Sustainable Cost Management in Retail

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Abstract

The considerable improvement of performance in retail companies is a result of applying the concept of sustainable development. In the context of this, sustainable cost management is particularly seen as crucial factor in business success of retailers. With the development of "green practices" and according to the results of empirical research global retailers made substantial cost savings and thereby improved operating and financial performance.

Sustainable cost management in retail has special significance in the economic crisis. It is quite understandable because of the fact that "cost reduction" is a primary way for the retailers to achieve the target performance.

Keywords: revenue growth, cost reduction, risk reduction, green practices.

JEL classification: L81, Q50

Introduction

The concept of sustainability is considered to be crucial factor in business and financial performance of retail companies (Deloitte: Sustainability and the CFO Study, 2012 Retail). Development path of the acceptance of sustainability initiatives in retail is as follows: the external pressure, compliance, risk management, cost savings and value strategies (RILA - Retail Industry Leaders Association: Improving Sustainable Supply Chain Efforts Among Retail Leaders).

Key measures of sustainability in retail are: the adequate product (standardized quality), energy consumption (in each stage of the supply chain), the human rights and labor laws (their respect) (Sustainable-Sphere: Sustainability in Retailing Industry). They provide the basis for efficient management of sustainable cost, as one of the factors of business success in retail.

The main sources of costs are: inflation of earnings, increased general expenses, vendor, financing and inventory costs (KPMG / UK - The Cost Boomerang). Their optimization can significantly improve the cost-effectiveness in order to achieve better performance in retail.

Primary areas of cost savings include the use of international and domestic outsourcing, elimination of unprofitable units and lines of business, efficient use of service channels, improvement of procurement position, efficient administration, improvement of risk management, efficient use of information technology (IT) and reduction of the level of service (KPMG / UK - The Cost Boomerang). Effective

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sustainable cost management can reduce about 10% of costs (KPMG / UK - *The Cost Boomerang*). It has a positive impact on the performance of retailers.

Companies of all kinds create value on the competitive market with a number of new, more efficient "operational strategies", including the improvement of productivity and reengineering processes. The focus of value creation is on the efficient management of operating expenses: sales, general and administrative expenses. Operating costs can be reduced through adequate budgetary control, more efficient procurement, re-designing processes, appropriate organizational change, partnership strategy development, offshoring and outsourcing (Lukić, 2012b; Deloitte: *Creating business value*). Significant operational cost savings can be realized in the application of *Lean* cost management concept (Lukić, 2012a; Deloitte: *Lean Cost Management*).

Within the retail value creation significant attention is paid to the cost of goods sold. It is quite understandable when one takes into account their high share (about 80%, depending on the type of the retailer) of the total cost in retail. They can be successfully reduced with (1) the efficient supply chain, (2) the relevant research and development costs, and the income on the grounds of it, and (3) rationalization of production, costs of raw materials and distribution costs (Deloitte: *Creating business value*).

So, for example, food retail can have considerable increase of margins and profits with modest expenditure of energy. This is achieved with a careful selection of air conditioners and efficient, renewable energy sources (LG Life's Good, *The Retail Food Industry: An innovative, sustainable retail environment*).

1. Literary Review

Due to its importance, there is lately an increasing number of published papers on the issue of sustainable development in retail (Wiese et al. 2012; Hampl, 2012; Kotzab et al. 2011; Yakovleva et al. 2012; Lukić, 2012c; Sorescu et al. 2011). They research various aspects of the given field. These are: the definition of sustainable development in retail, strategy of sustainable development, green retail, green product, green logistics, green marketing, green brand, green buyers, green packaging, green building, energy efficiency, cost reduction, green packaging, etc. All these treated aspects of the research, directly or indirectly, reflect on sustainable cost in retail.

In these papers we find sources and ways to meet sustainable cost in retail. It is quite understandable when we consider the fact that the sustainable costs are crucial business success factor in modern retail, particularly during the economic crisis.

2. Hypotheses, methodology and data

Sustainable development is a complex issue, and within it - sustainable cost management in retail. Due to this, numerous research hypotheses can be tested, but nevertheless, this paper explores the primary hypothesis (H1):
sustainable costs are crucial factor for business success in the modern retail, particularly during the economic crisis. Important hypothesis (H2) associated with the first is that it is necessary to continuously develop "sustainable awareness" of retailers on the importance of more efficient sustainable cost management in order to achieve the target performance.

Testing of these hypotheses is based on literature survey and comparative analysis of specific cases of developing "green practices", particularly global retailers. Following these examples, other retailers should promote "green practices" to improve their performance.

The primary data sources for the study of problems are relevant literature, publications made by agencies and consulting firms specialized in sustainable development in retail, as well as reports on sustainable development made by global and other retailers.

3. The concept of sustainable development in retail

Three key dimensions of the concept of sustainable development are environment, social protection and economy (Kvrgić, 2012; Vojteški Kljenak, 2012). Numerous factors affect the efficiency of the development and implementation of the concept of sustainable development in retail. They are shown in Figure 1.

![Figure 1. Sustainability factors in retail business](http://dkganalytics.com).

Source: Gleason, D. (June 2010), the National Retail Federation: Sustainable Retailing Consortium - Introduction to Environmental Sustainability, Deborah Gleason (http://dkganalytics.com).
The UK's 10 largest retailers (Tesco, Asda, Sainsbury J, Wm. Morrison, Cooperative Group, Kingfisher, Marks and Spencer, DSG International, John Lewis, and Home Retail Group) provide relevant information on integration of environmental, social and economic sustainability in the business model. This information is widely available (via the website). They believe that the integration of sustainability into business model has long-term positive effect on increase of growth (Jones et al., 2012), so as on the reduction of costs and risks. All this reflects positively on their overall business performance.

Key categories of environment sustainable initiatives in retail are fundamental environment behaviour, the use of energy, input materials, product, packaging, transportation, consumption and waste. Effective management of these categories (in terms of dealing with the environmental problems) has positive effect on the performance of retailers.

Some consulting and research firms have different approaches to the issue of sustainability in the retail (Accenture - Achieving High Performance through Sustainable Cost Management, Accenture - Three Steps for Sustainable Cost Reduction, Deloitte - Sustainable cost reduction: A measured approach to long term value; PWC - Achieving transformational results, Managing sustainability performance to increase integration and operational efficiency, www.pwc.com/us/sustainability). So, for example, Oracle’s approach to sustainability in retail is based on the rational package (it is planned to reduce waste from packaging by 2.5 billion pounds between 2011 and 2020, according to the Grocery Manufactures Association, and retailers are increasingly directed at “private” packaging), more efficient energy use in stores and distribution centres, and more efficient supply chain. It has a positive effect on increasing margins and thus profits in retail (Oracle - Enable the Eco-Enterprise for the Retail Industry).

The development of green marketing positively impacts the performance of companies, including retail. Important global dimensions of green marketing as business success factors are: 1) analysis of green marketing: analysis of green products, customers, social and ecological needs, green facilities, competition and market basket analysis, 2) development of green marketing: market segmentation and development, target segmentation, product positioning and promotion, green culture and green brand, and 3) management of sustainable business: product characteristics, product quality control, price determination, control and information systems, and reverse logistics, and 4) customer acquisition: social responsibility, customer's retention and green awareness (Lee, 2012). Reverse logistics is an essential element for development of green marketing as a factor in business success of all companies, especially retailers.

Research in practice found that a brand can significantly support the sustainable green initiative of managers as a function of achieving superior performance in all companies, including retail (Gupta, 2012). Greens brand is an important factor in business success. Ecological packaging significantly reduces costs. It has a positive impact on profits. The companies best-known on the issue of green brand in 2012 are: Toyota, Johnson & Johnson, Honda, Volkswagen, Hewlett-Packard, Panasonic, Dell, Siemens, BMW and Danone (Interbrand).
4. Cost efficiency in retail

Cost efficiency is a crucial factor in achieving target performance in retail. It can be achieved by increasing employee productivity through more efficient processes, using modern equipment and training, focusing on profitable customers and products; adjusting the number of employees with market demand, better use of promotions, sales and distribution of technology in reducing operational costs of the sale; seeking for favorable commercial terms, discounts and promotions, and more rational participation in service (Ernst & Young – Cost competitiveness).

Based on the long-term strategic initiatives, practical research revealed that, in principle, companies achieve 30-40% of the total cost savings. Cost savings on this basis are realized by only 5% of companies (Deloitte: Radically restructuring your costs).

The key success factors (i.e., sustainable sources of cost savings) in retail are: 1) determination of the precious goal, 2) involvement of senior officers and accounting, 3) strong project approach, 4) the tactical and strategic changes, 5) the inclusion of all relevant business functions, and 6) developing a culture of continuous improvement of (sustainable) cost management (Deloitte: Radically restructuring your costs). Their adequate control can significantly improve the competitiveness and profitability of retail companies.

The size of the margin (EBITDA), as one of the most important indicators of profitability, in general, is significantly affected by the following costs: erosion rates, lower demand, input costs inflation, currency fluctuations, inflation of labor costs, pressure of the inventors/stakeholders, and interest/debt servicing (Ernst & Young: Competing for growth – Winning in the new economy). Increased efficiency of given costs categories can influence the increase of respective margins, thus the performance of retail companies.

There is a prominent role and importance of creating the appropriate sustainable management accounting system for efficient implementation of the concept of sustainable cost in retail. Sustainable management accounting system should integrate all relevant concepts of modern management accounting, in particular the calculation of the basic activities (Petcharat, 2010).

In applying the activity based costing (ABC) - the essence of sustainable management accounting system is defined in allocation of environmental and social costs to the relevant activities. It ultimately has a positive impact on financial performance (i.e., creating added value) of all companies.

Generally speaking, environmental expenses result from procedural transformation of inputs (materials, packaging, energy and water) into outputs (products / services, packaging, waste, waste water, emissions into the air). They are the subject of optimization of sustainable management accounting system in the function of achieving the target performance.
5. The cost efficiency of the supply chain

It is particularly important for the retail companies to effectively manage the sustainable supply chains (McKinsey & Company - *The business of sustainability: Putting it into practice*). Basically, sustainable supply chain management is defined as involvement of environmental, social and economic values in the selection, evaluation and management of the supply base (Giunipero et al., 2012). Sustainable supply management integrates "environment thinking" in supply chain management, including product design, materials and resources selection, manufacturing processes, delivery of finished products to customers, as well as management of the product after its life cycle (Giunipero et al., 2012). Practical research found that management initiatives and state regulations have positive impact, while investment and economic uncertainty limit the improvement of sustainable procurement and supply (Giunipero et al., 2012).

Sustainable cost (i.e. cost reduction) of the supply chain are realized on the basis of efficient energy lighting, packaging reduction (average 20%), providing truck fleet with the new ultra-efficient engine (an average reduction in fuel consumption of 35%) (PriceWaterhouseCoopers, 2010, *Value of Sustainable Procurement Practices*).

Effective management of relationships with suppliers has a special significance in the context of sustainable supply chains (Harms et al., 2012). There are many problems of sustainability of the supply chain concerning various risks and opportunities.

In Germany, 81% of companies have innovation potential problem in the sustainable management supply chains. Beside that, reliable suppliers and quality assurance (both 97%) are also significant economic problems (Harms, 2012). The successful resolution of all relevant issues significantly increases the efficiency of sustainable supply chains in all companies.

The efficiency of sustainable supply chains depends on many crucial factors, and these are: a strategy for sustainable supply chain, environment risk, market risk, information technology (IT), business regulations, organizational culture, risk and compliance management, laws, standards and regulations (Wittstruck, 2011). It also includes the management of the environment and corporate social responsibility. Their adequate control can successfully contribute to improving the supply chain efficiency. It has a positive effect on the overall performance of retailers.

The cost efficiency of the supply chain affects the optimization of working capital (Humphrey et al. 2012, Ernst & Young *Cost competitiveness*). So, for example, by reducing the cost of the supply chain tax benefits can be realized, which allows (retail) company to reinvest in supporting activities and thus become more flexible with working capital. In order to reduce the costs, many companies seek for better commercial terms, discounts and promotions from their suppliers. Accordingly, they reach decisions: whether the purchase should be local / regional, centralized, should it be outsourcing (through third parties), or combined.
In the retail food supply chain costs are between 60 and 70% (KPMG / UK - The Cost Boomerang). They can be optimized by the effective management of supply chain, i.e. by using "green logistics".

It is considered that the application of the concept of sustainable supply chains will lead to a significant changes in the future, in terms of strengthening the relations (i.e., greater cooperation) between retailers and their suppliers (RILA - Retail Industry Leaders Association: Improving Sustainable Supply Chain Efforts Among Retail Leaders).

Modern retailers invest significantly to improve the efficiency of managing storage, transportation and operating loss prevention. These three areas are related to the management of relationships with suppliers. With proactive strategy for suppliers, retailers achieve significant improvement in the efficiency and effectiveness of operations.

The sustainability strategy is reflected on the cost of packaging products - it contributes to their reduction. Product design greatly affects its cost (Reed, 2012). By using sustainability strategies many retail companies reduce supply chain costs - change product design and materials, reduce labor and eliminate unnecessary packaging. So, for example, the famous Swedish furniture retailer - IKEA, redesigned the packaging by the application of strained flatter box in order to optimize the volume during transport. This adjustment allows four additional sofas to fit in a truck or train, thus providing a lower cost of products and positive reflection on environment (Reed, 2012).

6. Energy efficiency

Service companies, that means and retail, can significantly reduce costs through more efficient use of energy and water. Energy efficiency plays a major role and has considerable importance on improving the efficiency of logistics and supply chain (Halldórsson, 2010). Within the management of sustainable costs in retail, special attention should be paid to energy efficiency. It is one of the most significant performance factors of retail companies (Gleason, D. June 2010, The National Retail Federation: Sustainable Retailing Consortium - Introduction to Environmental Sustainability, Deborah Gleason (http://dkganalytics.com).

The structure of energy consumption in typical grocery shops is as follows: lighting 23%, heating 13%, cooling 11%, ventilation 4%, water heating 2%, boiling 5%, refrigeration 38%, and other 3% (LG Life's Good, The Food Retail Industry: An innovative, sustainable retail environment). Significant cost savings of energy in food stores can be achieved with new, more efficient lighting (using a green light) and refrigeration (by replacing the existing with the new devices).

Regarding energy sustainability, disclosure practices of certain companies are different. Specific measures of energy sustainability are developed. Energy productivity of entities - companies or retail stores, can be determined on the basis of distribution of total income compared to total energy consumption for a given fiscal period. For the following companies in 2010 energy productivity of the
construction was: Home Depot - $ 3.849, Kohl's Corp. - $ 3.736, Kingfisher - $ 3.719, the industrial average of $ 3.719, Canadian Tire Corp. - $ 3.054, and Wal-Mart - $ 2.780 (The Delphi Group and Corporate Knights Review - Canadian Tire ...); corp.canadiantire, ca / ... / ...).

As energy productivity, likewise productivity of carbon dioxide emissions can be determined for a given entity - a retail company or store, by dividing the total revenue with the emission of carbon dioxide in particular fiscal period. In 2010 productivity of carbon dioxide emissions from construction and truck fleet in the following companies was: Canadian Tire Corp. - $ 52.499, Kingfisher - $ 34.235, industry average - $ 29.993, Home Depot - $ 22.127, Kohl's Corp. - $ 21.395, and Wal-Mart - $ 19, 709 (The Delphi Group and Corporate Knights Review - Canadian Tire ...; corp.canadiantire, ca / ... / ...).

In terms of productivity of energy and productivity of carbon dioxide Wal-Mart is, according to the data presented above, in a disadvantage compared to other companies observed, and the average. It has, therefore, a higher consumption of energy and higher emission of carbon dioxide. Wal-Mart, as it is known, has lately taken all necessary measures to ensure their optimization.

7. Influence of RFID on sustainable cost in retail

The increasing use of information technology (IT) in the business of the companies contributes to the achievement of visible (efficiency, productivity, and organization) and invisible effects. It improves customer relations, sustainable competitive advantage, and reduces costs (Bahrami et al., 2012).

The research conducted on retail practice in China found that there is a significant positive relationship between employee competencies and operational strategies (i.e. lower costs, quality, and flexibility). Information technology helps retailers to provide flexible strategy. Operational strategies - low cost and flexibility have positive impact on business performance (Yu, 2012). Business of global retailer Walmart is in tune with this.

There is evident growing importance of radio frequency identification (RFID - radio frequency identification) and it is treated as a crucial factor in business success. So, for example, the general benefits of RFID in the supply chain are: 1) reduction of theft, 2) reduction of material handling, 3) increase of the accuracy of the data, 4) more efficient management in special cases, and 5) improvement of the information participation.

Benefits for the individual participants in the supply chain are: (1) Manufacturer / Supplier: production monitoring, quality control and continuous production and supply, (2) the distribution / logistics providers: material handling, space utilisation, asset management, and (3) Retailers: stockout reduction, buyer's service, aftersales service and lower inventories (Tajima, 2007). All in all, there is significant importance of using RFID on sustainable costs, among all the members of the value chain, including retail.
8. Sustainable reporting in Walmart

Global retail company Walmart gives special attention to the issue of sustainable development and sustainable cost effective management in the function of optimizing operational and financial performance (i.e., creation of additional value). It has developed an adequate network of sustainable value, which is displayed in Figure 2.

![Figure 2. Walmart’s Sustainable Value Networks](Source: Plambeck, (2011))

Walmart achieved significant cost savings from reducing carbon dioxide emissions, ensuring efficient transport vehicles (in terms of fuel consumption) and making special packaging (PriceWaterhouseCoopers, 2010: Value of Sustainable Procurement Practices).

Since 2005 company Walmart regularly publishes (on the website) annual report on sustainable development and its sustainability objectives are: 1) the use of 100% renewable energy, 2) providing zero waste, and 3) the sale of products that are sustainable to environment and people (Stankevičiūtė, 2012). These goals are achieved through reduction of carbon dioxide emissions, increase of energy efficiency, reduction of transportation costs, waste reduction and recycling, packaging and so on. Walmart plans to build such stores with 25-30% greater energy efficiency, which will produce up to 30% less carbon dioxide emissions.
emissions. Also, the plan is to carry out the reduction of carbon dioxide emissions by 20% in existing stores around the world (Stankevičiūtė, 2012). It will be beneficial to reduction of overall costs and increase of profits at the time, with the maximum satisfaction of the needs and desires of consumers.

9. Sustainable reporting in company Delhaize Group

Leading supermarket chain in Serbia is a global retailer Delhaize Group. As in other countries in which Delhaize operates, it pays significant attention to the effects of implementation of the concept of sustainable development in Serbia. In view of this, we will shortly point out some specifics of sustainable reporting of this retail chain.

Delhaize Group pays considerable attention to the achievement of cost-efficiency across the entire value chain (Delhaize Group - Our Journey to Sustainability: Progress Report 2011). Sustainability is integral part of the new business model - global strategies of operations of Delhaize Group.

Delhaize Group pays significant attention to the development of green brands. In some observed periods, the percentage of private brand products with GDA label at Delhaize Group operating in Europe was: 2009 - 39%, 2010 - 60% and 2011 - 80% (Delhaize Group - Our Journey to Sustainability: Progress Report 2011). Delhaize Group continually redesigns the package to achieve the 100% target.

Delhaize Group devotes considerable attention to donation to society. Direct donations of food (in tones) per individual observation period were: 2009-17639, 2010-20246, and 2011-22 151. The percentage of donations of money from profits before tax was: 2009 - 0.6%, 2010 - 0.5% and 2011 - 0.7% (Delhaize Group - Our Journey to Sustainability: Progress Report 2011).

Significant attention at Delhaize Group is dedicated to managing dissipation (losses). For instance, dissipation management in 2011 was: 53% of the waste recycled, total waste was 411 721 tons, earned income based on recycling was 26 million euros, and the recycling of food waste was 13 223 tons (Delhaize Group - Our Journey to Sustainability: Progress Report 2011).

Delhaize Group increases the effectiveness of water management. Total water consumption per m² of retail space, m³/m², amounted in individual years: 2009 - 0.79, 2010 - 0.77 and 2011 - 0.77 (Delhaize Group - Our Journey to Sustainability: Progress Report 2011).

In the company Delhaize Group significant attention is also devoted to reduction of carbon dioxide emissions. Carbon dioxide emissions by facility type are: 88.7% stores, 4.6% distribution centers, 0.4% offices, 5.6% product transportation, and 0.7% associates travel. Sources of carbon dioxide emissions are: 62% energy, 32% refrigerants, 6% transport and travel. Carbon dioxide emissions per m² of sales, tons of CO₂e/m², observed in individual years was: 2009-0.663, 2010-0.639, and 2011-0.613. (Delhaize Group - Our Journey to Sustainability: Progress Report 2011).
The Delhaize Group has significantly improved energy efficiency by replacing existing refrigerants with new, by using renewable energy (solar), and with improvement of transport energy efficiency. The consequence of this is that, in 2011 compared to 2010, energy consumption per square meter was reduced for 3.3%.

As a general conclusion, the company Delhaize Group pays considerable attention to efficient management of sustainable cost. It has a positive impact on its overall business and financial performance.

Conclusion

The research in the retail practice (through interviews with key financial and operational managers) showed that there is a significant relationship between sustainable performance and financial performance. This is why many global companies, particularly retail companies, transform themselves in relation to energy, environment, and sustainability. The change regarding the management of investor relations, risk management, financial reporting, compliance and credibility of non-financial data are considerable. The importance of disclosures on sustainable cost is increasing. Employees, shareholders, institutional investors, purchasers and policy makers show particular interest for the enhancing the role and the significance of sustainable reporting.

Sustainability is considered to be crucial factor in business performance of retail companies. Key measures of sustainability in retail are: the right product (standardized quality), energy consumption (in each stage of the supply chain), human rights and labor laws (their respect). Creation of sustainable cost significantly improves the performance of retail companies. This is achieved by optimizing the costs of sustainable sources.

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