Nr 1057 -

Integracja procesów logistycznych

# Maciej Kotula

Wrocław University of Economics

# THE METHODS OF ESTABLISHING POLITICS OF ASSORTMENT IN A TRADE COMPANY

## 1. Introduction

The main goal of following analysis is to prove how significant key to any firm's success and survival is an understanding of its cash-to-cash cycle and ability to optimize three cash leverage points – accounts payable, inventory and accounts receivable – to select right trade assortment offer and increase firm value.

## 2. Politics of assortment

The final decision about width and depth of the assortment must be proceeded by the analysis of the inner abilities of the firm and the condition of the environment. It has to be remembered that the politics of the assortment is one of the main, previously created, general trade strategy of a firm, which directly determines the structure of the assortment. General strategy of the sell answers the question where and whom we want to supply with our goods. It indicates whether we look for a new recipient or we base on an already created supply chain or we aim at reducing number of our recipients. General strategy means also the decisions connected with the structure of assortment which eventually result in a firm looking for the opportunities to widen their offer or retain already existing or deliberately reducing the range of offered goods. Those decisions are the exact result of detailed analysis of the surrounding and the situation of a trade company.

# Inner analysis of the company

On the bases of the general strategy of the assortment politics in a company we can turn to the last stage of creating the firm's offer. It is a detailed estimation of width and depth analysis, the firm must take into consideration the following factors:

its own abilities of having the sale on credit, size of warehouses, trade areas or special trade characteristics (for example minimal requirements of: the number of goods in a sell hall or size of trade area needed) particular kinds of assortment.

Next step to plan the assortment is the analysis of the trade company situation which is based on the sale analysis of particular kinds of assortment.

Cash is the most liquid of all assets and plays a significant role in any firm's liquidity, solvency and financial flexibility. The firms may show a profit and still go bankrupt.

The strategy of determining of working capital demand is a key factor in sales analyzing of trade company. Working capital cycle compares the timing differences between converting current assets to cash and making cash payments on obligations.

A very useful indicator of the working capital management is cash-to-cash cycle.

Cash-to-cash cycle is the time required for a company to convert its current assets and current liabilities into cash. The cash-to-cash cycle essentially measures how long a firm can receive interest free financing (trade credit).

Cash-To-Cash Cycle Time is calculated in the following way (is presented in figure 1):

Cash-To-Cash = Total Inventory Days Of Supply + Days Sales Outstanding - Days Payables Outstanding. The result is the number of days of working capital your organization has tied up in managing your supply chain.

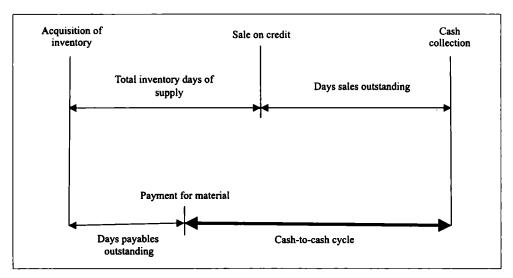


Fig. 1. Cash-to-cash cycle

Source: [3].

Cash-to-cash cycle method will be presented on the trade company example. The author compares profitability analysis of two particular assortments. The first analysis presents the gross margin(1) of the assortments (sales – cost of goods sold). The

second presents gross margin(2) including costs of working capital involvement (sales – cost of goods sold – cost (or + profit) of capital involvement in receivables).

The analysis of the influence of goods rotation on the firm's financial results takes into accounts the following variables:

- Accounts receivable,
- Accounts payable,
- Stock rotation,
- · Gross margin,

# Presented method is based on twofold analysis:

- 1. Calculating cash-to-cash cycle,
- 2. Calculating gross margin.
- \* It's calculated in the following way (an example):

# Ad 1. Cash-to-cash cycle (monthly):

Selling activities of "article X" and "article Y" are characterized by following variables:

	Article X	Article Y
Days sales outstanding	35 days	7 days
Total inventory days of supply	15 days	5 days
Days payables outstanding	30 days	20 days
Cash-to-cash cycle time	20 days	-8 days

Table 1. Selling activities of "article X" and "article Y"

Source: own study.

#### Article X

Cash-to-cash cycle = 20 days, it informs that in 30 days period our company is crediting sales of the article for 20 days (0,67 month).

#### Article Y

Cash-to-cash cycle = -8 days it informs that in 30 days period our company receives financing of sales (trade credit) of the article for 8 days (0,27 month).

# Ad 2. Gross margin (monthly):

Assumptions:

- 1 month = 30 days;
- Monthly cost of capital = 2.0%.

### Article X

Cash-to-cash cycle = 20 days (0,67 month), it informs that in 30 days period our company insures cost of working capital [%] equals 1,34% (=  $0,67 \times 2,0\%$ ).

# Article Y

Cash-to-cash cycle = -8 days (0,27 month), it informs that in 30 days period our company receives profit of working capital [%] equals 0,54% (=  $0,27 \times 2,0\%$ ).

Table 2. Cost (profit) of capital involvement in receivables

	Anicle X [PLN]	Article Y [PLN]
Sales	13 500,00	35 000,00
Average receivables	15 750,00	8 166,00
Capital involvement in receivables	11 655,00	7 349,40
Cost of working capital [%]	1,34	1,14
Cost (profit) of capital involvement in receivables	- 156,18	+83,78

Source: own study.

Table 3. Gross margin

	Article X [PLN]	Article Y [PLN]
Sales	13 500,00	35 000,00
Cost of goods sold	9 990,00	31 500,00
Gross margin (1)	3 510,00	3 500,00
Cost (profit) of capital involvement in receivables	-156,18	+83,78
Gross margin (2)	3 353,82	3 583,78

Source: own study.

Taking into account all assortment sales analyses we receive the information which article, group of articles, group of commodities is the most important in our structure of distribution. In the other words we analyze gross margins of particular items, group of items or group of goods in relation to the whole sell of company. The final results of these analyses in the trade company are presented below (table 4 and figure 2).

Results above prove how significant key to any firm's success and survival is an understanding of its cash-to-cash cycle and ability to optimize three cash leverage points – accounts payable, inventory and accounts receivable – to select right trade assortment offer and increase firm value. Simply assortment sales analyses (gross margin 1) are not enough in today's business.

Table 4. Articles - articles ranging numbers in gross margin

Indices of the article	Article gross margin participations in whole company gross margin (1) [%]	Ranking number in gross margin (1)	Ranking number in gross margin (2)	Article gross margin participations in whole company gross margin (2) [%]
30	4,16	1	1	1,79
67239	0,64	<u>6</u>	2	0,80
3890	2,76	2	3	0,69
58935	0,19	<u>41</u>	<u>4</u>	0,55
23173	0,17	<u>39</u>	<u>5</u>	0,51
68972	0,15	<u>63</u>	<u>6</u>	0,43
67715	0,13	<u>78</u>	7	0,37
78082	0,12	81	<u>8</u>	0,36
1627	1,07	<u>3</u>	9	0,36
68971	0,11	88	10	0,33

Source: own study.

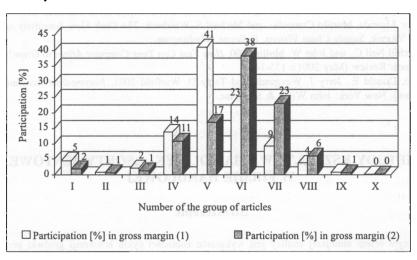


Fig. 2. Group of articles - participations in gross margins

Source: own study.

# 3. Conclusion

Looking at the final result of analysis we can see how significant change needs to be made in the way we measure traditional functional performance. Linking performance to the organization's overall financial performance is a key issue in most organizations.

We must know the role of cash-to-cash cycle in liquidity and firm value – realistic way to select right trade assortment offer.

This method should also lead to correct budget planning (time, size of warehouses, trade areas, marketing resources and of course working capital needs) for each particular trade assortment.

## References

- [1] Szulce H., Struktura i strategie w handlu, PWE, Warszawa 1998.
- [2] Sławińska M., Zarządzanie przedsiębiorstwem handlowym, PWE, Warszawa 2002.
- [3] Rutkowski A., Zarządzanie finansami, PWE, Warszawa 2003.

# **Articles from Internet**

- [4] Hutchinson P.D., PH. D., and M. Theodore Farris II, PH. D., CTL, Managing the Cash-to-cash cycle to increase a firm value, March/April 2004 Today's CPA.
- [5] Timothy W. Koch and S. Scott MacDonald, Overview of credit policy and loan characteristics, Copyright © 2003 by South-Western, a division of Thomson Learning.
- [6] Hoskin@Fizzel, Financial accounting a user perspective, Wiley; Third Canadian Edition.
- [7] Heitor Almeida, Murillo Campello, and Michael S. Weisbach, The Cash Flow Sensitivity of Cash.
- [8] Kate Vitasek, Supply Chain Visions, Bellevue, Washington.
- [9] Churchill Neil C., and John W. Mullins. 200, How Fast Can Your Company Afford to Grow?, Harvard Business Review (May 2001); 135-143.
- [10] Kieso, Donald E., Jerry J. Weygandt, and Terry D. Warfield 2001, Intermediate Accounting (10th Edition). New York: John Wiley & Sons, Inc.

# METODY KSZTAŁTOWANIA POLITYKI ASORTYMENTOWEJ W FIRMIE HANDLOWEJ

### Streszczenie

Głównym celem niniejszej analizy jest wykazanie istotności cyklu konwersji gotówki przy kształtowaniu oferty firmy handlowej. Ostateczne decyzje dotyczące szerokości i głębokości posiadanego asortymentu muszą być poprzedzone zarówno analizą otoczenia, jak i analizą własnych możliwości. Jedną z najczęściej wykorzystywanych metod jest zestawienie wielkości sprzedaży poszczególnych pozycji asortymentowych na tle całej firmy. Kluczowym elementem takich analiz, często pomijanym w polskich przedsiębiorstwach, jest strategia zarządzania kapitałem obrotowym. Bardzo użytecznym wskaźnikiem zarządzania kapitałem obrotowym jest cykl konwersji gotówki (z ang. Cash-to-cash cycle time). Celem analiz obrotu poszczególnymi rodzajami asortymentu jest wyznaczenie dla każdego z nich przewidywanych wartości zysku ze sprzedaży. W konsekwencji uzyskamy pełny obraz na to, jaki udział ma obrót danym

artykułem, grupą artykułów czy też grupą towarową na tle całej firmy. Dzięki tej analizie można między innymi znacznie efektywniej rozdysponowywać budżety różnorodnych zasobów w firmie (np. czasu, powierzchni magazynowej, powierzchni handlowej czy środków marketingowych) dla każdego rodzaju asortymentu handlowego. Ta dopiero metoda wydaje się właściwie skonstruowanym narzędziem pomocnym w wyznaczaniu odpowiedniej struktury oferty handlowej firmy, która ma umożliwić w rezultacie osiągnięcie założonych uprzednio celów.