

Evaluation of The Role of Development Strategy in Growth of Operating Profit On the Example of Semi-Finished Food Production Enterprise

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Abstract

It is very important to evaluate how well the implementation process of the strategy a company has chosen is going. To make such evaluations it is important to Analyse customer relations, Study how well internal business processes are organized, Evaluate growth and development perspectives and Analyse and summarise financial results.

In this article we will pay attention on financial results, in particular the analysis of changes in operating income.

Three factors which cause changes to profit while implementing the strategy are: volume, prices and productivity. In Our opinion, using the method mentioned in this article, it becomes possible to calculate the contribution that strategy makes to the growth of profit.

Keywords: Operating income (profit), strategy, growth, price, productivity, cost.

Introduction

Companies selects certain strategies for conducting their activities. The main directions of the strategys are strategy of cost leadership or strategy of product differentiation. If in the first case, the aim of the management is to achieve minimal costs, in the second case, their aim is to highlight the uniqueness of the product, create the best image among the analogues, and as a result to achieve high sales price.

It is important to assess how successful the strategy is accomplished. As a rule, for this task Should be: 1) Analysis of Customer Relations; 2) Study of internal business processes; 3) Evaluation of growth-development perspectives; 4) Summing up financial results.

Most important from these four directions are financial results and The ultimate goal of successful implementation the first three is to have a positive impact on the financial results.

In the article, based on the financial results of 2017-2018 of the food production enterprise “Samepo” and analysis of certain statistical data, the reasons for the change in profit are determined.

Main Text:

Small Enterprise "Samepo" since 2012 has been producing some kind semi-finished food products. By the end of 2017 the enterprise replaced the old 4 equipment, the output of which was 6,000 kg per year. It was purchased 5 modern equipment with the same productivity whose operation significantly reduces production costs and loss of raw materials. Consequently, it was decided to offer low prices for the market - strategy of cost leadership. The summarized accounting data below is from the 2017 and 2018 indicators of the enterprise:

	2017	2018
Kg product produced and sold	19,190	29,430
Selling price per kg	\$5.5	\$5
Direct material used- Flour	5,050 kg	6,540 kg
Costs per kg of Flour	\$1.1	\$1.05
Direct material used- Meat	9,595 kg	13,080 kg
Costs per kg of Meat	\$4.7	\$5
Additional cost per kg of product	\$0.5	\$0.42
Manufacturing capacity	24,000	30,000
Total conversion costs	\$9,600	\$7,500
Selling and customer-service capacity (customers)	30	60
Total selling and customer-service costs	\$3,600	\$5,400

Annual manufacturing conversion costs depend on production capacity defined in terms of kg that can be produced not the actual units produced. Selling and customer-service costs depend on the number of customers that “Samepo” can support, not the actual number of customers. It should be noted that, in 2018 one sales manager managed 15 clients on average and was hired 2 manager. The trainings conducted at the end of 2017 and the Implemented program gave every manager Ability to service 20 customers. At the same time, the third manager was hired in this direction and that's why the company has been able to provide service for 60 potential customers. “Samepo” has 27 customers in 2017 and 35 customers in 2018.

By Statistical data, during 2018 the market grew for “Samepo’s” products was 10%.

At first let's calculate operating income for years 2017 and 2018:

	2017	2018	Change
Sales Revenues	\$ 105 545	\$ 147 150	\$ 41 605
costs:			
Direct material used- Flour	\$ 5 555	\$ 6 867	\$ 1 312
Direct material used- Meat	\$ 45 097	\$ 65 400	\$ 20 304
Additional costs	\$ 9 595	\$ 12 361	\$ 2 766
conversion costs	\$ 9 600	\$ 7 500	\$ -2 100
selling and customer-service costs	\$ 3 600	\$ 5 400	\$ 1 800
Total costs	<u>\$ 73 447</u>	<u>\$ 97 528</u>	<u>\$ 24 081</u>
Income	\$ 32 099	\$ 49 622	\$ 17 524

It is important to find out how successful the implementation of the selected strategy was and what is the share of strategy in the growth of profit by \$ 17,524. For that we need to calculate the growth, price recovery and productivity component that would explains the change in operating income from 2017 to 2018.

- Lets figure out what effect the growth of production and sales volume had on profit in 2018.

For this purpose, under condition of other factors remaining static, we should calculate the impact of produced and sold goods growth in quantity on revenue and expenses.

Now let's calculate cost effect of growth:

Revenue Effect of Growth =

(Actual kg of output sold in 2018 – Actual kg of output sold in 2017) ×
Selling price in 2017 = (29,430 – 19190) × \$5.5 = \$56320

In 2017 production of every additional kilogram required 0.263 kg of flour and 0.5 kg of meat. Therefore,

Cost effect of Growth for Flour = (29,430 × 0.263 – 5050) × \$1.1
= \$2,964

Cost effect of Growth for Meat = (29,430 × 0.5 – 9595) × \$4.7
= \$24,064

Additional raw materials for kg of product were used in 2018 by the same amount as 2017. That's why

Cost effect of Growth for Additional costs = (29,430 – 19,190) × \$0.5
= \$5,120

For calculation effect of growth on Conversion and selling and customer-service costs we will use the following formula:

Cost effect of growth for fixed costs = (Actual units of capacity in 2017 if adequate to produce 2018 output in 2017 or, if 2017 capacity inadequate to produce 2018 output in 2017, units of

capacity required to produce 2018 output in 2017-
Actual units of capacity in 2017) X Price per unit of
capacity in 2017

In our case for Conversion and Selling and customer-service costs we'll get:

Cost effect of growth for Conversion costs

$$= (30,000 - 24,000) \times (\$9,600 / 24,000) = \$2,400$$

Cost effect of growth for selling and customer-service costs

$$= (45 - 30) \times (\$3,600 / 30) = \$1,800$$

If we sum up effects of growth we'll get:

Revenue Effect of Growth		\$56 320
Cost effect of Growth for Flour	\$2,964	
Cost effect of Growth for Meat	\$24,064	
Cost effect of Growth for Additional costs	\$5,120	
Cost effect of growth for Conversion costs	\$2,400	
Cost effect of growth for selling and customer-service costs	\$1,800	
Change in operating income due to growth		\$19,972

Consider how the profit has been changed because of the change in the selling and purchase prices.

For revenue we will have:

Revenue effect of price recovery = (Selling price in 2018 - Selling price in 2017) X

Actual units of output sold in 2018

In our case we'll get:

$$\text{Revenue effect of price recovery} = (\$5 - \$5.5) \times 29,430 = -\$14,715$$

Connection to raw materials we will use the formula:

Cost effect of price recovery for variable costs = (input price in 2018 - input price in 2017) X Units of input required to produce 2018 output in 2017

We'll get:

Cost effect of price recovery for Flour

$$= (\$1.05 - \$1.10) \times (29,430 \times 0.263) = -\$387$$

Cost effect of price recovery for Meat = $(\$5 - \$4.7) \times (29,430 \times 0.5)$

$$= \$4,415$$

For additional costs we'll have:

Cost effect of price recovery for Additional costs

$$= (\$0.42 - \$0.5) \times 29,430 = -\$2,354$$

For fixed costs we will use the formula:

Cost effect of price recovery for fixed costs = (Price per unit of capacity in 2018 - Price per unit of capacity in 2017) X Actual units of capacity in 2017 if

adequate to produce 2018 output in 2017 or, if 2017 capacity inadequate to produce 2018 output in 2017, units of capacity required to produce 2018 output in 2017

For Conversion and selling and customer-service costs we get:

Cost effect of price recovery for Conversion costs $= (\$0.25 - \$0.4) \times 30,000 = -\$4,500$

Cost effect of price recovery for selling and customer – service costs $= (\$90 - \$120) \times 45 = -\$1350$

In summary, the net decrease in operating income attributable to price recovery equals the following:

Revenue effect of price recovery		-\$14,715
Cost effect of price recovery for Flour	-\$387	
Cost effect of price recovery for Meat	\$4,415	
Cost effect of price recovery for Additional costs	-\$2,354	
Cost effect of price recovery for Conversion costs	-\$4,500	
Cost effect of price recovery for selling and customer-service costs	-\$1,350	
Change in operating income due to price recovery		-\$10,538

Consider how the profit has been changed because of the more efficient or inefficient use of raw material and manufacturing capacity.

The productivity-component calculations use 2018 prices and output:

Cost effect of productivity for variable costs $= (\text{Actual units of input to produce 2018 output} - \text{Units of input required to produce 2018 output in 2017}) \times \text{Input price in 2018}$

We'll get:

Cost effect of productivity for Flour $= (6,540 - 29,430 \times 0.263) \times \$1.05 = -\$1,265$

Cost effect of productivity for Meat $= (13,080 - 29,430 \times 0.5) \times \$5 = -\$8,175$

Cost effect of productivity for Additional costs $= (29,430 - 29,430) \times \$0.42 = 0$

To calculate the cost effect of productivity for fixed costs (Conversion and Selling and customer-service costs), we use the 2018 date and the analyses of capacity required to produce 2018 output in 2017:

cost effect of productivity for fixed costs $= (\text{Actual units of capacity in 2018} - \text{Actual units of capacity in 2017 if adequate to produce 2018 output in 2017 or, if 2017 capacity inadequate to produce 2018 output in 2017, units of capacity required to produce 2018 output in 2017}) \times \text{Price per unit of capacity in 2018}$

Cost effect of productivity for Conversion costs $= (30,000 - 30,000) \times \$0.25 = 0$
 Cost effect of productivity for selling and customer-service costs $= (60 - 45) \times \$90 = \$1,350$

In summary, the net increase in operating income attributable to productivity equals:

Cost effect of productivity for Flour	\$1,265
Cost effect of productivity for Meat	\$8,175
Cost effect of productivity for Additional costs	\$0
Cost effect of productivity for Conversion costs	\$0
Cost effect of productivity for selling and customer-service costs	<u>-\$1,350</u>
Change in operating income due to productivity	\$8,090

If we summarize the results we will have the following picture:

Change in operating income due to growth	\$19,972
Change in operating income due to price recovery	-\$10,538
Change in operating income due to productivity	<u>\$8,090</u>
Total change in operating income	\$17,524

As noted above, the market for product produced by "Samepo" increased by approximately 10% during the year 2018. Consequently, it may be argued that the increase in sales of 10,240 kg was partially, namely $19,190 * 10\% = 1,919$ kilograms, achieved by market growth and partially, $10,240 - 1,919 = 8,321$ kilograms, from the growth of "samepo's" market share.

That is why part of the growth in operating profit due to quantitative sales growth- $(1,919/10,240) \times 19,972 = \$3,743$ – is achieved by the growth of market volume and is not the effect of the selected strategy performed.

Growth in operating profit, from the low prices and cost savings can be calculated as follows:

Growth in operating profit due to growth of market share	\$19,972-\$3,743	\$16,229
Change in operating profit due to prices		-\$10,738
Change in operating profit due to productivity		<u>\$8,090</u>
Total		\$13,781

Finally, we got the factors of differences between the operating profit of 2017 and 2018:

The effect of market growth	\$3,743
The effect of the low prices and cost savings	\$13,781

Total change in operating profit \$17,524

As shown above, the increase in profit by $55\% = (\$17,524 / 32,099) \times 100\%$ largely (almost $79\% = (\$13,781 / \$17,524) \times 100\%$) is seen as a result of the chosen strategy. **Therefore, financial indicators indicate successful implementation of the selected strategy.**

Conclusion

Thus, the analysis of financial indicators in the article gives an opportunity to assess how well the selected strategy has been achieved and what was the main factors influencing on change company's profits. Changes, implemented by the small enterprise "Samepo", and the selected strategy were successful. A similar approach can be used in other industries and for other strategies selected.

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