008].

Kauffman, R. (2002). Supply Management. The Journal of Supply Chain Management, 38(4), 46-52.

Kenda, V., Bobek, V. (1997). International Business Relations (in Slovene). EPF, Maribor.

Kuratko, D. (2008). Entrepreneurship: Theory, Process, and Practice. South-Western, Cincinnati.

Lester, K., Piore, J. (2004). Innovation – The missing Dimension. HUP, Cambridge.

Leydesdorff, L. (2006). The Knowledge-based Economy. Universal Publishers, Boca Raton.

Lummus, R., Vokurka, R. (1999). Defining supply chain management. Industrial Management & Data Systems, 99(1), 11-17.

Megginson, L., Mosley, D., Pietri, P. (1992). Management. HarperCollins, New York.

Murphy, P., Poist, R. (2003). Green perspectives and practices. Supply Chain Management, 8(2), 122-131.

Murphy, P., Wood, D. (2004). Contemporary logistics. Prentice Hall, New Jersey.

Murphy, P., Poist, R., Braunschweig, C. (1996). Green Logistics. Journal of Business Logistics, 17(1), 191-211.

Murphy, P., Wood, D. (2004). Contemporary logistics. Prentice Hall, New Jersey.

Mulej, M. (1979). Ustvarjalno delo in dialektična teorija sistemov (In Slovene). RC, Celje.

Mulej, M. (2006). Absorpcijska sposobnost tranzicijskih manjših podjetij za prenos invencij, vednosti in znanja iz univerz in inštitutov (In Slovene). FM, Koper.

Mullins, L. (2006). Essentials of Organizational Behavior. Prentice Hall, Harlow.

Musek, J. (1993). Personality and Values (in Slovene). ZO, Ljubljana.

Porter, M. (1998). On competition. Harvard Business School Publishing, Boston.

Potocan, V. (2004). Operations management (In Slovene). FEB, Maribor.

Potocan, V. (2005). Efficiency or effectiveness? Organization, 38(10), 570-576.

Potocan, V. (2008). Organizational viewpoint of the relationship in supply chains. The Journal of American Academy of Business, 14(2), 181-187.

Potocan, V. (2009). Does trust influence supply chain management? The Journal of American Academy of Business, 15(1), 118-124.

Potocan, V., Mulej, M. (2006). What is Business cybernetics? The Journal of American Academy of Business, 9(2), 211-217.

Potocan, V., Mulej, M. (2007). Transition into an innovative enterprise. FEB, Maribor.

Potocan, V., Mulej, M. (2009). How to improve innovativeness of SMEs. Management, 14(1), 1 - 20.

Rao, P., Holt, D. (2005). Do green supply chains lead to competitiveness and economic performance? International Journal of Operations & Production Management, 25(9), 898-916.

Rokeach, M. (1973). The nature of human values. The Free Press, New York.

Rushton, A., Oxley, J., Croucher, P. (2001). The handbook of logistics and distribution management. PAGE, London.

Schermerhorn, J. (2008). Management. John Wiley & Sons, New York.

Schwartz, S., Blisky, W. (1987). Toward a universal psychological structure of human values. Journal of Personality and Social Psychology, 53(3), 550-562.

Sheshimski, E., Strom, R., Baumol, W. (2007). Entrepreneurship, Innovation, and the Growth Mechanism of the Free-Enterprise Economies. PUP, Princeton.

Slack, N., Chambers, S., Johnson, R., Betts, A. (2006). Operations and process management. Prentice Hall, Harlow.

Stank, T., Davis, B., Fugate, B. (2005). A strategic framework for supply chain oriented logistics, Journal of Business Logistics, 26(2), 27-45.

Stock, G., Greis, N., Kasarda, J. (1999). Logistics, strategy and structure. International Journal of Physical Distribution & Logistcs, 29(4), 224-239.