PROFIT MAXIMIZATION THROUGH A DIFFERENTIAL PRICING STRATEGY

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ABSTRACT
The practical approach of strategy formulation, given the company's mission, is based on the key strategic objective that is to be achieved through the respective strategy. The strategic objective is different from one company to another, even in the case of competing companies, and different from one period to another, even within the same company.
Companies can have very different strategic objectives, such as sales-oriented objectives (achieving a certain volume of sales, achieving a certain market share), objectives such as survival of the company (especially in a context of crisis and fierce competition) market dominance through product quality and others. But whatever the fundamental objective in the medium or short term, one cannot omit the objective of profit, or maximization of profit, which is the ultimate goal of any economic organization. At the same time, whatever the targeted strategic objective, price has a decisive role in achieving it and, in general, in the success of the overall strategy of the company.
There are numerous situations in which a wrong price strategy compromised the overall strategy of the company.
Within this paper, we intend to highlight how a differential pricing strategy can contribute to maximizing profit.

KEYWORDS: profit, strategic objectives, market segmentation, differential pricing, potential margin.

JEL CLASSIFICATION: D24, L21, M21, M31, O12

1. INTRODUCTION
In recent times, there is an increasing concern regarding the lack of economic performance of the companies which has its justification in the absence of relevant strategies or their application (in situations where they exist); companies tend to imitate each other and the competition transforms into a "destructive competition". The salvation of these, according to the conception of M. Porter, represents the strategy, which involves "creating a unique and valuable position involving a set of activities different from the competitors" (Porter, 2008). Given this aspect, we would be tempted to believe that it is very important that Romanian companies develop global strategies to ensure realistic exploitation of their evolution opportunities on longer intervals of time in a competitive environment, increasingly more complex and powerful, both internally and internationally. This overall strategy, that is capable of ensuring the articulation of procedural and structural components

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of the company into a "whole" and to offer it the characteristics of a complex, open and organically adaptive system, constitutes the foundation of partial (functional) strategies that operationalize the global strategy (Popa, 2004). The marketing strategy is an important component of these partial strategies, and its formulation must necessarily comprise the four elements of marketing-mix, the price being the most relevant reference item, given its strategic role. But if we consider that the results of "strategies" developed at national level in our country over the past 25 years, have unfortunately had a negative effect on the economic and social system of Romania, it is normal to have serious reservations on performance targets (except immediate financial performance of those who promoted them) of such strategies, determining us to reassess the importance of planning in business management in our country at the present stage (Deac et al., 2016a).

We consider that, whether it is an approach to develop a strategy or short or medium term planning, the essential problem within a demarche of price substantiating is finding a level of "reference price" that could serve as a relevant starting point for the final price decision, respectively the price at which the product is to be included in the price catalogues or on the shelf and finally sold on the market, or the price of finalizing an economic transaction (Deac et al. 2014). There are certain differences on consumer behaviour regarding the fairness that customers perceive between an advantageous or disadvantageous price (Dobrin, Giurcanciuc, 2015). Therefore, it is important to note that one of the recommended strategies in negotiation in order to obtain the maximum gain is to "demonstrate the rationality of the price offer" if the proposed price is presented as "fair" and "equitable", it will have a greater impact on the buyer than if it is presented without an objective explanation (Leigh, 2004). Taking into consideration an approach for a price substantiation strategy, the problem is even more complicated, since this is a sequential process on a longer time horizon and issues arising in the various stages of this process cause the existence of differences between the "reference price", which was originally set and the price paid by customers on the envisaged time horizon (for example, there may be some customer discounts based on the volume of purchases, reductions in price over time, taking into account the life cycle etc.). It is essential to determine as rigorously as possible the level of "reference price" that can be the starting point for further analyses of the strategic approach and, ultimately, for the implementation of a sustainable price strategy.

In our opinion, there is no accurate method of price substantiation that ensures sustainable market success in a competitive environment, but in order to determine the level of the "reference price" several methods may be used. These methods take into account the factors influencing the price (production and selling costs, customer demand and supply, prices and reactions of competitors) taken separately or in combination. Moreover, it may also determine an optimum price (that maximizes profits) given all three factors, the method consisting primarily in examining in detail the demand curve in relation to the price (Deac et al. 2014).

### 2. IMPACT OF PRICE ON THE PROFITS OF THE COMPANY

Given the company's mission, the practical approach to strategy formulation is based on the main strategic objective which is to be achieved by the strategy. This objective is different from one company to another, even for competing companies, and different from one period to another, even within the same company. If we consider the price strategy, it needs to have as a starting point the strategic marketing objectives of the company, which represent what the company aims to achieve at a certain organizational level and within a predetermined time frame. They are established for large timelines, most often on long term of 3-5 years or even higher, up to 10 years, stated M. Porter at the conference held in Romania in November 2007 (Ziarul Financiar, 2007). The more a company defines its strategic marketing objectives in a clearer manner, the more it is easier to set out the pricing strategy. Companies can have very diverse strategic goals; there may be sales oriented objectives (obtaining a particular sales volume, achieving a certain market share), goals
such as survival of the company (especially in a context of crisis and fierce competition), market domination by product quality etc. However, as pointed out above, whatever the pursued strategic objective, on the short or medium term, one cannot conceive a strategic approach without considering profit; ultimately, any targeted objective is subordinated to the objective of profit or the maximization of it (which is the ultimate goal of any company, otherwise there would not exist economic companies, but philanthropic organizations). Notwithstanding, whatever the fundamental targeted objective in a strategic approach, the price has a decisive role in achieving this objective and, in general, in the success of the overall strategy of the company.

If we consider profit as an objective, the factors that influence its size are: cost, price and sales volume. Of these three factors, price is the primary factor by excellence. Nowadays, after companies have minimized the level of costs and made their sales force a veritable weapon, they grant increasingly higher interest to the possibilities offered by price. In the competitive environment, price is always perceived as a source of problems: customers complain that it is too high, competitors use it as a weapon to attack the competition to gain market shares (even risking a “price war”), distributors exert high pressure on it, all of which are inevitable realities of modern competition. A survey conducted in Western Europe and the US, among marketing managers, concerning 13 issues considered most difficult of their work, shows that the price is the first quoted element, with a score of 4.3 points out of a maximum of 5 points (Simon et al., 2006).

The question that arises is: what should be the price of a product for a company to be competitive in the market? As it has previously been stated, there is no accurate method of establishing the price that ensures sustainable success in the market, but what is certain is that the price level must be set taking into account the following factors: costs of production and sales, customer demand and offer, competitors’ prices and reactions. Companies can have very different strategic objectives, but a profitable price, given any of these objectives, cannot be determined from a simple mathematical calculation of costs, taking into consideration that it is not known how clients will react; but price cannot be fixed according to customers either, as long as competitors’ reaction cannot be predicted. Therefore, none of these factors can be determined without considering the others; the pricing mechanism is very complicated and subtle, given its multiple effects. We can state that the price substantiation is both a science and an art, based on precise calculations and sound reasoning, as it will result in the paper, and which does not exclude items based on intuition, flair, hunches, experience etc., which are elements of management as art. A solid reasoning assumes that people who are involved address the right questions and understand the assembly of factors that determine the success of some pricing decisions and the failure of others.

It is obvious that the price level directly determines the margin which the company can obtain, a higher price increases the obtained margin from each product sold, but the price increase will determine, almost always, a reduction in sales volume, which may adversely affect the level of profit. Furthermore, the modification of price has consequences on costs, for example, a price reduction may lead to an increase in sales volume and, ultimately, a reduction in total unit cost due to economies of scale and the effect of experience, which may influence the profit in a positive manner. In the economic reality, very few managers relate to price substantiation from a strategic perspective. This approach is treated as a routine matter that the company faces, for solving new arising problems or to adapt to a given situation (if on the window shop near mine, belonging to a competitor, appears a sign mentioning "50% discount", I must do the same, otherwise I will lose), price decisions taken can be infrequently classified as strategic decisions, price is rarely a differentiating element (Trout, 2006).

In recent years, the role and importance of marketing departments are growing in companies from Romania, as well, marketing specialists being considered "fashionable". With the changing market behaviour of companies, by switching from the stage of behaviour focused on production (where the mere objective was to produce), or on product (there were manufactured items that producers appreciated they satisfy customers), to marketing focused behaviour (producing ensured a degree of satisfaction expected by each market segment), marketing has become the means through which
companies identify unmet needs in the sales market, develop new products to meet those needs, promote their products in a fair and continuous manner with a campaign to support post-sale (Cărstea et al., 2002). Considering these perfectly correct aspects, we might consider that everything a company undertakes is for the exclusive benefit of customer, hence the phrase "The customer is always right", but companies are not charitable organizations.

**In the strategic approach for price substantiation there may be one final major objective, namely the maximization of profit, which represents the fundamental objective of any economic company and all departments in the company, by whose functional strategies should contribute to this objective.** However, a more delicate problem is that, within the company, in the management departments directly involved in this strategic approach, there is no unified vision concerning the concrete modalities of action. We could say that, on the contrary, many times the opinions are contradictory, each compartment imposes certain constraints on the process of price substantiation. Thus: the sales department advocates for lower pricing arguing that, in this way, the company will be able to obtain an immediate increase of transactions and sales volume, all of which being ultimately reflected in higher profits; the financial department supports consolidation and preservation of minimum contribution margins, enabling cost coverage and obtaining the planned profits, dictating a minimum price which is to be imposed; the marketing department considers that price, as a tool of marketing mix, should be used selectively in combination with other tools, pursuing long-term high profits, even at the risk of lower profits (or losses) in the short term. Each compartment is right, in its point of view, these constraints correspond from the perspective of the respective compartment. It is important to note that, in a company, each department has its own objectives, which may be at odds, often only apparent, with the objectives of other departments, and within a particular compartment employees can have individual goals whose achievement, not always, lead to the achievement of the major objective of the company (Deac et al., 2014).

The strategic approach to pricing requires a new type of relationship between these key compartments, given the **balance to be achieved between the customer's need to obtain value for the price paid and the company's need to cover costs and earn a convenient profit**. The awareness that, in the conditions of a market economy, the strategic approach of price substantiation should have as starting point the customers. The objective is to capture the value created for customers, therefore it is normal that prices are set by the compartment that is best able to anticipate the respective value, namely the marketing department. However, their efforts in this endeavour will not be effective as long as those in the marketing department do not possess relevant information about customers and competitors, information needed to estimate the value, the gathering of data being the responsibility of sales department. But the efforts of the marketing and sales departments will not generate profits unless there are some adequate financial targets, imposing a new finance vision. Rather than pursuing recovery of permanent costs, the financial compartment should think proactively, in order to establish to what extent cost modification is influenced by changes in the level of sales and price, aimed at increasing profitability, and to use the conclusions to chart directions for action and to create incentives for people from the marketing and sales compartments to achieve their own targets in a profitable manner for the company (as long as salespeople will be stimulated only by sales volume, they will seek to offer discounts to the maximum level possible) (Nagle & Hogan, 2008).

Regardless of the size and competitive position of a company, price substantiation should be based on three fundamental principles:
- It is based on value;
- It is proactive;
- It is determined by profit.

These three principles represent pieces of a puzzle, which, though it does contain only three tracks, is very difficult and complicated to solve, but whose correct solution leads to a more efficient approach of price substantiation.
3. PROFIT MAXIMIZATION THROUGH A DIFFERENTIAL PRICING STRATEGY

There cannot be designed a strategic approach of price substantiation of a product without understanding "What is the product?" and "What is the price?" in the eyes of buyers, apparently simple questions, but very complicated within this approach.

"What is the product?" "A product is every thing offered in the market with the purpose of collecting interest, acquisition, utilization or consumption and that can satisfy a need or a desire" (Kotler & Armstrong, 2007). Based on this definition, any product can be structured on several levels, an essential aspect in price substantiation, and the specific elements of each level influence its size. The first level is the "basic product", which must answer the question: "What exactly is bought?" and is the essence of the product ensemble. It is defined by all the base advantages that the product will provide to purchasers. The answer to the question is simple: for example, the acquisition of a car that would allow the purchaser to travel to work. The next level is "the actual product" around the basic product, which, depending on its type, can be characterized by five aspects: packaging, quality, features, style and brand. Following the given example, a buyer decides to purchase a BMW car, which is an effective product, the brand, features, style and quality were all carefully combined to enrich the basic advantage. The last level is represented by "the improved product" formed around the actual product by offering additional benefits such as transport and free installation, warranty for a period of time, rapid intervention and repair in situations when there are problems, quick free ongoing telephone consultancy, purchase facilities etc. For the buyer, these additional advantages that must not only comply to his needs, but also to enchant him, become an important part of the product as a whole, influencing the will of payment. Every feature and additional benefit cost money and, therefore, the manufacturer must know whether buyers are willing to pay the price difference.

"What is the price?" "Price expresses the equivalence of two qualitatively different goods, namely their exchange value", asserted since antiquity, Aristotle, the price being considered as a relative measure, of "something" that is measured by "something else". In current conditions, "price expresses the amount of money that the buyer pays in exchange for a unit of economic good, namely it is the monetary expression of exchange value that the seller receives for a traded good unit. Price is therefore the sum of money received-paid for the definitive transfer of the ownership right from one person to another" (Dobrotă, 1997). This represents the given definition of political economy that captures also the legal aspect of the act of sale. But, the most controversial issue of political economy, relating to price, has been and remains the problem of "unique substance of price", of finding "that something" that makes it possible to bring the changed goods to a common denominator that makes them comparable, measurable and transferable (according to different concepts, at the base of price formation stands: "the work incorporated into each of the goods that are changed", according to the first scientific attempt to rationalize the unique essence of price made by the classic Adam Smith: rarity; utility; usefulness of the least desirable asset; disposable income). For an ordinary buyer, the price may represent "the amount of money the buyer has to pay for purchasing a product or a service", according to the definition found in the Explanatory Dictionary of the Romanian Language (DEX), a definition understood by any individual who knows that in order to take possession of a product, as a general rule, must give a sum of money. The price may also be "the sum of all values that the consumer offers in exchange of the advantage of having or using the product or service" (Kotler & Armstrong, 2007), definition which broadens the meaning given to price and emphasizes the elements underlying its formation. However, when analysing "price by taking into consideration the purchasing behaviour of buyers, it represents the total sacrifice consented by the customer to purchase a product (a commodity or service), the client systematically comparing this sacrifice to the value he attributes to the product he wants to buy" (Deac et al., 2016b). The price and the perceived value are the two great foundations of all economic transactions. This total sacrifice consented by the client has an objective side (referring to
an economic sacrifice), and a subjective side (referring to the psychology by sacrifice). The economic sacrifice consented by the customer represents the total costs incurred for obtaining and using the respective product. Such an indicator is composed of the purchasing price of the product, additional costs of placing it in service (transport, handling, installation) and costs of operating it (maintenance, repair, assuming the risk of failure or poor performance) (Monroe, 2003). The psychological sacrifice, unquantifiable, but with a great impact in the purchasing decision, in some situations, is given by the state of discomfort (cognitive dissonance) buyers can experience when deciding the acquisition of a product, while the product’s performance does not meet initial expectations (as no brand is perfect, consumers do not feel satisfied with certain drawbacks of the chosen brand by the fact that they lost other benefits of the brands that were not purchased) or, for various reasons, had to abandon other products or options that they have for investing the money at their disposal. It follows that, from the consumers’ point of view, the price becomes rather a cost element, and they are in search of ways to minimize this cost (Lauterborn, 1990).

Actually, customers are very heterogeneous regarding their needs, behaviour, perception of the product, their willingness to pay, etc., each buyer could represent a distinct potential market and, ideally, a seller could develop a marketing program and a different price strategy. Considering these aspects, there are very diverse products in the market in order to meet every type of need, distributed through different distribution networks. More than that, we can encounter customers with hybrid buying behaviours, willing to pay very high prices for some products while looking for offers at the lowest prices for others.

This reality on the market can be seen as a great opportunity for a company that proposes differentiated products at differentiated prices to maximize profits, although the basic need that the product responds to is the same. Moreover, companies are marketing a product at differentiated prices, even though this differentiation does not find entire correspondence in the cost differentiation. Thus, a train journey on the route Bucharest-Sinaia, for example, costs between 30 and 200 lei, depending on the type of train (Regio, Interregio, InterCity), class, type of wagon, although the basic service (moving from Bucharest to Sinaia) remains the same. But the speed, comfort and services are not identical, all of which are elements that justify differences in perceived value and price.

*Table 1* presents, in a more general manner, the price differences in certain fields (Deac et al., 2014):

<table>
<thead>
<tr>
<th>Activity domain</th>
<th>Variation of price</th>
<th>Differentiation criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail transport</td>
<td>300%</td>
<td>Means of transport category, class, wagon type</td>
</tr>
<tr>
<td>Air transport</td>
<td>700%</td>
<td>Company, class, tariff conditions, restrictions</td>
</tr>
<tr>
<td>Hospitality, tourism</td>
<td>1900%</td>
<td>Category, season, location</td>
</tr>
<tr>
<td>Consumer goods</td>
<td>530%</td>
<td>Distribution network, quantity</td>
</tr>
<tr>
<td>Industrial products</td>
<td>350%</td>
<td>Quantity, imposed conditions</td>
</tr>
<tr>
<td>Telephony</td>
<td>1030%</td>
<td>Operator, tariff plan, subscription type</td>
</tr>
</tbody>
</table>

*Source: Adapted from Deac, Vrîncuț & Păun (2014)*

We underline that there are various situations where this strong differentiation in price is not directly linked to the product or service sold. Thus, the price of a bottle of 0.5 litre of still water, for example, range from simple to triple or even more, depending on the distribution channel, location, although the product is the same (from 1.5 RON in a hypermarket, to 8 RON at the airport). *Despite the significant variation in prices, products are sold in all situations because these prices are consistent with the customers’ will of payment.* Referring to the same bottle of still water, at the
airport a person before boarding does not have time or the availability for price comparison and, therefore, is willing to pay a higher price. Instead, usually, when the same person makes ordinary purchases, will buy the same product from the hypermarket that has the lowest price.

**A fine and methodical segmentation of the market constitutes a fundamental basis for developing a relevant price strategy.** In recent years, great progress has been made in this domain, mainly by extending "one-to-one" marketing, the ultimate goal being to propose an offer and a price tailored to each individual client (adjusted offers and prices).

For a differential pricing strategy to be effective, certain conditions must be imposed:

- *Firstly, the market must be segmented, segments must present different degrees of demand and migration of customers from one segment to another must not be possible;*
- *Secondly, it should not be possible for the buyers of the low-cost segment to resell the product on other segments with higher prices;*
- *Last but not least, this differential pricing strategy should not arouse feelings of bad faith among buyers against the sellers.*

The effect that can be achieved through price differentiation is very easy to visualize. *Figure 1 shows,* in general terms, the demand curve in relation to the price (for reasons related to performing faster mathematical calculations, it will be considered that this curve is a straight line, the reasoning remaining valid regardless of its form; certainly, for a high price level, the sales volume will be 0; and for a price equal to 0, the company will sell the entire production, according to the buyers, the best price is gratuity).

The question is to determine what parts of absolute potential margin can be achieved with single or differential pricing strategy, with direct impact on profit (profit being calculated as the difference between total absolute margin and fixed costs in the same period of time).

As previously stated, one can determine a single optimal price level that maximizes profit, but this single price (even optimal) does not lead to the best result, and as shown in *Figure 2.*

The areas of triangles A and C are lost absolute margins. Triangle A is the consequence of the fact that some customers are willing to pay a higher price than the single one, given that the product would have higher attributes; triangle C is the opposite, respectively lost absolute margin due to the fact that for some customers the charged price is higher compared to the perceived value and therefore they will not buy the product, but would be willing to buy the product with fewer features and thus a lower price.
A differential pricing strategy will enable gaining certain sides of the absolute margins lost in the case of single price strategy. In reality, it is very difficult to exploit the entire absolute potential margin. This would mean that prices must be fully customized, which requires a perfect knowledge of each client’s willingness to pay (a feasible element in practice in the case of industrial goods, when one can negotiate all contractual terms and price of an order with each customer, and practically impossible in the case of consumer goods).

Unfortunately, the behaviour of many companies is to rather substantiate prices in response to the expectations of customers and competitors, and do not use price in a proactive manner to influence these expectations.

Travelling by a minibus which connects the capital of a distant city (unfortunately we cannot mention the city name, because there is a single company operating on that line and we do not have their permission), I was totally disappointed with the lack of comfort and, having the opportunity to meet the owner of the company, I addressed a seemingly simple question: Why not providing comfortable means of transport at a higher price? The answer came immediately, telling me that the price is, even under these circumstances, considered too high and I should only imagine what would be the consequences of its growth. I realized that it was neither the place nor the time to say what I "imagine", but we draw your attention to this matter. It is exactly the difference between the conventional and the strategic approach of price substantiating.

To highlight the effects of different price strategies on the profits of companies, we will consider the following hypothetical example suggested by the above mentioned aspects:

The potential market of a company operating transport services between two cities is 400 passengers/day and their willingness to pay is evenly distributed, varying between 0 and 400 m.u. (monetary unit). For the same reasons presented above, we considered the variation of demand in relation to price as uniform. Given the fact that in road transportation the variable costs are insignificant, we neglect these costs (noting that this does not affect in any manner the reasoning of price differentiation impact on profits), and therefore results a single optimal price of 200 m.u. The number of passengers is equal to 200 and an absolute margin of 40,000 m.u. is obtained (Figure 3). Areas A and C represent the lost absolute potential margins. Triangle A comprises travellers who are willing to pay more than 200 m.u., given that this service would provide greater value, but the company does not fructify this pay. Triangle C represents passengers who are not willing to pay 200 m.u., but would use the service, under a lower price, the current single price of 200 m.u. prevents any possibility of purchase.

**Figure 2. Single pricing strategy**
*Source: adapted from Deac, Vrîncuț, Păun, (2014)*
Applying a differential pricing strategy by creating two types of rides, the optimal prices will be 133 m.u., respectively 266 m.u., every type of ride will take 133 passengers and the total margin obtained will be 53,067 m.u., which is an increase of 32.66% from the initial situation (Figure 4).

Deepening the segmentation by creating three types of rides, the optimal prices are 100 m.u., 200 m.u. and 300 m.u., respectively. The number of passengers in this situation is 100 on each type of ride and the total margin achieved is 60,000 m.u., respectively 50% higher than in the first case (Figure 5). It is observed that 50% of the total margin is obtained from "more demanding" passengers, who represent only 33% of the total number of passengers.
This differential pricing strategy is a general rule in transport. In fact, if we refer to the types of classes in rail or air transport, they are not the same size, and the fact that the largest proportion of earnings derives from customers that pay higher prices can be considered a general rule. A study of US airlines shows that about 6% of passengers contribute to 37% of turnover (Simon, H., et al, 2006).

4. CONCLUSIONS

These theoretical examples highlight crucial aspects of price differentiation, namely:

- **Potential earnings through a differential pricing strategy are considerable**;
- **For a differential pricing strategy to be viable, customers should not be able to migrate from one segment to another and buyers should not be able to make price comparisons**;
- **It is more important to differentiate "up" than "down"**: the gains are higher in this situation (for example, in a paid parking lot, few places may be permanently reserved for customers in a hurry that are willing to pay a higher parking fee);
- **From the example shown it is noted that in all cases the average price is the same**, namely 200 m.u., however the number of passengers is different from one case to another (in the first case 200 passengers, 266 passengers where there are two types of rides, and 300 passengers in the case of three types of rides). **The conclusion is that a differential pricing strategy does not imply a change in the average price level, the objective being to target more effectively various customers (different customer segments)**;
- **In practice, a differential pricing strategy will not generate the desired result except to the extent that an efficient and rigorous demarcation of the segments is possible**. For example, in air transport, it is highly possible that many customers do not buy, as expected, tickets to Business Class if the difference in the service between the two classes is insignificant and therefore it could record a situation which is worse than in the case of a single price strategy.
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