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## PROBLEMS OF SETTING THE PRICING POLICY OF AN ENTERPRISE

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**Abstract:** The issue of setting the pricing policy is very complex and very often it is highly difficult to definitively set the level of prices. No single universal solution can be put forward here because each case requires an individual approach and consideration of many factors. The policy of price setting requires a continuous co-operation of the sales and marketing and financial departments. Considerations in this area should be made continuously and from a wide perspective.

**Keywords:** pricing policy, profitability, price setting.

### 1. Introduction

Corporate management entails continuous optimisation of revenues and costs with the purpose of enhancing the profitability of the business operation. The sales prices of products and goods are factors that most substantially affect the financial result of the business.<sup>1</sup> Setting the right level of prices is one of the most difficult tasks of the Sales and Marketing Departments and Managers. To deliver this objective a set of factors that affect the final decision in this area must be analysed. The article presents selected comments on the issue.

### 2. Price setting – marketing aspects

Contrary to other marketing tools the price is the only instrument to directly generate the company's revenues. Its setting also features the highest elasticity. The reason is that – contrary to the product features or selected distribution or promotion solutions – it can be modified relatively fast. However, its level is determined by the price sensitiveness of customers. In practice there are many factors that determine this sensitiveness. One of the most important are the following effects [4, p. 187]:

- unique value,
- customer awareness of substitutes,

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<sup>1</sup> Further in the article the considerations will refer to the “product” only (ready-made products, service); however, numerous issues discussed also concern goods.

- difficulty in comparing the quality of substitutes,
- total expenses,
- broken-down expenses,
- final use,
- lost money,
- stock,
- quality-price relationship.

The more unique (individualised) a given product is, the less aware of the availability and quality of substitute products the customers are, the smaller the share of a given product in their basket of goods is, the higher the share of transaction costs borne by other market entities, the lower the expense taken to buy the final goods in relation to the total purchase-sales cost, the less price-sensitive buyers tend to be. Customers are also less sensitive to the prices of complementary and perishable products. Finally they react easily to the price hikes of products which in their awareness are high-quality products. These are often brand products perceived as more exclusive.

The choice of a given price level is also determined by the enterprise's objective of its business operation. This can be survival, maximising the current profit or revenue, maximising sales increase, aspiring for the highest quality product or skimming. Obviously the price ceiling is determined by the market demand and the price floor is determined by the enterprise's costs. In addition, the final price setting must take into account the competitive pricing. With this aspect in mind it should be underlined that the competition-oriented pricing policy of an enterprise can reflect the use of one of the following strategies [1, p. 250]:

- elimination of competitors,
- preventive price setting,
- price setting based on the competitive pricing policy,
- avoidance of competitors.

The use of the strategies of eliminating competitors and preventive price setting is possible if an enterprise enjoys a strong market position. The cost advantage justifies their use. The strategy of preventive price setting can be used in the initial stages of the product life cycle. Its primary objective is to discourage potential competitors from taking action in the market of a specific product. The primary objective of the strategy of eliminating competitors is to remove from the market those competitors that are not in a position to achieve a specific level of accumulated production volume. This is why the strategy is typical for the final stage of the product life cycle. However, if an enterprise does not enjoy the leader position it can only watch the competition's actions and make relevant decisions in response. Generally it is believed that prices should oscillate around the price level of the key competitor or market leader rather than around the industry average. The avoidance of competitors strategy occurs when an enterprise seeks a market segment that is not penetrated by the key competitors.

The price level of a given product is also closely related to its quality and the quality of competitive products (Table 1).

**Table 1.** Strategies of product price and its quality

Product quality	Price		
	high	medium	low
High	1. Strategy of premium value	2. Strategy of high value	3. Strategy of super value
Medium	4. Strategy of overcharge	5. Strategy of mid value	6. Strategy of good value
Low	7. Strategy of rip-off	8. Strategy of false economy	9. Strategy of economy

Source: [3, p. 449].

If there are enterprises in the market that use different strategies, i.e. the highest quality strategy, the medium value strategy and the economy strategy accordingly, then all of them can co-exist so long as there are three groups of buyers, i.e. those that stress the price, the quality and those that consider both these features. The use of this pricing strategy shows a given division of the market and avoidance of competitors in a specific segment. Enterprises that use the strategy of the high value, good value and super value attack enterprises that use the strategies of the premium quality, medium value and economy accordingly. Their objective is to offer a product with quality comparable to a product perceived in the market as a premium quality one at a lower price, though. The overcharge, rip-off and false economy strategies consist in setting the product price at a level much higher than the offered quality. The use of this strategy is risky because customers may feel being “cheated”. Consequently, customers are very likely to spread the bad word about the company and its products. Enterprises that aspire for existence and market development should definitely avoid this strategy group. However, it can be beneficial for enterprises which want to seize market opportunities and resultant current profit maximisation.

As pointed out above the use of an appropriate strategy is dependent on the relevant product life cycle. This is illustrated in Table 2.

**Table 2.** Pricing strategies and product life cycles

Price during market maturity	Price during the product market launch	
	low	high
Low	low prices strategy	skimming strategy
High	penetration strategy	high prices strategy

Source: [1, p. 249].

The low price strategy is determined by the relatively high market volume. Its success depends on the economies of scale. Then the price is set at the level accepted by a wide circle of buyers. However, its relative low level requires the elimination of

extra services costs. The penetration strategy consists in entering the market with a low product price and stimulating high demand through intensive promotion actions. Its success lies, on the one hand, in discouraging competitors, and, on the other, in stimulating demand that will result in the increased capacity of a given market. The delivery of these objectives will let the enterprise gradually increase the price. Its increase, however, is accepted by buyers provided that the appropriate promotion measures are continued. The increase in the quantity of produced and sold products results in the reduction of unit production costs and in the increase of revenue, which should cover the costs born in the initial stages of the product sales. The high prices strategy is possible only when either customers are not price sensitive or when the enterprise enjoys essential entry barriers, e.g. product patent protection, customer loyalty or high market entry costs. Even though the enterprise does not benefit from the economies of scale high prices compensate high production and distribution costs. The high prices strategy can be used primarily for high quality products, very often luxury ones. The skimming strategy should initially be targeted at the early minority segment that is open to novelties and ready to pay a high price. Intensive promotion measures run concurrently should lead to increased demand, which in turn makes gradual price reduction possible.

### 3. Price setting – financial aspects

In theory the price should cover total costs related to the production and sales of products. In addition, it should help the enterprise achieve the budgeted profit margin. This condition should be met for any single assortment.<sup>2</sup> However, there are situations when sales price below costs is acceptable. A variable unit cost is assumed as the price floor [6, p. 74] because every price surplus over a variable cost (the so-called contribution margin) results in at least partial coverage of fixed costs that are born regardless of the production and sales volume. The sales price below this value in turn aggravates the losses as the turnover volume increases. This solution is appropriate for free production capacity utilisation and lack of extra fixed costs. When this assumption is not met a variable cost increased by extra fixed costs (or losses at contribution margin due to limiting the current production) calculated as the unit of the new assortment item is taken as floor price. The sales price surplus over variable costs in relation to the sales price (this is a unit contribution margin rate) can then be used to maximise the total profit margin because the choice of the highest rate products contributes to the higher sales results [6, p. 75]. However, one should bear in mind here the market limitations from demand and the competition.<sup>3</sup>

Further to the above comments an enterprise may sometimes be not in a position to achieve a positive profit margin on all its products and the sales price covers only

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<sup>2</sup> For price setting formula “costs plus” see e.g. [5, p. 110].

<sup>3</sup> Further information on cost calculation see e.g.: [2, p. 472].

a portion of the costs. At the same time limiting the production through the elimination of low-profitability or deficit assortments is not possible and may aggravate the situation. This concerns *inter alia* enterprises that operate in the so-called continuous system, e.g. steel mines.

### Example 1

Enterprise Beta produces 20 products in the continuous system (Table 3). They feature different profitability. Variable and fixed costs were set following the above procedures. Columns from 2 to 6 present data concerning sales prices, unit variable, fixed costs, and relevant profit margins. The subsequent two columns present the production volume (for the example simplification purposes they are at the same time the sales volume) and the total profit margin for particular assortments accordingly. Columns 9 and 10 present unit and total weights for particular products. Columns 11-13 are auxiliary and present total variable, fixed costs, and revenues across the assortments. The final line is the total of all the presented items.

Further to the calculations products W1 to W5 are deficit ones (the reason are higher fixed costs in relation to the other products). The total margin on all the assortments is 11,131. If we evaluate profitability on the basis of the total costs in an enterprise a decision to discontinue the production of W1 to W5 should be made. However, the decision would be wrong because fixed costs related to these products could practically never be reduced to 0 and very often remain at the same level. The situation is presented in Table 4.

Following the decision W1 to W5 have been discontinued from the production. At the same time an assumption is made that the production of the other assortments is not increased. This is very often determined by limited demand for profitable products. Even though the table shows the same margin value of 11,431 under the total value this results from simplifications taken in the example, i.e. fixed costs related to W1 to W5 were not ascribed to the fixed costs of the other products. They should then be deducted from the margin value (because they are still there) and increase the fixed costs of the other products by the same value. In this case the sales result for continued products will be  $11,431 - 4,051$  (fixed costs W1 to W5) = 7,380. As we can see, the sales result is much lower than in the original version.

It should be borne in mind that the method of accounting for fixed costs in an enterprise can be wrong and yield wrong information. Consequently a wrong decision about the price level for a given assortment can be taken. The profit margin should be maximised through the optimisation of the sales of products with the highest contribution margin. The presented cases had a contribution margin set at a fixed level as 50% of the sales price for all the products. It can be set in enterprises at different levels dependent on the assortment.

In the case of a negative contribution margin on selected assortments and simultaneous impossibility of their price increase it is often suggested that these be withdrawn from the production and sales.

Table 3. Selected quantity and value data concerning products made at enterprise Beta at an initial stage

Product	Price	Variable unit cost	Contribution margin	Fixed unit cost	Unit margin after total costs	Quantity	Total margin	Weight	Total weight	Variable costs	Fixed costs	Revenue
W1	0.80	0.40	0.40	0.46	-0.06	1,000	-64	0.120	120	400	464	800
W2	0.88	0.44	0.44	0.49	-0.05	1,000	-54	0.126	126	440	494	880
W3	0.97	0.48	0.48	0.53	-0.04	2,000	-88	0.132	265	968	1,056	1,936
W4	1.06	0.53	0.53	0.56	-0.03	2,000	-64	0.139	278	1,065	1,129	2,130
W5	1.17	0.59	0.59	0.61	-0.02	1,500	-29	0.146	219	878	908	1,757
W6	1.29	0.64	0.64	0.49	0.15	1,700	263	0.153	260	1,095	832	2,190
W7	1.42	0.71	0.71	0.54	0.17	2,300	391	0.161	370	1,630	1,239	3,260
W8	1.63	0.81	0.81	0.62	0.20	2,400	469	0.169	405	1,956	1,486	3,912
W9	1.87	0.94	0.94	0.71	0.22	1,600	360	0.177	284	1,499	1,140	2,999
W10	2.16	1.08	1.08	0.82	0.26	1,800	466	0.186	335	1,940	1,474	3,880
W11	2.48	1.24	1.24	0.94	0.30	1,400	416	0.195	274	1,735	1,319	3,470
W12	2.85	1.43	1.43	1.08	0.34	2,500	855	0.205	513	3,563	2,708	7,126
W13	3.28	1.64	1.64	1.25	0.39	2,300	905	0.216	496	3,770	2,865	7,540
W14	3.77	1.88	1.88	1.43	0.45	2,000	905	0.226	453	3,770	2,865	7,540
W15	4.34	2.17	2.17	1.65	0.52	1,100	572	0.238	261	2,384	1,812	4,769
W16	4.55	2.28	2.28	1.73	0.55	1,400	765	0.249	349	3,187	2,422	6,373
W17	4.78	2.39	2.39	1.82	0.57	1,200	688	0.262	314	2,868	2,180	5,736
W18	5.02	2.51	2.51	1.91	0.60	1,800	1,084	0.275	495	4,517	3,433	9,034
W19	5.27	2.63	2.63	2.00	0.63	3,000	1,897	0.289	866	7,905	6,007	15,809
W20	5.53	2.77	2.77	2.10	0.66	2,100	1,394	0.303	637	5,810	4,415	11,620
Total							11,131		7,320	51,380	40,249	102,759

Source: author's elaboration.

**Table 4.** Selected quantity and value data concerning products made at enterprise Beta after discontinuing non-profitable assortments

Product	Price	Variable unit cost	Contribution margin	Fixed unit cost	Unit margin after total costs	Quantity	Total margin	Weight	Total weight	Variable costs	Fixed costs	Revenue
W1	0.80	0.40	0.40	0.46	-0.06		0	0.120	0	0	0	0
W2	0.88	0.44	0.44	0.49	-0.05		0	0.126	0	0	0	0
W3	0.97	0.97	0.48	0.53	-0.04		0	0.132	0	0	0	0
W4	1.06	1.06	0.53	0.53	-0.03		0	0.139	0	0	0	0
W5	1.17	0.59	0.59	0.61	-0.02		0	0.146	0	0	0	0
W6	1.29	0.64	0.64	0.49	0.15	1,700	263	0.153	260	1,095	832	2,190
W7	1.42	0.71	0.71	0.54	0.17	2,300	391	0.161	370	1,630	1,239	3,260
W8	1.63	0.81	0.81	0.62	0.20	2,400	469	0.169	405	1,956	1,486	3,912
W9	1.87	0.94	0.94	0.71	0.22	1,600	360	0.177	284	1,499	1,140	2,999
W10	2.16	1.08	1.08	0.82	0.26	1,800	466	0.186	335	1,940	1,474	3,880
W11	2.48	1.24	1.24	0.94	0.30	1,400	416	0.195	274	1,735	1,319	3,470
W12	2.85	1.43	1.43	1.08	0.34	2,500	855	0.205	513	3,563	2,708	7,126
W13	3.28	1.64	1.64	1.25	0.39	2,300	905	0.216	496	3,770	2,865	7,540
W14	3.77	1.88	1.88	1.43	0.45	2,000	905	0.226	453	3,770	2,865	7,540
W15	4.34	2.17	2.17	1.65	0.52	1,100	572	0.238	261	2,384	1,812	4,769
W16	4.55	2.28	2.28	1.73	0.55	1,400	765	0.249	349	3,187	2,422	6,373
W17	4.78	2.39	2.39	1.82	0.57	1,200	688	0.262	314	2,868	2,180	5,736
W18	5.02	2.51	2.51	1.91	0.60	1,800	1,084	0.275	495	4,517	3,433	9,034
W19	5.27	2.63	2.63	2.00	0.63	3,000	1,897	0.289	866	7,905	6,007	15,809
W20	5.53	2.77	2.77	2.10	0.66	2,100	1,394	0.303	637	5,810	4,415	11,620
Total							11,431		6,312	47,628	36,198	95,257

Source: author's elaboration.

The overall demand for products is often limited to a given level and an enterprise cannot manufacture only profitable products and keep the same production volume expressed in e.g. tons at the same time. In addition, quite often the customer will buy a non-profitable product and other profitable assortments at the same time. The ‘lesser evil’ is to reduce efficiency. However, this also increases the total cost of the other assortments, which in turn will result in the non-profitability of the currently profitable assortments. One possible solution is to sell “packages” of products to a given customer. Should a negative contribution margin occur the profitability of the transaction should be analysed very thoroughly. The reason is that substantial volume on such an assortment may result in considerable losses.

### Example 2

Customer Alfa buys 5 different products from enterprise Beta. They feature different profitability presented in Table 5.

**Table 5.** Selected data on sales prices, costs and sales volume of products made at enterprise Beta and sold to enterprise Alfa

Product	Price	Variable unit cost	Contribution margin	Fixed unit cost	Unit margin after total costs	Quantity	Total margin
W1	1.00	1.05	-0.05	0.25	-0.30	1,000	-300
W2	1.20	1.05	0.15	0.29	-0.14	1,000	-138
W3	1.50	1.10	0.40	0.35	0.05	2,000	110
W4	2.30	1.30	1.00	0.46	0.54	2,000	1,080
W5	2.60	1.40	1.20	0.49	0.71	1,500	1,059
Total							1,811

Source: author’s elaboration.

Products W1 and W2 are deficit ones. In addition, product W1 has a negative contribution margin. However, the total margin on customer Alfa is positive and equals 1,811 and the profitability calculated as a relation of the total margin to sales revenues equals 13.2%.

## 4. Example of the pricing policy of an enterprise

The enterprise should define principles of price setting for particular assortments taking into account the above-mentioned and other factors to be considered when setting the price level. A factoring scenario can be used as an example here. The cost of such a funding source is usually higher than the overdraft, which consequently reduces the sales margin. Another example involves the customer’s notorious overdue settlement of payments. In this case – for the sake of a good relationship with the



customer – penalty interests are charged and then annulled. The cost of funding such overdue invoices also depletes the margin. There are many such aspects and each case requires a tailored approach. At the same time it is advisable that certain standing procedures be in place and put into action when required.

### Example 3

Enterprise Beta set the prices of particular products following the financial and marketing data. The data are enclosed in the attachment to the pricing policy. After considering any available discounts the sales price must not be lower than the variable unit cost. The approval of the sales price below the total cost lies with the Sales Director.

#### *Basic discount*

Basic discount is dependent on the previous year's turnover and the quality of the relationship. Maximum discount values are shown in Table 6. They are approved by the Sales Director.

**Table 6.** Maximum discount values dependent on turnover

Last year's turnover (zlotys)	Discount (%)
up to 50,000	up to 5
50,001-100,000	up to 6
100,001-200,000	up to 7
200,001-300,000	up to 8
300,001-500,000	up to 10
500,001-1,000,000	up to 11
1,000,001-2,000,000	up to 12
Over 2,000,000	up to 13

Source: author's elaboration.

Apart from the turnover the following factors also affect the discount value:

- history of timely settlement of accounts payable,
- loyalty to enterprise Beta,
- structure of settlements for the past year (cash, transfers, factoring, bill of exchange).

For new customers the basic discount must not exceed 6%.

#### *Additional discounts*

a) for enterprises selling to chains another 2% discount can be approved following the Sales Director's prior approval;

b) sales prices can be tailored for selected assortments for a given customer following the Sales Director's and Management Board Member's prior approval.

The approved prices must assure the profitability of sales to a given customer. The setting of such prices can be justified by e.g. a high volume of the other assortments, signing a substantial contract, depleting stock levels, assuring the continuity of production and sales, etc.

#### *Seasonal discount*

From 1.01.200X to 31.03.200X a 5% post-seasonal discount is introduced.

#### *Discount for cash payment*

The discount is 2% (for a standard 60-day payment term).

Seasonal discounts and cash payment discounts can only be applied for customers with a healthy history of past payments.

The pricing policy is subject to the approval of the enterprise's Management Board at the beginning of a given period. Its execution is then monitored by the Financial Director who presents the results of his/her control to the President of the Management Board in a list of margins for particular products (assortments) and customers. Following this a decision is made about setting the pricing policy for the subsequent periods.

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## PROBLEMY KSZTAŁTOWANIA POLITYKI CENOWEJ PRZEDSIĘBIORSTWA

**Streszczenie:** Zarządzanie przedsiębiorstwem wiąże się z koniecznością ciągłej optymalizacji przychodów i kosztów w celu zwiększania rentowności działalności. Do najistotniejszych elementów kształtujących wynik finansowy jednostki należą ceny sprzedaży produktów oraz towarów. Prawidłowe ustalenie poziomu cen wymaga przeanalizowania różnych elementów mających wpływ na decyzję przedsiębiorcy odnośnie do ich wysokości. W artykule zawarto wybrane uwagi na ten temat.