



PERFORMANCE MANAGEMENT SYSTEM IN SALE AND DISTRIBUTION: A CASE OF SERBIAN COMPANY

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ABSTRACT. Background: Performance management system (PMS) is the process of quantifying action which leads to organizational efficiency, competitiveness and growth. Performance measurement is the vital element of quality management system (QMS). Innovative companies have a strong culture, clear sense of mission and purpose, a well thought out strategy and business philosophy of continuous improvement, driven by QMS. Implementation of QMS ISO9001 standards has encouraged many organizations to develop and implement performance management system. Statement of quality objectives and Measurement, analysis and improvement as a part of QMS which leads to continual improvement is a vital part of success of company. Therefore PMS influence on sale, distribution and logistics companies with a complex processes and great number of subjects in supply chain are of great importance for their success.

Methods: In our research we analyse measures and measurement approaches and frameworks that exist in logistic management and based on that we present results from one SME from eastern European country. We use case study research and therefore we conduct interviews with managers, employees and QMS/PMS implementation staff in sale and distribution company.

Results: The aim of this study was to estimate the value of various metrics of the evaluation of QMS implementation. The study was based on case study in one Serbian sale and distribution company specifically in measurement part and metrics that are essential for their business and to compare them with approaches existed in literature. We reveal some obstacles in collecting data for measurement and benchmarking in Serbian market. Different metrics for efficient management of company are implemented in this company based on sales results and customer satisfaction.

Conclusion: The importance of the research is in the fact that implementation of QMS reveal the need for PMS implementation and therefore results in certain performance measures implementation and further continuous tracking of these parameters. We made conclusion that higher business results were reached after PMS implementation and that after implementation of QMS and PMS top managers understand the importance of implementation. We reveal also the fact that in former eastern European socialism countries like Serbia, exist resistance of performance measurement implementation and publication of these data as well as the implementation of benchmarking among companies.

Key words: Quality management, Logistics, Performance Management System (PMS), Serbia.

INTRODUCTION

Implementation of Quality Management System (QMS) is of great importance for effective and efficient work of companies. Very important part of QMS is performance measurement, control and improvement. Performance management system (PMS) is the process of quantifying action, where

measurement as a process of quantification and action leads to performance [Neely et al., 1995]. Therefore PMS influence on sale, distribution and logistics companies with a complex processes and great number of subjects in supply chain are of great importance for their success. Given the volume of information that logistics professionals must consider to make sound decisions, selecting performance measures that report timely and relevant information is critical for effective

management of logistics activity. [Griffis et al., 2007]. The aim of this study was to present results of QMS implementation in one Serbian sale and distribution company specifically in measurement part and metrics that are essential for their business and to compare them with approaches existed in literature. According to QMS standard which put customer on primary position and the interest of managers and owners of companies to gain higher financial results, we focus our work on two groups of parameters: customer satisfaction and sales results. The study was initiated in order to raise the level of importance of performance measurement implementation for countries in transition and for understanding that the first step toward this implementation could be QMS implementation.

Every organization needs to use a proper combination and selection of quality tools, methodologies and techniques for implementing continuous quality improvement process [Parkash and Kumar Kaushik, 2011]. The competitive and innovative companies had a strong culture, a clear sense of mission and purpose, a well thought out strategy and a business philosophy of continuous improvement, driven by Total Quality Management (TQM) which is successfully realised by PMS [Neely et al., 2001]. Therefore TQM and implementation of ISO9001 standards have encouraged many organisations to develop and implement PMS. Some of the basic principles of TQM are strongly related to the use of measures. Within ISO9001, developing a method of measurement, analysis and improvement is an integral part of the quality management system [chapter 8 of ISO9001]. TQM and technology play important and complementing roles in improving the performance. Brah and Lim (2006) shows for logistics company that both high technology firms and high technology TQM firms perform significantly better than their low technology peers.

In Serbia QMS implementation in domestic companies is still on very low level especially in Small and Medium Enterprise's (SME's). The lack of financial funds for implementation as well as owner's and management willingness for implementation and their misunderstanding of QMS importance are the

most common reasons for low level of QMS implementation. Also the influence of previous period of planned economy neglected the importance of performance measurement, KPIs, success factors and improvement of business processes. Considering the transition to market economy and competition with highly efficient companies from all over the world, domestic companies has to be more proactive and improve the level of their efficiency and competitiveness toward customers' satisfaction.

Sliwczynski B. and Kolinski A. [2012] confirm the relation of company's processes efficiency to the processes of material flow and logistic processes which together create a complex decisional system. Such important processes have to be measured. Logistics management has many measures and measurement approaches and frameworks. Most firms' priorities change over time due to market and competitive dynamics and therefore new or different measures are used in accordance with priorities and situation. According to analysis of academic literature some of the proposed sample measures are: On-time delivery percentage; Logistic costs as a percentage of sales; Days order late; Inventory turnover ratio; Complete order fill rate; Average order cycle time; Order cycle time variability; Items picked per person per hour; Average line item fill rate; Weeks of supply; Average backorder fill time; Sales lost due to stock out; Percent error pick rate; Logistics cost per unit [Griffis et.al., 2007]. In their work Griffis et.al. [2004], proposed measurement framework with dimensions: measures based on efficiency or based on systems responsiveness; measures support operational decisions versus strategic decisions; measures suited for process orientations versus measures suited to functional orientations; measures monitor performance versus measures for functional orientations. According to research of Lichocik and Sadowski [2013] an effective supply chain must be cost-effective (ensuring economic efficiency of a chain), functional (reducing processes, lean, minimizing the number of links in the chain to the necessary ones, adapting supply chain participant's internal processes to a common objective based on its efficiency) and ensuring high quality of

services (customer oriented logistics systems). Januszewski [2011] stated that not all customers are equally important for the company, that the aim of the identification of key customers is to facilitate the optimal allocation of resources of the company and to use combination of methods for the evaluation of the customer value in logistic companies.

As an indicator of how many strategic supply network performance measures are actively in use the Supply Chain Operations Reference (SCOR) model provides a clue of 144 defined supply chain operation reference measures (SCOR) (Supply Network Council, 2006) identify approximately 19 strategic measures which can be classified as strategic, managerial or operational in nature [Morgan, 2007]. According to Morgan [2007], instead effort needs to be expended to reduce the number of performance measures, the goal is to design simpler and more effective performance measurement systems throw management involvement and that whichever methodology is chosen, the key task must be to focus on the central relationship between culture and performance measurement and how this varies in different countries. Sliwczynski [2010] concluded in his research that developing such a number of operating solution variants within a supply chain in practical management of material, information and financial flows that would make it possible to conduct a comprehensive analysis at the accepted level of costs and execution time is the optimal number of variant analysis measures.

The experience from, and the review of, industry standards and best practices in supply chain performance measurement suggest that "less is better" as to developing performance metrics. Companies should focus on only a small list of Key Performance Indicators (KPIs) which are critical for their operations management, customer service, and financial viability. Potential KPIs should be developed for each of the SCOR model's four meta-processes (plan, source, make, and delivery) and need to be hierarchically grouped such as primary and secondary metrics [Chae, 2009].

Performance measures that are focused on financial metrics are used for a long period of

time to provide operational control and external financial reporting in private sector organisations [Kuwaiti, 2004]. New market development and globalisation force companies to consider their performance in terms of quality of service, flexibility, customization, innovation and rapid response (Neely, 1999).

METHODOLOGY

The chosen research methodology was case study of sale and distribution company of construction products which is suited to the interpretive research approach. Multiple sources of data are embraced and engaged in a recursive, sense-making process, in which results and discussion are compared and contrasted as suggested by Yin [2003]. Data were gathered with semi-structured interviews that were held with the top managers, sales managers and outlet managers responsible for the leading processes in company. Key questions and issues were raised in order to define implementation of performance measures in company. The managers were allowed to freely give their opinions and answers [Simon et al., 1996].

RESULTS AND DISCUSSION

Company was issued an ISO9001 certificate by an internationally acknowledged certification company, which made a significant contribution in introducing process approach, defining and measuring business parameters, as well as additional analysis and improvements. After ISO 9001 have been implemented, performance measures were established. Before ISO9001 implementation, performances were just on the level of bookkeeping considering domestic low requirements. Measurement, analysis and improvement as indispensable parts of ISO 9001, were valuable tools for the establishing of PMS in company. Performance measures have been developed in company on the basis of financial metrics and reporting mechanism. All parameters were stored both in spreadsheets and in bookkeeping software developed commercially on domestic market. Both tracking systems were used for parallel

control and comparison. Such monthly reports have become available to the manager staff.

Every month on meeting outlet managers present their result in previous month. Outlets are organized as income units and their results are tracked individually. Payment of outlet managers is connected with outlet results. Data were prepared by managers of outlets (existing 8 outlets all over Serbia), technical director, specialists responsible for technical support and sales of products according to different groups and bookkeeping department. The stated parameters serve for internal comparison between sales points which makes a solid competition between them. A number of business decisions is made through these regular monthly meetings, a set of proposed measures towards suppliers is established, a position about sales of certain product on a given territory is taken, the questions of quantity of stocks is reviewed, trends are followed, problems and causes are established and possible ways of their removals, as well as business improvement are defined. Certain parameters are followed and compared with regard to received parameters in companies which are part of the international shareholder from the region, which deal with the same business. Benchmarking within domestic market and competition is on very low level since it is very hard to provide results from competition and statistical state institutions.

In the next part of paper we will present performance measures that are used in this company. We uncovered two groups of performances:

- Sales results,
- Customer satisfaction.

Sales results based on financial parameters analysed monthly on meetings are based on performance measures of outlets. They are:

- Retail sales information (invoiced, paid invoices, number of invoices, average value of the invoice, rebate amount, amount and list of unpaid invoices),
- Wholesale information (pro-invoices, date, invoice number, customer's name, value of pro-invoice and invoice, unpaid amount, discount, name of salesman),

- Information of net amount of income in comparison to previous years (so called diagram "to know where we stand")
- Information of goods groups (retail sales and wholesale, quantity of sold goods by goods groups, participation in the total sales of specific important suppliers), comparison with previous years and to the competitors),
- Year turnover plan, control and analysis of realization in sales outlets totally and by goods groups, comparison with previous years, pre-tax profit/total income, income and profit by employee
- Total inventory turnover and inventory by goods groups, inventory turnover ratio, expenses of inventory per product, number of days in inventory and unit inventory costs (in total, for sales outlets and by goods group).
- Expenses (workforce, utilities, vehicles used for goods transport to customer and from supplier or central distribution center, logistic cost in relation to sales, other material costs).

Performance measures connected with customer satisfaction are:

- Number of objections/complaints of buyers about sold goods, value of products subject of complaint in relation to the total income;
- Price of products with relation to competition for the same quality;
- Order cycle time, on-time delivery;
- Fill rate, in stock, stock out, backorder

Company takes a lot of care to stock of material available for customers and high level of in stock probability despite high expenses of high inventory level. Company doesn't take evidence about sales lost due to stock out as one of the very important parameters for customer satisfaction which directly leads to lost sale and income.

According to research of Griffis et.al. [2004], dimensions used in analyzed company within performance measures of sales result and customer satisfaction are measures based both on efficiency and system responsiveness, measures that support both operational and strategic decisions of management, measures

suited for process orientations and measures for monitor performance.

Performance measures in company serve for process and business improvement and corrective measures which include improvement level of customer services, proposed measures toward suppliers in order to raise the level of sales, own stock optimization in relationship with high customer satisfaction and sales rise in outlets. Implementation of ISO9001 initiated every month meetings, establishment of performance measures which are discussed on these meetings, improvement and corrective measures according to gained parameters. Business results within all parameters are better controlled and raised within implementation of management analysis of performance measures.

CONCLUSION

Important aspect of the implementation of PMS according to our presented findings is to establish a quality management system ISO9001, since it demands system of measurement, analysis and improvement with corrective measures. After implementation PMS in analyzed company, according to interviews with managers, business controllability, efficiency and user satisfaction were raised on the higher level and therefore better results were gained through higher level of sale and income. In our research we presented different metrics within two groups, sales results and customer satisfaction which appropriate to performance measures analysis of academic literature. These company parameters mostly comply with studies which classify measures as strategic, managerial or operational in nature and that are suited for process measurement and company efficiency and responsiveness. Some other specifics of PMS are due to culture, country and company uniqueness. Further research should include analysis of PMS implementation in a larger number of logistic companies in Serbia and further research of implementation other group of performance measures other than customer satisfaction and sales result.

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SYSTEM ZARZĄDZANIA EFEKTYWNOŚCIĄ W SPRZEDAŻY I DYSTRYBUCJI: STUDIUM SERBSKIEGO PRZEDSIĘBIORSTWA

STRESZCZENIE. Wstęp: System zarządzania efektywnością to proces ilościowego działania, prowadzącego do efektywności w zakresie organizacji, konkurencyjności i rozwoju. Pomiar wyników jest istotnym elementem systemu zarządzania jakością. Innowacyjne firmy charakteryzują się silną kulturą, przejrzystym poczuciem misji i celów, posiadaniem dobrze przemyślanej strategii i filozofii ciągłego doskonalenia swojej działalności, kształtowanej poprzez system zarządzania jakością. Wdrożenie standardów ISO9001 SZJ stymuluje wiele firm do opracowania i wdrożenia systemu zarządzania efektywnością. Jasne określenie celów jakościowych oraz sposobów pomiaru stanowi ważną część systemu zarządzania jakością, umożliwiającą ciągłe doskonalenie działania i w rezultacie osiągnięcie sukcesu przez firmę. Dlatego też wpływ systemu zarządzania efektywnością w przedsiębiorstwach działających w obszarze sprzedaży, dystrybucji i logistyki, charakteryzujących się złożonością procesów i dużą liczbą ogniw w łańcuchu dostaw, jest bardzo istotny dla osiągnięcia sukcesu przez te przedsiębiorstwa.

Metody: W badaniach przeanalizowano środki i metody pomiarowe, które są stosowane w zakresie zarządzania logistycznego. W oparciu o tą analizę zaprezentowano wyniki analizy reprezentanta wyłowionego wśród grupy małych i średnich przedsiębiorstw z Europy Wschodniej. Przeprowadzono studium przypadku, w trakcie którego przeprowadzono rozmowy z zarządzającymi, pracownikami oraz osobami wdrażającymi systemy zarządzania jakością w przedsiębiorstwie działającym w obszarze sprzedaży i dystrybucji.

Wyniki: Celem niniejszej pracy była ocena przydatności wyboru wskaźników dla oceny wdrażania systemu zarządzania jakością. Badania przeprowadzono w jednym z serbskich przedsiębiorstw, działającym w obszarze sprzedaży i dystrybucji. Szczególny nacisk położono na system stosowanych wskaźników i porównanie tego systemu z opisywanymi w literaturze fachowej. Stwierdzono parę trudności w uzyskaniu odpowiednich danych dla przeprowadzenia pomiarów i benchmarkingu dla serbskiego rynku. W analizowanym przedsiębiorstwie stosowano różne mierniki, oparte na pomiarze wyników sprzedaży oraz poziomu zadowolenia klienta.

Wnioski: Znaczenie przeprowadzonych badań wynika z faktu, że wdrożenie systemu zarządzania jakością ujawniło potrzebę wdrożenia systemu zarządzania efektywnością. To z kolei jest związane z koniecznością wdrożenia systemu wskaźników służących do pomiaru i monitorowania działań przedsiębiorstwa. Osiągnięcie lepszych rezultatów przez przedsiębiorstwo, dzięki wdrożeniu tych systemów, spowodowało lepsze zrozumienie konieczności takiego wdrożenia przez zarządzających firmą. Stwierdzono istnienie oporu w przeprowadzaniu badań pomiaru efektywności oraz publikacji tego typu danych dla celów benchmarkingu w krajach postsocjalistycznych Europy Wschodniej.

Słowa kluczowe: zarządzanie jakością, logistyka, system zarządzania, Serbia.

EIN EFFEKTIVITÄTSMANAGEMENT-SYSTEM IN VERKAUF UND DISTRIBUTION: FALLSTUDIE EINES SERBISCHEN UNTERNEHMENS

ZUSAMMENFASSUNG. Einleitung: Ein Effektivitätsmanagement-System stellt einen Prozess des quantitativen Wirkens, das zur Steigerung der Effektivität im Bereich der Organisation, der Wettbewerbsfähigkeit und der Entwicklung

eines Unternehmens führt, dar. Die Berechnung von betreffenden Ergebnissen bildet daher ein wesentliches Element des Qualitätsmanagement-Systems. Innovative Firmen charakterisieren sich durch eine ausgebaute Organisationskultur, transparente Zielsetzung und Gefühl ihrer Mission, ferner durch den Besitz einer gut durchdachten Strategie und Philosophie der ständigen Vervollkommnung ihrer Tätigkeit, die mittels des Qualitätsmanagement-Systems gestaltet werden. Die Einführung von den Standardnormen ISO9001 SZJ stimuliert viele Firmen zur Bearbeitung und Einführung des Effektivitätsmanagement-Systems. Die klare Bestimmung von Qualitätszielen und Berechnungsmethoden stellt einen wichtigen Bestandteil des Qualitätsmanagement-Systems dar, das die permanente Vervollkommnung der wirtschaftlichen Aktivität und somit die Erzielung eines kommerziellen Erfolgs durch die Firma ermöglicht. Daher ist das Effektivitätsmanagement-System in den Unternehmen, die im Bereich von Verkauf, Distribution und Logistik tätig sind und sich durch eine Kompliziertheit von Prozessen und eine große Anzahl von Gliedern in den Lieferketten charakterisieren, sehr wesentlich für die Erzielung des Erfolgs durch die Unternehmen.

Methoden: Im Rahmen der Forschungen wurden die Mittel und Methoden, die im Bereich des Logistik-Managements angewendet werden, analysiert. Gestützt auf diese Analyse wurden die Ergebnisse einer unter klein- und mittelgroßen Unternehmen ausgewählten, repräsentativen, in Ost-Europa lokalisierten Firma präsentiert. Anhand dieser im Bereich des Verkaufs und der Distribution tätigen Firma wurde eine Fallstudie realisiert, in deren Rahmen Gespräche mit den Geschäftsführern, Mitarbeitern und den für die Einführung von Qualitätsmanagement-Systemen im Unternehmen zuständigen Personen durchgeführt wurden.

Ergebnisse: Das Ziel der vorliegenden Arbeit war es, die Brauchbarkeit der für die Bewertung der Einführung des Qualitätsmanagement-Systems ausgewählten Kennziffern einzuschätzen. Das Forschungsvorhaben wurde in einem serbischen, im Bereich von Verkauf und Distribution aktiven Unternehmen durchgeführt. Einen besonderen Druck legte man auf das System der dabei angewendeten Kennziffern und den Vergleich des betreffenden Systems mit den in der Fachliteratur beschriebenen Systemen. Dabei stellte man einige Schwierigkeiten bei der Ermittlung von entsprechenden Daten für die Durchführung der Bemessung und der Benchmarking-Bewertung für den serbischen Markt fest. Im betreffenden Unternehmen wendete man unterschiedliche Messwerte an, die hauptsächlich auf die Bewertung der Verkaufsergebnisse und des Niveaus der Kunden-Zufriedenstellung zurückzuführen waren.

Fazit: Die Bedeutung der durchgeführten Forschungen beruht auf der Tatsache, dass die Einführung des Qualitätsmanagement-Systems auch die Notwendigkeit der Einführung des entsprechenden Effektivitätsmanagement-Systems offenlegte. Dies ist folglich verbunden mit der Notwendigkeit der Einführung eines Kennziffer-Systems, das zur Bewertung und zum Monitoring der Betätigung dieses Unternehmens dienen sollte. Die dank dieser Systeme durch das Unternehmen erzielten, besseren Resultate hatten auch eine bessere Akzeptanz für die Notwendigkeit der Einführung solcher Systeme seitens der Geschäftsführer zur Folge. Bei dieser Gelegenheit wurden auch zurückhaltende Stellungnahmen zur Durchführung von Effektivitätsberechnungen sowie zur Veröffentlichung solcher Daten für die Zwecke des Benchmarkings in den Ländern des postsozialistischen Ost-Europas festgestellt.

Codewörter: Qualitätsmanagement, Logistik, Management-System, Serbien.

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