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The Impact of Quality Management Systems on the Efficiency of Current Assets Management in Small Commercial Enterprises

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Grzegorz Zimon¹

Abstract:

Purpose: Financial security and high profits are the basic goals set by the owners and managers running an enterprise. To achieve them, management tools and systems should be introduced to improve the efficiency of resource management that the company has. By optimizing the level of current assets one can reduce costs, which has a positive effect on the company profits and the level of financial liquidity. Therefore, improving the efficiency of wealth management is an important element of business management. The purpose of the article is to show how standardized quality management systems affect the efficiency of managing current assets and their basic components

Design/Methodology/Approach: The analysis was carried out on a group of 159 trade companies. The research period covered the years 2015-2017. The enterprises surveyed were divided into those that implemented quality management systems (52 enterprises) and those that do not use this type of solutions (107 enterprises). Then, analyzes were made and the results obtained by the associated enterprises in individual groups were compared. The analysis of financial indicators and basic statistical methods (average, median) were used as the basic research tools.

Findings: The introduction of quality management systems is designed to improve the efficiency of business management, also has the large impact on costs. The decrease in costs reduces the price of products and goods sold.

Practical Implications: The results demonstrate that quality management systems have the significant impact on the price, which is the most important criterion for buying goods or services

Originality/Value: Analysis showed that enterprises which use quality management systems manage their assets more efficiently compared to enterprises that do not use quality management systems

Keywords: Current assets, quality management, SMEs.

JEL codes: G30, G32, G33, L15.

Paper type : Research article.

¹Corresponding author, Rzeszow University of Technology, Department of Management, gzimon@prz.edu.pl

1. Introduction

Business owners are primarily interested in the profits of the company. When assessing enterprises most often, they analyze profitability and financial liquidity, i.e. the most important areas from the point of view of the company security and development. In order the results of profitability and financial liquidity could be at a high level, it is necessary to introduce appropriate tools, methods and management systems that will improve the efficiency of managing current assets. Current assets are assets that are strongly associated with short-term decision making, which has the direct impact on the financial security of enterprises. Effective management of current assets also allows reducing the costs of managing them, which in the long run certainly will positively affect the profitability of enterprises. A tool that should improve the efficiency of managing current assets is basically standardized quality management systems in every enterprise. Quality management systems are most often used in manufacturing companies, where the product is subjected to tests regarding its quality in the next stages of production.

The complexity of quality management systems largely depends on the industry in which the company operates. In the chemical, medical, metallurgical and food industries, research into product quality is necessary and provides the basis for making decisions on admission to trading. The situation is different in manufacturing enterprises dealing with e.g. furniture production, construction enterprises where quality management systems are used to a lesser extent. In turn, the introduction of quality management systems in commercial enterprises is not popular. These types of units deal with trade in goods and have direct contact with individual customers. Here, the lack of high quality customer service will result in their loss, which is why in this area every company will focus on high quality and the introduction of additional quality management systems can increase the efficiency of acquiring contractors. However, if an enterprise wants to improve the effectiveness of wealth management, then the introduction of quality management systems allowing to assess the work of employees seems to be the most reasonable. Inventories and receivables from customers are the two most important components of current assets, they are such elements for which the use of modern quality management systems can bring a lot of benefits. The aim of the article is to assess the impact of standardized quality management systems on the efficiency of managing current assets.

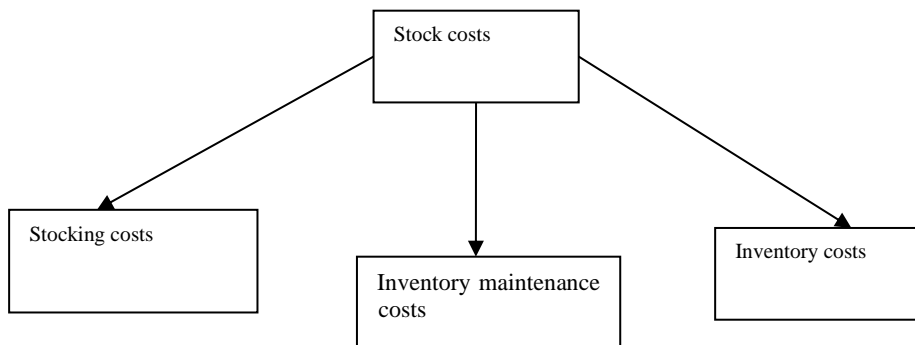
2. Management of Current Assets

Quality management systems in small enterprises are rarely used. There are three main reasons for this. The main reason is the costs of their introduction and maintenance. The introduction of quality management systems suitable for a given enterprise costs money, and the effects they are supposed to bring in the form of revenue increase or cost reduction are hardly noticeable, especially by the owners. In addition, the reluctance of employees to perform additional obligations also has the large impact on the desirability of introducing quality management systems. However, the most important barrier is the

opinion of the owners as company managers often do not see the benefits that standardized quality management systems could bring to the company. In the case of managing current assets, it seems necessary to introduce quality management systems for the proper functioning of the enterprise. The introduction of an appropriate quality management system in the area of the most important elements of current assets management, i.e. inventory and receivables from customers, is able to optimize their level, which will positively affect the financial liquidity and profitability of enterprises.

As previously stated, current asset cost management is closely related to the management of current assets. The two most important components of current assets generating the largest costs are inventories and receivables from customers. In the enterprises analyzed, these components constitute about 99% share in current assets. Inventory management costs depend on the management strategy chosen by the company. Conservative policy means high costs, other strategies depending on the choice are characterized by lower costs but a higher risk of losing financial liquidity. In general, it can often be found in the literature that inventory is an area where there is a large waste of costs (Coyle *et al.*, 2010; Zimon, 2015). There are authors who claim that high levels of inventory are savings in supplies (Blinder & Macciani, 1991). However, in general, warehouse management costs occupy the highest position in inventory management costs. Inventory costs are determined by the costs of warehouse management, they result from activities that involve inventory, and thus their creation, maintenance and exhaustion. A detailed breakdown of inventory management costs is presented in Figure 1.

Figure 1. *Division of costs due to inventory management*



Source: *Author's own research.*

When analyzing Figure 1, it can be seen that inventory management applies to many areas where the introduction of quality management systems should optimize the level of costs, e.g. the area related to maintaining inventory and stock depletion. Lack of quality control of goods received in the event that the entity uses inventory management systems based on JiT strategy may result in the suspension of production or sales. This will be caused by the receipt of damaged or poor-quality materials or

goods. In this situation, you may not have enough time to replenish your missing inventory. This will stop production and sales. Therefore, the costs of lost opportunities arise, in the case of such inventory management policies, quality management systems are a must.

Inventory management and maintaining a high level of inventories is necessary to increase employment. There are authors who believe that overloading employees during the organization of orders has been identified as a key factor that causes reduced efficiency of warehouse management and increased costs (Gue & Meller, 2009; Parikh & Meller, 2009; 2010). Most often, in order to improve the efficiency of inventory management, appropriate logistic management systems are introduced, e.g. EOQ, JIT, various types of inventory classification methods based on the ABC or XYZ principles. The introduction of these systems is the first stage to improve the efficiency of warehouse management, the second stage is the introduction of appropriate quality management systems. In the case of inventory management, the lack of adequate motivation and control systems for employees on the line of warehousemen, the procurement department, transport are a large source of neglect in the inventory management process. Very often, mistakes and omissions of warehouse or transport employees lead to unnecessary inventory management costs. In order to avoid such situations, an appropriate employee motivation and control system should be introduced, which can be served by appropriate quality management systems. To achieve improvement in the area of corporate finance, standardized quality management systems are often implemented (Fonseca & Domingues, 2017; Zaramdini, 2007, Zimon 2019; Zimon & Zimon 2019). Compliance with their guidelines leads, among others to organize basic business processes, reduce costs and minimize non-compliance (Sampaio *et al.*, 2012).

Receivables from customers are the second main component of current assets. Managing them is much more important than inventory management, because it is responsible for the inflow of cash into the company. The management of receivables from recipients is primarily trade credit management. The impact of trade credit on business management is confirmed by numerous studies conducted around the world. Its impact on financial liquidity is indisputable and depends on the receivables management strategy. Many authors indicate that trade credit has a direct impact on profitability (Ukaegbu, 2014; Lazaridis & Tryfonidis, 2006; Kim & Chung, 1990) and claim that trade credit is an important criterion for selecting suppliers when it is difficult to decide from who to buy products (Sarotis & Hill, 1983; Schiff & Lieber, 1974, Schipley & Davis, 1991). There are authors who also show that additional discounts have the big impact on trade credit management since an enterprise can get important rebates for earlier payments when it settles its obligations to suppliers beforehand (Bougeheasa *et al.*, 2009). In the literature you can also find many analyzes and explanations informing that the trade credit offer has the impact on financial security (Blais & Gollier, 1997, Brennan *et al.*, 1988; Mateut *et al.* 2006, Zimon 2018), the quality of the products offered, behavior of recipients (Jainn, 2001; Cunat, 2007; Lee & Stoce, 1993; Long *et al.*, 1993; Frank & Maksimovic, 2005; Burkart &

Elingsen, 2004; Daripa & Nilsen 2005). Additional loans for earlier payment are of great importance for shaping the entire receivables management policy. The decision whether to pay earlier or take advantage of the additional discount determines the receivables management policy. Debt managers should investigate the cost of trade credit. Trade credit costs consist of three categories (Pluta, 2004):

1. Credit maintenance costs are usually the costs of servicing a short-term loan taken to finance a trade credit granted.
2. Costs of monitoring receivables is a group of costs to which we include the costs of continuous monitoring and collection of receivables. These costs relate to the most important element in the process of managing receivables monitoring receivables (Scherr, 1989).
3. Bad debts are receivables that the company will not recover.

The improvement of management efficiency in these two areas definitely leads to a reduction in the costs of managing current assets, which will positively affect the financial results. In the case of receivables and inventory management, it should be remembered that too aggressive policy of managing these current assets leads to a loss of financial liquidity.

3. Research Methodology

The purpose of the analysis was to determine the impact of the implementation of standardized management systems, quality on the improvement of processes related to the management of current assets. The research covered small enterprises conducting commercial activity in the construction industry dealing in trade in sanitary and heating equipment. 159 small Polish trading enterprises were subjected to analysis. The research period concerned the years 2015-2017. The analysis was conducted to assess the impact of quality management systems on the inventory management process. The enterprises surveyed were divided into those that implemented quality management systems (52 enterprises) and those that do not use this type of solutions (107 enterprises). Then, analyzes were made and the results obtained by the associated enterprises in individual groups were compared. The analysis of financial indicators and basic statistical methods (average, median) were used as the basic research tools.

4. An Analysis of the Impact of Quality Management on Current Assets – Results

In order to determine the impact of quality management systems on the efficiency of managing flight assets, the enterprises were divided into two groups. The first group consisted of 52 enterprises not using quality management systems, they were designated as group A. The second group was 107 enterprises using standardized quality management systems, they were designated as group B. The first stage of the

analysis was the analysis of the structure of current assets in the audited entities. Table 1 presents the share of receivables in current assets in the analyzed enterprises.

Table 1. Average share of receivables in current assets of the analyzed enterprises.

The share of receivables in current assets	A (N = 107)				B (N = 52)			
	\bar{x}	Me	min	max	\bar{x}	Me	min	max
2015	0.49	0.49	0.13	0.71	0.36	0.38	0.24	0.50
2016	0.47	0.48	0.09	0.73	0.37	0.39	0.33	0.51
2017	0.44	0.47	0.20	0.69	0.37	0.39	0.35	0.50

Source: Author's own research.

A much lower share of receivables in current assets was recorded in enterprises using quality management systems. In both groups of enterprises, the average result in individual years is lower than 50%. This result indicates that the share of inventories in current assets in the analyzed enterprises will exceed 50%. The detailed results regarding the share of inventories in current assets are presented in Table 2.

Table 2. Average share of inventories in the current assets of the analyzed enterprises.

The share of inventories in current assets	A (N = 107)				B (N = 52)			
	\bar{x}	Me	min	max	\bar{x}	Me	min	max
2015	0.51	0.50	0.22	0.58	0.63	0.64	0.35	0.70
2016	0.53	0.51	0.28	0.60	0.61	0.62	0.33	0.72
2017	0.55	0.56	0.3	0.61	0.63	0.60	0.35	0.76

Source: Author's own research.

Enterprises using standardized quality management systems recorded significantly higher inventory levels. The results they achieve in individual years are generally about 60% share in current assets. The next stage of the analysis was the analysis of receivables and inventory turnover in days (Table 3).

Table 3. Average results - receivables turnover in days

Receivables turnover in days	A (N = 107)					B (N = 52)				
	\bar{x}	Me	s	min	max	\bar{x}	Me	s	min	max
2015	70.0	75.1	23.7	18.1	124.3	55.2	62.5	17.1	30.1	85.2
2016	74.6	73.5	23.1	11.3	109.5	53.4	61.5	16.5	33.2	83.1
2017	75.4	76.2	24.0	19.5	127.1	57.2	63.8	19.1	28.7	86.1

Source: Author's own research.

The analysis showed that clearly lower results of receivables turnover appeared in the case of enterprises using quality management systems. Then inventory turnover ratios in days were determined. The results are presented in Table 4.

Table 4. Average results of inventory turnover in days

Inventory turnover in days	A (N = 107)					B (N = 52)				
	\bar{x}	Me	s	min	max	\bar{x}	Me	s	min	max
2015	68.3	61.7	14.2	32.4	78.9	70.1	70.2	15.2	51.2	92.8
2016	72.1	65.2	17.9	42.6	91.6	71.8	68.5	21.1	43.4	105.5
2017	75.9	69.9	18.1	43.1	96.2	76.3	77.9	20.0	45.7	97.2

Source: Author's own research.

When analyzing inventory turnover ratios in days, no significant differences were noted between the results in both groups of enterprises. The last indicator that was used for the analysis was the operating cycle. This indicator is defined as an indicator of the effectiveness of property management. Table 5 presents average results for the analyzed enterprises in individual years.

Table 5. Average results for the operating cycle indicator in days

Operating cycle	A (N = 107)		B (N = 52)	
	\bar{x}	Me	\bar{x}	Me
2015	134.9	136.5	131.3	134.1
2016	144.0	139.7	128.2	136.2
2017	151.0	148.1	133.5	143.7

Source: Author's own research.

5. Conclusions

The customer buying a good or service most often pays attention to the price, trade credit and then to the time, quality of service or quality of the goods offered. The introduction of quality management systems is designed to improve the efficiency of business management, also has the large impact on costs. The decrease in costs may cause a reduction in the price of products and goods sold. So it can be said that quality management systems have the significant impact on the price, which is the most important criterion for buying goods or services. Therefore, the use of standardized quality management systems in wealth management is becoming a necessity.

In the enterprises analyzed, assessing the operational cycle, enterprises using quality management systems demonstrated higher efficiency of wealth management. This is due to the effective management of receivables from customers compared to a group of companies that have not implemented quality management systems. The second element positively influencing the efficiency of asset management is the result of the inventory turnover ratio. The results in both groups of enterprises are at a similar level.

However, it should be noted that in units using quality management systems, the share of inventories in current assets is definitely higher than the share of inventories in current assets in enterprises that do not use quality management systems. Inventory management with such a high share is difficult, it requires a very good organization of work. Therefore, the operation of quality management systems should be positively assessed, thanks to which enterprises obtain inventory rotation results similar to those of the second group.

To sum up, it can be stated that efficient management of receivables and inventory allows enterprises that use quality management systems to manage their assets more efficiently compared to enterprises that do not use quality management systems. The analysis is an introduction to the next, broader research that should be extended to various industries.

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