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INFLUENCE OF QUALITY MANAGEMENT SYSTEMS ON THE FINANCIAL CAPITAL MANAGEMENT STRATEGIES IN TRADING COMPANIES

Trading companies which want to increase their competitiveness are forced to look for new ideas to improve the implementation of the adopted strategy. The aim of the publication is to show the role of the quality management system according to ISO 9001 to develop the strategy of working capital management in trading companies. Working capital is one of the most important elements of financial management in a company. This is an area of finance which includes management of current assets and current liabilities. The choice of the appropriate management strategy leads to high liquidity and low profitability, or vice versa. Companies managers, to meet the expectations of the owners, introduce management systems that allow for safe maintenance of liquidity. One such solution, without which the implementation of certain working capital management strategy is almost impossible is to develop appropriate standards for quality management. In the paper the requirements of the quality management system according to ISO 9001 were characterized and discussed its impact on the choice of individual strategies of working capital management. Based on the considerations it was stated that: quality management systems improve relationships with suppliers and customers and minimize the number of errors and inconsistencies in the supply and distribution strategy, aggressive management of working capital without the introduction of appropriate quality management systems leads to the collapse of companies. Its application is in some sense a buffer that protects the company from bankruptcy, at the stage of implementation of the system it is recommended to have developed strategies for working capital management and the implementation process should be adjusted to their requirements.

Keywords: quality, capital, strategy, management

1. INTRODUCTION

Working capital is one of the most important elements of financial management in a company. This is an area of finance which includes current assets and current liabilities management. In order a company could function efficiently in the market various policies and strategies for current assets and current liabilities should be developed in such a way to make

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net working capital positive. The difficulties associated with maintaining a satisfactory level due to the feedback that occurs between liquidity and profitability. Selection of the appropriate capital management strategy leads to high liquidity and low profitability, or vice versa. Business owners are interested in profit that the company obtains. Companies managers, in order to meet the expectations of the owners are trying to introduce new solutions and management systems that will allow them to maintain a secure liquidity and get profit. One such solution, without which the implementation of certain working capital management strategy is almost impossible, is to develop appropriate standards for quality management. This is the first step towards streamlining internal processes to manage key areas of the company and prepare a solid foundation for the implementation of the intended strategy and the implementation of standardized quality management systems.

The aim of the publication is to show the role a quality management system can play according to ISO 9001 in the individual strategies of working capital management in trading companies. In order to realize the stated objectives studied literature and in 2013 conducted the research process for the ten trading companies operating in purchasing groups.

2. WORKING CAPITAL IN A COMPANY

While analyzing the literature on working capital one can meet with the two concepts associated with it: net working capital and the gross working capital. Gross working capital is synonymous with gross assets and it includes: inventories, accounts receivable, short-term investments and short-term accruals.³ However, net working capital is defined as current assets lessened by current liabilities.⁴ Net working capital is otherwise the working capital. The working capital as individual elements of current assets "work" to make money.⁵ Another definition defines net working capital as a part of the constant capital (long-term) of a company, which finances the assets.⁶ In the literature very often, however, the net working capital is defined as the working capital.

The most important role of working capital in the company results from the fact that:

- 1) it is a measure of liquidity,
- 2) acts as a buffer that protects a company against operational losses; the excess of current assets over current liabilities allows the renewal of the operating cycle,
- 3) reduces the negative impact of the environment on the functioning of the company, protects against supply variability.⁷

Its management is important from the point of view of maintaining the security of the company. The choice of working capital management strategy also has a great impact on the

³ Finanse firmy. Jak zarządzać kapitałem, (ed.) Szczęsny. W, Wydawnictwo CH. Beck, Warszawa 2007, p. 201

⁴ Brigham E.F., J.F Houston, Podstawy zarządzania finansami, PWE, Warszawa 2005, p. 241

⁵ Pluta W., Michalski G., Krótkoterminowe zarządzanie kapitałem. Jak zachować płynność., C.H. Beck, Warszawa 2005, p. 50

⁶ Kusak A., Płynność finansowa. Analiza i sterowanie, WWZ, Warszawa 2006, p. 58

⁷ Kusak A., Płynność finansowa. Analiza i sterowanie, WWZ, Warszawa 2006, p. 58

cost of the company. The heads of the company have a choice of three classic strategies of working capital management:

- 1) conservative, which is characterized by a predominance of current assets over current liabilities. Companies using this type of strategy have high inventories, lower inventory status of receivables and low states of commitments,
- 2) moderate, which draws the best from the conservative and aggressive strategies and minimizes the risks posed by these two strategies,
- 3) aggressive, which is characterized by a small or no advantage of current assets over current liabilities. Companies using this type of management have low inventories, higher states of receivables and inventories and a very high level of current liabilities.

The choice of the right management policies with individual components making up the capital will have an important impact on three very important elements for the assessment of the financial condition of the company: liquidity, profitability, asset management effectiveness of current and current liabilities. However, in order the managers could get favorable results on their financial condition it is necessary to examine whether and how quality management systems affect working capital management strategies. How is it reflected in the final economic-financial situation of a company?

3. QUALITY MANAGEMENT SYSTEMS IN TRADING COMPANIES

The basic condition for determining the development of trading companies is to meet the demands made by consumers and institutional customers. It should be noted that the requirements of the customers cover a wide range of features and characteristics of products and services and they are changing and evolving dynamically. Therefore, managers of companies are looking for solutions and concepts that support the multifaceted process of customer service. Modern quality management systems in this context are a highly recommended solution. This is due to the fact that their idea, and the whole structure is based on highlighting the role of chief client in the process of business management.

Narrowing the area of considerations for trading companies because of their nature, in the first place the implementations of standardized quality management systems should be considered, and in particular the system according to ISO 9001 standard.

The ISO 9001 despite the fact that in recent years it has lost much of its popularity, it is still the most commonly-implemented quality management system in the world. This is due to the fact that the main goal of its creators was to develop a universal system addressed to any type of organization. Initially, the quality management systems in accordance with ISO 9001 standards were implemented in large industrial enterprises. Today, they are more popular in trading organizations. The main reason is the fact that ISO 9001 was amended on several occasions which resulted in better reflect its contemporary trends in management and business practice. Indirectly, it also stems from the increased growth rate of the economy. Taking this into account it can be concluded that relatively many trading organizations recognize international standards of management as an effective tool to support operations.

The main goal of the authors of ISO 9001 was to develop such a standard of governance that would make entrepreneurs aware of the fact that management of the company should be directed primarily at the client. In addition the main objectives of the ISO standard include⁸:

- 1) to show external customers, on the basis of objective evidence that the company does everything within its capabilities to maximize their satisfaction,
- 2) the introduction in the company of such a management system that allows to enter a path of sustainable development, enabling appropriate targeting, minimize losses and improve the functioning of internal processes,
- 3) to enable the company to creative adaptation, the general requirements of the standard, to the specifics of the business, size, sector, objectives, strategies or existing market rules.

In addition, the ISO 9001 with its requirements gives a company a guidance on the definition of the quality management system architecture, based on the process approach and the indications for its continuous improvement⁹. The ISO 9001 with its guidelines governs such areas in a company as: the development of system documentation, management responsibility, employees' rights, methods of communication, maintenance management, acquisition and management, comprehensive implementation of the product or measurement, analysis and improvement.

It should be noted that the implementation of a standardized quality management system is an investment and in such terms it should be considered. Practice and numerous publications show that the implementation of standardized quality management systems is not an easy task, as it requires from the people involved in the process the extensive knowledge covering the specifics of a particular company and the specific requirements of the system. It should be emphasized that properly implemented systems can be a source of additional problems and costs¹⁰. However, a well prepared and properly executed implementation process and the improvement of the quality management system according to ISO 9001 will certainly lead to a number of benefits in the future, both internal and external ones. An analysis of the literature shows that the potential benefits are extremely diverse and should be considered in the context of the expectations and objectives adopted in the implementation phase of the system. Trading companies which decide to implement ISO 9001 in the long term can expect:

- 1) image improvement (marketing advantages),
- 2) increase of both internal and external customer satisfaction,
- 3) organization in documentation,
- 4) shift to process management,
- 5) increase of pro-quality awareness of managers and employees at all levels,
- 6) increase of the quality of services,
- 7) more close cooperation with suppliers,

⁸ Łunarski J., Zarządzania jakością. Standardy i zasady, Wydawnictwo Naukowo-Techniczne, Warszawa 2008, p. 256.

⁹ Urbaniak M., Kierunki doskonalenia systemów zarządzania, Wydawnictwo Uniwersytetu Łódzkiego, Łódź 2010, p. 22.

¹⁰ Bugdol M., Jedynek P., Współczesne systemy zarządzania. Jakość, bezpieczeństwo, ryzyko, Helion, Gliwice 2012, p. 75.

- 8) building a strategy based on quality objectives,
- 9) improvement of logistics customer service.

Generally it can be assumed that the benefits of the introduction of quality management systems result mainly in sorting out the most important areas of the companies and their integration and to emphasize the leading role of the client in business. In addition, standardized systems contribute to a reduction in measurable and immeasurable loss of quality due to defects and non-compliances, as well as to test new ideas and concepts on quality in the field of companies management¹¹.

However, there is reason to fear that the application of formal quality management system and the high costs associated with the implementation and improvement of the system can adversely affect the efficiency and effectiveness of trading companies. Noting the nature and the financial problems faced by particularly small and medium-sized trading companies the question of how to implement a standardized quality management system can affect their functioning appears?¹² The answer to this question largely depends on the actual commitment of staff and management in the organization in the implementation and improvement of the system. If the system was implemented in haste by persons not having sufficient knowledge, one may find that the system will generate more losses than benefits. The most serious shortcomings of standardized quality management systems include:

- 1) an increase in bureaucracy,
- 2) absorbing of employees with unnecessary actions,
- 3) the high cost of maintaining the system,
- 4) division of companies into those operating in areas under the terms of the system and areas where the system is only a facade,
- 5) artificial creation of the objectives,
- 6) managing the norm rather than the actual needs of the market.

4. ROLE OF QUALITY MANAGEMENT SYSTEMS IN WORKING CAPITAL CONTROL

The introduction of appropriate quality management systems have various effects on different elements affecting the level of working capital. The impact of standardized quality management systems is also dependent on the chosen strategy of working capital management in a company. It may be of small relevance or very important for working capital and financial performance of companies. The level of working capital is mainly influenced by inventories, receivables and liabilities and, therefore, for these three elements the analysis of the impact of quality management systems in individual strategies was conducted.

The first analyzed element were stocks. Their role in trading companies is crucial for liquidity, profitability. The impact of quality management systems on individual capital management strategies is presented in the tables below. It was examined on the basis of two

¹¹ Zymonik Z., Hamrol A., Grudowski P., Zarządzanie jakością i bezpieczeństwem, PWE, Warszawa 2013, p. 89.

¹² Zimon D., Ocena efektów wdrożenia wymagań normy ISO 9001 w małych i średnich organizacjach handlowych, Problemy Zarządzania, no. 2, (37), 2012, p. 73.

strategies: aggressive and conservative one. Because the moderate strategy results in minimizing the weaknesses of the previous strategies and maximizing their advantages¹³, the characteristics of the impact of quality management at its individual elements was omitted. Its influence is generally average and the details were accurately described in case of the aggressive and conservative strategies. Table 1 presents the influence of quality management on stocks.

Table 1. Assessment of the influence of quality management on stocks in each working capital management strategies

Strategy	Influence on stocks	Influence on costs	Influence on financial security
CONSERVATIVE	YES	AVERAGE	NO
MODERATE	YES	AVERAGE	AVERAGE
AGGRESSIVE	YES	LARGE	LARGE

Source: own research

The development of system documentation, which is required at the stage of implementation of standardized quality management system has undoubtedly an big influence on all working capital management strategies. Quality management systems are the most important in the case of an aggressive capital management strategy. This is due to the use of risky inventory management systems that rely on minimizing inventory levels.

The introduction of appropriate quality management systems and guidelines resulting from the enhanced control of purchased materials allows to obtain supplies that meet established quality standards. In this range ISO 9001 is extremely restrictive and has a number of provisions governing relations with suppliers and quality control of the derived components. This is very important because, in the case of inadequate quality control and acceptance of the defective materials there is a stoppage in production and sales, which could generate significant losses and adversely affect the level of logistical support. Furthermore, the sales cannot be completed within a period which may incur penalties and the loss of the contract, it is an important element that appears in the receivables management. Quality management systems are, therefore an integral part of supporting an aggressive capital management strategy. Their absence means high liquidity risk and high costs.

While using the conservative strategy for inventory management it is more important to implement appropriate inventory control systems than the introduction of quality management systems. The application of even the simplest methods of inventory management will improve the costs. It is possible to implement quality management systems while applying the conservative strategy, but their impact on the profitability and safety of the operation is negligible. One thing one can be sure of is the fact that the introduction of quality management systems in this case will generate costs.

¹³. Finanse firmy. Jak zarządzać kapitałem,(Ed.) Szczesny W., C.H. Beck, Warszawa 2007, p. 213.

The next area associated with working capital which was analyzed from the point of view of quality management systems are receivables.

Table 2. Assessment of the influence of quality management on receivables in each working capital management strategies

Strategy	Influence on receivables	Influence on costs	Influence on financial security
CONSERVATIVE	YES	LITTLE	LARGE
MODERATE	YES	AVERAGE	AVERAGE
AGGRESSIVE	NO	NO	NO

Source: own research

In the case where the company conducts aggressive strategies and sells according to the principle to sell as much as possible, without analyzing the history and the financial situation of counterparties, the introduction of quality management systems is pointless. Most procedures will not be followed and implemented. If one uses a conservative strategy for the management of receivables, the introduction of quality management systems is justified. Conservative strategy is based on an appropriate receivables management policies. Properly structured receivables management policy leads to the separation of the recipients into various groups, the introduction for the specific groups long trade credits, the introduction of limits on trade credits, the introduction of appropriate recovery procedures. In this respect, the implementation of the requirements of standardized quality management systems also seems reasonable. Thus, the philosophy of quality management promotes customers and recipients segmentation into groups to identify key customers. During the next stage, the company should strive to form long-term relationships with them based on improving the technical quality, increase reliability of supply, transfer of knowledge and shortening the procurement cycle. Linking these activities will benefit the preservation of order in the recovery process and will reduce the risk of errors in the process of debt management policy. But it will be associated with incurring low costs but it will have a positive impact on the security of the company.

The last analyzed element are current liabilities. In the table 3 the assessment on the influence of quality management systems on individual capital management strategies was done.

Table 3. Assessment of the influence of quality management on liabilities in each working capital management strategies

Strategy	Influence on liabilities	Influence on costs	Influence on financial security
CONSERVATIVE	YES	LITTLE	LITTLE
MODERATE	YES	LITTLE	LITTLE
AGGRESSIVE	YES	LITTLE	LITTLE

Source: own research

In the case of liabilities it is necessary to make a similar assessment as in the case of receivables. Aggressive strategy consists in lengthening the maturities of liabilities. Payment of liabilities is made according to a "quench the fire". This system does not need to be supported and it will be difficult to introduce the appropriate procedures. In the case of quality management some solutions for the conservative strategy could be introduced that would allow to avoid a situation in which the company is unable to discharge liabilities.

When analyzing the sources structure of companies funding for individual management strategies of working capital it should be noted that it is different for each of them. Based on literature sources and debt equity ratio, it is assumed that to ensure the financial stability of the company the debt equity ratio should be within the range of 1.0 to 3.0. The lower limit of the range is the standard for large enterprises, while the upper for small entities.¹⁴ This indicator can also have a negative value (negative equity), which is very typical for companies facing bankruptcy (or those that have already fallen).¹⁵ In the case of an aggressive strategy of management of working capital the ratio of liabilities to equity will be high and will be more than 3. In some companies it can also take negative values. When analyzing the moderate strategy, which is very often considered as the optimal, the ratio of total liabilities to equity will be located within the limits of 1.0-3.0. The conservative strategy, which is safe for which liability is limited (mainly those liabilities to suppliers) to a minimum, will be characterized by a low level of this index value above 1.0.

5. CONCLUSIONS

Based on the analyses, the following conclusions were drawn:

- 1) Quality management systems improve relationships with suppliers and customers and minimize the number of errors and inconsistencies in the process of supply and distribution,
- 2) At the stage of implementation of the system, it is recommended to have developed strategies for working capital management and the implementation process should be adjusted to their requirements,
- 3) Strategy for aggressive management of working capital without the introduction of appropriate quality management systems lead to the collapse of companies. Its application is in some sense a buffer that protects the company from falling.

In spite of some flaws and the relatively high costs the implementation of standardized quality management systems in trading companies is widespread. But (according to the authors) over time the ISO 9001 will gradually lose its importance and will be considered only as a starting point for the implementation of the branch systems and the development of the philosophy of total quality management in a company. The discussion on this topic will surely quicken soon as a significant amendment to ISO 9001 will be introduced soon.¹⁶ However, at

¹⁴ Nowak. E , Analiza sprawozdań finansowych, PWE, Warszawa 2005, p.225

¹⁵ Kowalak R., Ocena kondycji finansowej przedsiębiorstw, ODDK , Gdańsk 2003, p.75

¹⁶ Zimon D., Zarządzanie jakością w logistyce, CeDeWu, Warszawa 2013, p. 43.

the moment, standardized quality management systems can be considered as a recommendable solution for trading companies which want to improve efficiency and effectiveness.

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WPŁYW SYSTEMÓW ZARZĄDZANIA JAKOŚCIĄ NA STRATEGIE ZARZĄDZANIE KAPITAŁEM OBROTOWYM W PRZEDSIĘBIORSTWACH

Przedsiębiorstwa handlowe chcąc zwiększać swoją konkurencyjność zmuszone są do poszukiwania nowych koncepcji usprawniających realizowanie założonej strategii. Celem publikacji jest ukazanie roli jaką może odgrywać system zarządzania jakością według normy ISO 9001 w opracowaniu strategii zarządzania kapitałem obrotowym w przedsiębiorstwach handlowych. Kapitał obrotowy to jeden z najważniejszych elementów zarządzania finansami w przedsiębiorstwie. Jest to obszar finansów który obejmuje zarządzanie aktywami bieżącymi i pasywami bieżącymi. Wybór odpowiedniej strategii zarządzania nim prowadzi do wysokiej płynności i niskiej zyskowności lub na odwrót. Zarządzający firmami aby sprostać oczekiwaniom właścicieli wprowadzają systemy zarządzania które pozwolą na utrzymanie bezpiecznej płynności finansowej. Jednym z takich rozwiązań bez których wdrażanie pewnych strategii zarządzania kapitałem obrotowym jest wręcz niemożliwe jest wypracowanie odpowiednich standardów zarządzania jakością. W publikacji scharakteryzowano wymagania systemu zarządzania jakością według normy ISO 9001 oraz omówiono jego wpływ na wybór poszczególnych strategii zarządzania kapitałem obrotowym. Szczegółowo przedstawiono wpływ systemu zarządzania jakością według normy ISO 9001 na poszczególne elementy wpływające na poziom kapitału obrotowego netto czyli należności krótkoterminowe, zapasy oraz zobowiązania bieżące. Analiza ta została przeprowadzona z uwzględnieniem podziału strategii zarządzania kapitałem obrotowym na agresywną, umiarkowaną i konserwatywną. Na

podstawie rozważań stwierdzono, że: systemy zarządzania jakością usprawniają relacje z dostawcami i odbiorcami i minimalizują liczbę błędów i niezgodności w procesie zaopatrzenia i dystrybucji, strategia agresywna zarządzania kapitałem obrotowym bez wprowadzenia odpowiednich systemów zarządzania jakością prowadzi do upadku przedsiębiorstw. Jej zastosowanie to w pewnym sensie bufor chroniący przedsiębiorstwo przed upadkiem, na etapie implementacji systemu, zaleca się mieć już opracowane strategie zarządzania kapitałem obrotowym i proces wdrażania dostosować do ich wymogów.

Słowa kluczowe: jakość, kapitał obrotowy, strategia, zarządzanie

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