



## RISK MANAGEMENT - UNAPPRECIATED INSTRUMENT OF SUPPLY CHAIN MANAGEMENT STRATEGY

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**ABSTRACT. Background:** Unlike Enterprise Risk Management, which is certainly quite well rooted in business practice, Supply Chain Risk Management (SCRM) still continues to be dynamically developing subject of academic research, whereas its practical applications are rather scarce.

**Material and methods:** On the basis of broad review of the current state of the art in world literature, significant relevancies to the core processes and enterprise strategy are discussed.

**Results:** The paper shows some interesting from the enterprise's performance and competitiveness point of view additional benefits, potentially resulting from the proactive, consistent and effective implementation of the SCRM system.

**Conclusions:** Some additional advantages from proactive supply chain risk management account for perceiving SCRM as multifunctional instrument of strategic SC management, exceeding established understanding RM as security and threat-prevention tool only. Positive influence from SCRM onto SC performance and competitiveness can make reasonable to enhance its position within SCM strategy.

**Key words:** supply chain management, supply chain risk management, risk, risk management.

### INTRODUCTION

There is rather not much controversy about still growing importance of supply chain management (SCM) as an efficient way leading to making contemporary business processes more resilient, more agile and as a result - more competitive. Even those, who call it the most common example of a buzz-word [Enarsson, 2006] agree, that SCM comprises some advantages and opens new perspectives for further progress, especially at the global markets. Signification of SCM concept is underlined from various points of view. Following Christopher [2005], as global supply chains become more complex and fragmented, the question of how they should be managed and governed becomes critical. SCM represents also one of the most significant paradigm shifts of modern business management [Chen and Paulray, 2004]. According to Bozart and Handfield [2006] the organization's survival depends on the diligent operations and supply chain management. SCM has become vitally important especially considering recent changes in global business [Hopkin, 2010]. From the marketing point of view the creation of market-facing and customer-responsive supply chains must become the goal as the rules of competition change dramatically and we enter the era of supply chain competition [Christopher, 2004].

Klassen and Johnson [2004] qualify striving for achieving competitive advantage as the target of the most advanced supply chain orientation. As - in fact - the essence of SCM is and will remain its contribution to the product (service) competitiveness, a matter of special concern should be all instruments enabling SC to improve performance and gain additional competitive advantage. Two superior criteria of business success - which are customer satisfaction and shareholder value - are

crucially dependent on the supply chain competitiveness. This is what individual enterprises, being partners in SC, are ready to pay some price for, sacrificing some particular interests to gain ultimate advantage. Christopher [2010] calls it "the new model of competition", where "successful companies will be those, whose supply chains are more cost-effective than those of their competitors". Supply chain risk management (SCRM) as a part of supply chain strategy influences areas of performance and must fit in that pattern. The question about its real impact on SC competitiveness becomes timely and important.

Operations management and supply chain management are equally philosophical business approaches and a collection of tools and techniques [Bozart and Handfield 2006]. From such point of view, within the last decade, SCRM emerges as one of very important tools within SCM. The reason is admittedly the increased vulnerability of today's, global supply chains [Cranfield, 2002; Juettner, Peck, and Christopher, 2003; Kersten et al., 2006; Peck, 2006; Waters, 2007], continuously growing variety of threats resulting in supply chain disruptions [Kleindorfer and Saad, 2005; Sheffi, 2005; Hale and Moberg, 2005; Manuj and Mentzer, 2007, Tang, 2006a] but also development and practice of business strategies resulting in new or increased risk [Sheffi, 2005; Tang, 2006b; Trent and Roberts 2010] as a result of enhanced demand for solutions aiming in greater resilience, agility and competitiveness of supply networks [Christopher and Peck, 2004; Sheffi and Rice, 2005; Tang and Tomlin, 2008; Enyinda et al., 2008; Ponomarov and Holcomb, 2009; Peck, 2010] .

A more comprehensive review of the wide spectrum of SCRM problems represented in the literature may be found in the publications of Paulsson [2004]; Rao and Goldsby [2009] and others.

## **SCRM INTEGRATION WITHIN THE STRATEGY**

Unquestioned desideratum of all contemporary approaches to RM is that risk management should be integrated with the organization's strategy. It is also confirmed by existing RM standards. The oldest, Australian RM standard AS/NZS 4360 [2004] recommended: "the risk management policy should be relevant to the organization's strategic context and its goals, objectives and the nature of its business". IRM standard [IRM, 2002] defines: "risk management is a central part of any organisation's strategic management". COSO II [2004] introduces as a fundamental notion the principle of including risk management in corporate strategy. This attitude is continued by the newest ISO 31000 [2009] points aligning of risk management objectives with the objectives and strategies of the organization as a strong and sustained commitment by management of organization.

This view was not always so obvious and evolved during last decades, being also substantially dependent on the top management attitude and involvement. In traditional, "financial" approach, subordinating all RM activities to internal audit or other financial unit was regarded as quite sufficient and reasonable. Nowadays "risk management is no longer solely a financial discipline, nor is it simply a concern for the internal control function" [CIMA, 2010]. Introduction of the Enterprise Risk Management construct moved RM competencies and responsibilities closer to the board. Hopkin [2002] suggested: "it is likely that the responsibilities will be allocated to board members" . Lam [2003] predicted transformation of audit committees into risk committees. Evolution of risk management to a strategic process was described by DeLoach [2000]. Advanced holistic approaches to risk and risk management already found the idea of RM as the board area of interest to be obvious. Lloyd's survey [2005] reported: "evidence suggests that boards are taking risk more seriously". Involvement of top managers is regarded as the best approach [Waters 2007]. Nevertheless, according to AON Global Risk Management Survey [2007] - "risk is now firmly on the board agenda, although there is not always a consistent approach". Many surveys show lack of sponsorship from the senior management as the main barrier to implementation of ERM [Strategic Risk, 2010], or one of primary reasons [The Economist Intelligence Unit , 2007].

The requirement of integration seems to be absolutely reasonable, however its understanding and realization differs from case to case and hasn't found its universal and commonly accepted interpretation. In business practice it is quite common, that "integration" is realized in a very formal,

bureaucratic way. When practically realized, imposing solutions elaborated within RM process meets mostly - sometimes strong - incomprehension and opposition from line managers and other staff. In numerous cases it leads to significant reduction of organization's engagement or even abandonment, resignation of already implemented RM systems.

## **SCRM AND CORE PROCESSES**

In most cases RM is shaped as a process parallel to the core ones, supporting them and somehow subordinated to them. Anyhow, they remain to be at least to some extent autonomous. RM process is equipped with separate structures, procedures, and objectives. Also, what is extremely important - with "own" management. Nevertheless, the results of RM process refer to other processes and are impliedly supposed to be implemented in adequate core processes. They cannot exist independently. Such superposition frequently fails to bring expected results as solutions elaborated within RM process are perceived as a foreign body, a kind of implant - and rejected. It happens so because of substantial conflict of interests which takes place and which materializes as a result of performing RM process in an autonomous way, as a technical, passive or reactive tool "against risks". This may be successful in case of many risk categories - (mainly hazards, financial and operational risks etc.), where RM process yields rather passive or reactive solutions: insurances, financial instruments, technical means increasing resistance or contingency plans. In the SC scale similar functions may be assigned to such popular risk mitigating remedies as increased (safety, buffer) stocks, redundancies, spare capacities and risk sharing. Apart from sometimes limited effectiveness of such passive solutions, we must consider also a great variety of risks requiring much more sophisticated approach. Situation becomes complex and delicate, when considering for example strategic, process- or market-related risks. Than - because of e.g. market and/or process dynamics - such passive risk mitigation tools appear to be even less effective. Moreover, core processes are strongly oriented towards gaining competitive advantage, whereas RM measures frequently include some dose of opposite solutions. This is the case with lean practices. Just-in-Time strategy brings considerable advantages in reducing stocks and improved operations, but implies significant threat of SC disruption. The simplest and most effective way to mitigate that risk is to build in some additional inventory, although that increases costs and diminishes competitiveness. Outsourcing may solve some technological or operational problems, however reduces visibility and control. Mitigating that risk sometimes leads to surprising solutions - in case of Boeing Dreamliner project it was ultimate purchasing the cooperating company [Tang et al., 2009]. LCCS and offshoring yield purposeful cost savings (material and/or labour), at the same time extend lead-times, complicate logistics and increase risk of disturbances (e.g. because of cross-culture problems). Those lean management generated risks, when subject to risk management processing - requiring e.g. some additional expenditures - may considerably reduce the assumed effect of pro-competitiveness efforts.

Here we have to face the conflict of interests mentioned above. Correlativeness between risk taking and gaining competitive advantage is often a kind of a feedback loop. Gaining additional competitive advantage mostly means taking more risk. Additional risk needs extraordinary actions to mitigate it whereas measures to be taken mostly diminish also effects of efforts established to increase competitiveness.

Such ambiguity is hardly solvable as long as RM process is perceived in a very technical way - as a tool to mitigate risks only. Complexity and subtle nature of interconnections between risk management and core processes require more general approach, based on the analysis of entire, multiaspectual influence exerted on the organization's performance from risk management.

## **EXTENDED POTENTIAL OF SCRM**

Risk-competitiveness feedback loop displays also another important phenomenon. In majority of RM-bounded interrelations multiaspect correlation takes place. From famous "Albuquerque case" [Norman and Jansson, 2004] we learned a lot about risk management, SC disruption risks, single-sourcing risk and how to mitigate risk impacts, but also the fact, that it was effective risk management what allowed Nokia to gain extra competitive advantage. Similar example was the Mitch Hurricane story [Sheffi, 2005] when better risk management let Chiquita survive, concurrently bringing that banana company additional increase in revenues. In both cases risk management assured safety and survival in critical situation, but also yielded - as a "side effect" - some additional profits, which couldn't be gained without it. That positive influence mechanism works regardless of emergencies, which admittedly are and will be the main reason for existence of RM systems. Nevertheless, such extra phenomena seem to be noteworthy and let us perceive RM as something more than reactive safety assuring tool only. There are many other exemplifications. It happens more and more frequently, that choosing partner for strategic collaboration (esp. supplier) companies treat implemented RM system as an important criterion. Confidence between SC partners mitigates risk, but also vice versa: good risk management fosters confidence, necessary for better collaboration between partners and better SC synchronization [Christopher and Lee, 2004]. In the absence of efficient RM, risk of defective relations between SC partners is growing. At the same time, RM systems implemented by partnering organizations positively influence and reinforce relations. Lack of visibility and reliability implies increased risk, but again: good risk management leads to improved visibility and reliability, valuable from general SCM point of view. It is undoubted, that evidence of implemented risk management system improves entity's image and reputation and consequently - its position (as a reliable partner) against competitors.

Basically, the SCRM influence exerted onto the core processes may be considered at two reference planes: direct and derivative, indirect. First of them reflects fundamental expected impact of SCRM, lying at the grassroots of the RM concept itself. It corresponds to "traditionally" understood generic objective of SCRM, which is assuring SC processes safety (continuity of supply) and increasing their resistance to disruption. However, in some situations it may result also in gaining some additional competitive advantage as shown above. The other plane comprises may be not so spectacular (however also predictable) accidental impacts, a kind of "side effects". They may be regarded as derivatives of intricate co-relations within organization's processes and structures. These influences may have both - internal and external character - and include such features as relationships between SC partners, visibility and confidence, information flow and SC alignment and excellence (internal) also market-related issues, image and reputation, customer satisfaction etc. (external). Altogether they create quite interesting perspective of stimulating the organization's competitive potential, as each of them may be recognized as associated with or referred to significant drivers of organization's competitiveness.

Contrary to the broad spectrum of books and articles on general problems of RM and SCRM - there is a little literature on the risk management benefits other than safety, security, disruption resistancy etc., however some authors remark such likely consequences. When a disruption hits many companies at once, or affects a whole region, prepared companies may be able to take advantage of the reduction in market capacity to enter new markets and serve new customers [Sheffi, 2005]. Dairy giant Danone gained a lead at the baby food market as a result of well-thought-out SCRM policy [Schaafsma, 2009]. Hopkin [2010] as RM outputs quotes achieving enhanced performance of the organization in three important areas: efficacious strategy, effective processes and efficient operations. Sadgrove [2005] points such benefits of risk management as "good defence" in law, lower risk exposure, greater profits, better use of resources and making the organization alert to changes in the market and society. Similar relevancies result also indirectly from other works on SCRM. Brindley and Ritchie [2004] constate that "the key issue for the organization is one of balancing increased risks with the potential opportunities to improve the financial performance and the overall corporate performance". Elkins, Handfield, Blackhurst and Craighead [2008] point the importance of building responsive and resilient supply chains that can withstand the impact of major supply chain disruptions and catastrophes,

without impacting the end customer and without incurring excessive recovery costs. Khan et al. [2008] discuss interactions between product design, SCRM and SC agility. Somewhat inspiring, close to these questions are publications on interdependencies between risk and performance [DeLoach, 2000; Winkler and Kaluza, 2006; Ritchie and Brindley, 2007, 2008; Wagner and Bode, 2008], between RM and SC relationships management [Ritchie, Brindley and Armstrong, 2008] also between risk and agility [Braunscheidel and Suresh, 2009].

Awareness of synergistic, mutually driven correlations between RM and core processes, in particular that of additional positive impact from RM onto SC performance and image, leads to some modification of the RM capabilities as well as its role played in the enterprise and SC strategies. From strategic point of view, in the face of fundamental tasks of RM but also regarding its contributory potential, generic objectives of SCRM may be now re-articulated as:

- ensuring business safety at the SC scale, that is to say securing cost-effective and operationally efficient continuity of supply, and
- contributing to SC competitive advantage creation.

This makes from SCRM something more than defensive, safety-assuring tool only. Consciously and competently applied it might play a role of sophisticated, multi-functional instrument of strategic management, assuring safety, but simultaneously reinforcing SC performance and competitiveness. Such broad understanding of SCRM concept may also be helpful in overcoming boards' distantness and cautiousness to SCRM, being so frequently pointed as one of main obstacles in implementations.

## **CONCLUSIONS AND FURTHER WORKS**

In the paper some additional advantages from proactive supply chain risk management transcending mitigation of direct negative risk impacts have been discussed. They account for perceiving SCRM as multifunctional instrument of strategic SC management, exceeding established understanding RM as security and threat-prevention tool only. Positive influence from SCRM onto SC performance and competitiveness can make reasonable to enhance its position within SCM strategy.

Considering extended RM potential as discussed above, it seems rational to continue in-depth exploration of mechanisms of correlation between RM and other processes. Of special interest should be research on mutual dependencies between risk management and performance. Particularly, RM contribution to organization's competitiveness is a purposeful issue.

Another area of research activity could be positioning of RM within organization's structures and strategy, as extended objectives suggest, also because of some negative experiences with implementations.

## **REFERENCES**

- AON, 2007. Global Risk Management Survey'2007. Chicago, IL: AON Corporation.
- AS/NZS, 2004. Risk Management. AS/NZS 4360. Sydney: Standards Australia.
- Bozarth, C. and Handfield, R.B., 2006. Introduction to operations and supply chain management. Upper Saddle River, N.J.: Pearson Education Inc., Polish edition: Helion S.A., Gliwice, 2007, 27-38.
- Braunscheidel M.J. and Suresh, N.C., 2009. The organizational antecedents of a firm's supply chain agility for risk mitigation and response. *Journal of Operations Management*. 27, 119-140.
- Brindley C., Ritchie B., 2004. Introduction. In: Brindley, C. (Ed.). *Supply Chain Risk*. Aldershot: Ashgate Publishing Limited, 3-13.

- Chen I.J., Paulraj A., 2004. Towards a theory of supply chain management: the constructs and measurements. *Journal of Operations Management*, 22, 119-150.
- Christopher M., 2004. Supply Chains: A Marketing perspective. In: S. New and R. Westbrook (Eds). *Understanding Supply Chains*, 23-42. New York: Oxford University Press Inc., 23-41.
- Christopher M., 2005. Managing the supply chain of the future: setting the research agenda. *Logistics Research Network Conference*, Plymouth, 7-9.09.2005.
- Christopher M., 2010. New directions in logistics. In: D. Waters (Ed.), *Global Logistics. New directions in supply chain management*, 1-13. London: Kogan Page; 1-13.
- Christopher M., Lee H., 2001. Mitigating supply chain risk through improved confidence. *International Journal of Physical Distribution & Logistics Management*. 34(2), 388-396.
- Christopher M., Peck H., 2004. Building the Resilient Supply Chain. *The International Journal of Logistics Management*, 15, 2, 1-14.
- CIMA, 2010. Reporting and managing risk. A look at current practice in the private and public sectors. London: Chartered Institute of Management Accountants, July 2010.
- COSO II, 2004. Enterprise Risk Management - Integrated Framework. Committee of Sponsoring Organizations of the Treadway Commission.
- Cranfield School of Management, 2002. Supply Chain Vulnerability. Final report. Cranfield: Cranfield University. School of Management.
- DeLoach J., 2000. Enterprise-wide Risk Management. Strategies for linking risk and opportunity. London: Prentice Hall - Financial Times, 23-24.
- Elkins D., Handfield R.B., Blackhurst J. Craighead C.W., 2008, A "To-Do" List to Improve Supply Chain Risk Management Capabilities. in: Handfield, R.B. and McCormack, K. *Supply Chain Risk Management. Minimizing Disruptions in Global Sourcing*. New York: Auerbach Publications, 57-63.
- Enarsson L., 2006. Future Logistics Challenges. Copenhagen: Copenhagen Business School Press, 20.
- Enyinda C.I., Ogbuehi A., Briggs C., 2008. Global Supply Chain Risk Management: A new Battleground for Gaining Competitive Advantage. *Proceedings of ASBBS*, February 2008, 278-292.
- Flynn B.B., Huo B., Zhao X., 2010. The impact of supply chain integration on performance: A contingency and configuration approach. *Journal of Operations Management*, 28, 58-71.
- Hale T., Moberg C.R., 2005. Improving supply chain disaster preparedness. A decision process for secure site location. *International Journal of Physical Distribution & Logistics Management*. 35(3), 195-207.
- Hopkin P., 2002. *Holistic Risk Management in Practice*. London: Witherby Publishers, 122.
- Hopkin P., 2010. *Fundamentals of risk management. Understanding, evaluating and implementing effective risk management*. London: Kogan Page, 214-215.
- IRM, 2002. Risk management standard. <http://www.theirm.org/publications/PUstandard.html>.
- ISO 31000, 2009. Risk management - Principles and guidelines. International Standard, ISO.
- Juettner U., Peck H. Christopher M., 2003. Supply Chain Risk Management: Outlining an Agenda for Future Research. *International Journal of Logistics: Research and Applications*. 6, 4, 197-210.
- Kersten W., Boeger M., Hohrath P. Spaeth H., 2006. Supply Chain Risk Management: Development of a Theoretical and Empirical Framework. In: Kersten, W. and Blecker, T. (Eds). *Managing Risks in Supply Chains. How to Build Reliable Collaboration in Logistics*, 3-17. Berlin: Erich Schmidt Verlag.
- Khan O., Christopher M., Burnes B., 2008. The impact of product design on supply chain risk: a case study. *International Journal of Physical Distribution & Logistics Management*. 38 (5), 412-432.

- Klassen R.D. Johnson P. F., 2004. The Green Supply Chain. In: New, S. and Westbrook R. (Eds). *Understanding Supply Chains. Concepts, Critiques and Futures*. Oxford: Oxford University Press, 229-246.
- Kleindorfer P.R. Saad G.H., 2005. Disruption risk management in supply chains. *Production and Operations Management*. 14 (1), 53-68.
- Lam J., 2003. *Enterprise Risk Management. From Incentives to Controls*. Hoboken, NJ: John Wiley and Sons, Inc., 302.
- Lloyd's, 2005. Taking risk on board. How global business leaders view risk. London: Society of Lloyd's, 2.
- Manuj I, Mentzer J.T., 2008. Global Supply chain risk management strategies. *International Journal of Physical Distribution & Logistics Management*. 38(3), 192-223.
- Norman, Jansson, 2004. Ericsson's proactive supply chain risk management. *International Journal of Physical Distribution & Logistics Management*. 34(5), 434-456.
- Paulsson U., 2004, Supply chain risk management. In: Brindley, C. (Ed.). *Supply Chain Risk*. Aldershot: Ashgate Publishing Limited, 79-96.
- Peck H., 2010. Supply chain vulnerability, risk and resilience. In: Waters, D. (Ed.): *Global Logistics. New directions in supply chain management*. 6th edition. London: Kogan Page, 192-207.
- Ponomarov S.Y., Holcomb M.C., 2009. Understanding the concept of supply chain resilience. *The International Journal of Logistics Management*, 20, 1, 124-143.
- Rao S., Goldsby T.J., 2009. Supply chain risks: a review and typology. *The International Journal of Logistics Management*, 20, 1, 97- 123.
- Ritchie B., Brindley C., 2007. Supply chain risk management and performance. A guiding framework for future development. *International Journal of Operations & Production Management*, 27, 3, 303-322.
- Ritchie B., Brindley C., 2008. SCRM and Performance - Issues and Challenges. In: Zsidisin G.A. and Ritchie B. (Eds). *Supply Chain Risks. A Handbook of Assessment, Management and Performance*. New York: Springer Science+Business Media, 249-276,
- Ritchie B., Brindley C.S., Armstrong N., 2008. Risk assessment and relationship management: practical approach to supply chain risk management. *International Journal of Agile Systems and Management*, 3, 228-247.
- Sadgrove K., 2005. *The Complete Guide to Business Risk Management*. Aldershot: Gower Publishing Limited, 274.
- Schaafsma F., 2009. Risk Management in a Baby Food Supply Chain. Presentation at The Supply Chain Risk Management Seminar 2009; Effective management in a time of crisis. Barcelona, 11-12.03.2009.
- Sheffi Y., 2005. *The Resilient Enterprise. Overcoming Vulnerability for Competitive Advantage*. Cambridge, MA: MIT Press, 216-220, 284.
- Sheffi Y., Rice J.B.Jr., 2005. A Supply Chain View of the Resilient Enterprise. *MIT Sloan Management Review*. Fall 2005, 47, 1, 40-48.
- Strategic Risk, 2010. Still some way to go. *Strategic Risk*. September 2010.
- Tang, C.S., Zimmerman, J.D. and Nelson, J.I., 2009. Managing New Product Development and Supply Chain Risks: The Boeing 787 case. *Supply Chain Forum. An International Journal*, 10, 2, 74-85.
- Tang C., Tomlin B., 2008. The power of flexibility for mitigating supply chain risks. *International Journal of Production Economics*, 116, 12-27.

- Tang C.S., 2006a. Perspectives in Supply chain risk management. *International Journal of Production Economics*, 103, 451-488.
- Tang C.S., 2006b. Robust strategies for mitigating supply chain disruptions. *International Journal of Logistics: Research and Applications*, 9, 1, 33-45
- The Economist Intelligence Unit, 2007. Best practice in risk management. A function comes of age. London: The Economist Intelligence Unit, 10.
- Trent R.J., Roberts L.R., 2010. *Managing Global Supply and Risk. Best Practices, Concepts and Strategies*. Fort Lauderdale, FL: J. Ross publishing, 25-41.
- Wagner S. M., Neshat N., 2010. Assessing the vulnerability of supply chains using graph theory. *International Journal of Production Economics*. 126, 121-129.
- Wagner S.M., Bode C., 2008. An Empirical Examination of Supply Chain Performance along Several Dimensions of Risk. *Journal of Business Logistics*, 29, 1, 307-325.
- Waters D., 2007. *Supply Chain Risk Management. Vulnerability and Resilience in Logistics*. London: Kogan Page, 53-74.
- Winkler H., Kaluza B., 2006 *Integrated Performance - And Risk Management in Supply Chains - Basics and Methods*. In: Kersten, W. and Blecker, T. (Eds). *Managing Risks in Supply Chains. How to Build Reliable Collaboration in Logistics*, 19-36. Berlin: Erich Schmidt Verlag
- Zsidisin G.A., Ritchie B., 2008. Supply Chain Risk management - Developments, Issues and Challenges. In: Zsidisin G.A. and Ritchie B. (Eds). *Supply Chain Risks. A Handbook of Assessment, Management and Performance*. New York: Springer Science+Business Media, 1-12.

## ZARZĄDZANIE RYZYKIEM - NIEDOCENIANY INSTRUMENT STRATEGII ZARZĄDZANIA ŁAŃCUCHAMI DOSTAW

**STRESZCZENIE. Wstęp:** W przeciwieństwie do zarządzania ryzykiem przedsiębiorstwa (ERM), które z pewnością jest niezłe zakorzenione w praktyce biznesu, zarządzanie ryzykiem łańcucha dostaw (SCRM) będąc przedmiotem dynamicznie rozwijających się badań akademickich, znajduje ciągle jeszcze raczej niewiele praktycznych zastosowań.

**Metody:** na podstawie obszernego przeglądu stanu badań w bieżącej literaturze światowej autor przeprowadza dyskusję odniesień SCRM do procesów podstawowych i strategii przedsiębiorstwa

**Wyniki:** Artykuł pokazuje pewne - interesujące z punktu widzenia m. in. wyników i konkurencyjności przedsiębiorstwa - dodatkowe korzyści potencjalnie możliwe do uzyskania z proaktywnego, konsekwentnego i skutecznego wdrożenia systemu zarządzania ryzykiem w łańcuchu dostaw.

**Wnioski:** Pewne dodatkowe korzyści z proaktywnego zarządzania ryzykiem w łańcuchu dostaw przyczyniają się do postrzegania SCRM jako wielofunkcyjnego instrumentu strategicznego zarządzania łańcuchem dostaw, wykraczającego poza ugruntowane rozumienie zarządzania ryzykiem jedynie jako narzędzie zapewniające bezpieczeństwo i zapobiegające zagrożeniom. Pozytywny wpływ SCRM na wyniki i konkurencyjność łańcucha dostaw może uzasadniać wzmocnienie jego pozycji w strategii łańcucha dostaw..

**Słowa kluczowe:** zarządzanie łańcuchem dostaw, zarządzanie ryzykiem w łańcuchu dostaw, ryzyko, zarządzanie ryzykiem.

## RISIKOMANAGEMENT - EIN UNTERSCHÄTZTES INSTRUMENT DER STRATEGIE VON SUPPLY-CHAIN-MANAGEMENT

**ZUSAMMENFASSUNG. Einleitung:** Im Gegensatz zum Management von Unternehmensrisiko (ERM), das in der Geschäftspraxis sicherlich ganz gut eingewurzelt ist, findet das Supply-Chain-Risikomanagement, als Subjekt der sich dynamisch entwickelnden, akademischen Untersuchungen, eher selten praktische Anwendungen.

**Methoden:** Auf der Basis der umfassenden Recherche in der aktuellen Fachliteratur der Welt werden Relationen von SCRM zu den Basisprozessen und Unternehmensstrategie diskutiert.



**Ergebnisse:** Der Artikel zeigt bestimmte - vom Standpunkt u.a. der Ergebnisse und der Konkurrenzfähigkeit des Unternehmens - zusätzliche, potentiell erreichbare Vorteile, die mit einer proaktiven, konsequenten und erfolgreichen Implementation des SCRM-Systems möglich sind.

**Fazit:** Bestimmte zusätzliche Vorteile des proaktiven Managements von Supply-Chain-Risikomanagement tragen dazu bei, dass SCRM als multifunktionales Instrument des strategischen SCM verstanden wird, was weit über bisherige Auffassung hinausgeht, als ein Werkzeug, das lediglich Sicherheit garantiert und Bedrohungen vermeiden hilft. Der positive Einfluss von SCRM auf die Ergebnisse und die Konkurrenzfähigkeit des Supply-Chains kann die Verstärkung seiner Position im SCM begründen.

**Codewörter:** Supply-Chain-Risikomanagement, Enterprise Risk Management, Risiko, Risikomanagement

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