

# A Sales Growth Model for Small Enterprises

MARTIN MACHEK, ONDŘEJ MACHEK

Department of Marketing, Department of Business Economics

University of Economics, Prague

W. Churchill Sq. 4, 130 67 Prague 3

CZECH REPUBLIC

[martin.machek@vse.cz](mailto:martin.machek@vse.cz) <http://kmg.vse.cz/>

*Abstract:* - Most firms in the world belong to the small and medium enterprises, which play a substantial role in the world economy and its development. The importance of SMEs relies in the generation of new jobs, innovation and stimulation of private ownership and entrepreneurial skills. The growth is important for all for-profit organizations. In this article, we present a model of small enterprise sales growth, which is based on the average bill and frequency of visits. Consequently, we derived partial factors which affect this growth. The use of the model was demonstrated on the example of hairdressing salon, representing businesses providing services.

*Key-Words:* *small firm growth; growth model; B2B2C; hairdressing salons*

## 1 Introduction

Small and medium enterprises (SMEs) have become a subject of interest of academics, researchers, and practitioners. The vast majority of businesses around the world are small and medium-sized enterprises, and these enterprises play a vital role in the world economy and its development. The importance of SMEs lies in job creation, innovation and stimulation of private ownership and entrepreneurial skills. Small businesses are flexible and able to adapt quickly to the changing environment, which is becoming important in times of economic crisis.

The definition of small business varies in different countries, as well as in individual sectors. In Europe, a small business is usually defined as a company that has less than 50 employees, while medium-sized enterprises are defined as firms with less than 250 employees. In the U.S., a small enterprise is defined as an enterprise with less than 250 employees and medium-sized enterprise as an enterprise with less than 500 employees.

Small businesses are often characterized, *inter alia*, by chaotic and simple management and the omnipresence of the owner in all business processes. For this reason, the education of the owners significantly impacts their growth and competitiveness.

In this paper we present a model of sales growth, which can be used in managing a small business which sell products, goods or services and in educating owners of small businesses.

## 2 Business Growth and its Measurement

Some theorists attempted to model the evolution of businesses using corporate life cycles. The stage model or corporate life cycle theory originated from economic literature ([14] or [16]). This model describes the progression of a firm through multiple growth phases over time. For instance, Miller and Friesen [12] described five common stages of firm development: birth, growth, maturity, revival, and decline. However, the number of stages in corporate life cycle models is not standardized [10]. The important thing to point out is that from the perspective of corporate life cycle theories, the growth represents only one of the stages in the business life. Much attention has been devoted to this stage since a permanent growth is desirable and important for all for-profit organizations. At this point, we can mention the widely-cited conceptual article of Greiner [6], who presumed that business growth consists of five phases: growth through creativity, growth through direction, growth through delegation, growth through coordination, and growth through collaboration.

Sometimes, economic theorists distinguish two modes of growth: organic growth and growth through mergers and acquisitions (inorganic growth). In the case of SMEs, almost all growth is of organic nature [3].

In this article, we will concentrate on the growth stage of the corporate life cycle. Growth is a process function which happens over multiple time periods. A small firm growth can be represented by the

change of some amount over time. The most frequently used measures of growth are probably profit, physical output in natural units, sales in monetary units and market share (see e.g. [4] or [20]). It is presumable that these measures are mutually interrelated. However, the interdependence between these variables is not clear and the empirical results on this topic are inconsistent and mixed. For example, evolutionary models suppose that profitability is the main factor of firm growth [13]. Other authors found that the profitability had a positive impact on the growth rate, but growth rates had a negative impact on the current year's profitability [18]. Sometimes, profitability is even considered to be in a direct trade-off relationship with firm growth [11].

We will further consider that the sales growth of a firm is a measure of growth, because sales growth is a normal aspect of the phenomenal growth of the small enterprise [12].

## 2.1 Factors of Business Growth

Empirical evidence shows that most small firms do not manage to grow; instead, they start and go out of the market small, because they only serve local markets and therefore have no significant growth potential (see e.g. [15] or [17]).

The growth may be influenced by external and internal factors which may or may not be affected by the firm itself. External factors of small firms growth often considered in the literature are dynamism, hostility and heterogeneity [5]. For example, firms operating in dynamic regions or industries are more likely to be growing (see e.g. [1]), but the growth is negatively affected by environmental hostility and the overall risk [20]. We can also classify the factors influencing growth in small firms following [19] as factors related to the entrepreneur (motivation, education, family, etc.), factors related to the firm (sector, legal form, location, etc.) and factors related to the strategy (workforce training, management recruitment, new products, etc.) However, these models are too general and many above-mentioned factors may not be influenced by the firm itself. A more specific and precise model is needed in order to be used in the everyday management of small firms.

## 3 A Model of a Small Firm Sales Growth

Let us define a company as an agent transforming a set of input factors into three classes of outputs: products, goods and services.

In the following text, three scalar values and six vectors are used:

- $K$  denotes the number of products offered;
- $L$  denotes the number of goods offered;
- $M$  denotes the number of services offered;
- $\mathbf{k}=(k_1, k_2, \dots, k_K)$  denotes product quantities;
- $\mathbf{l}=(l_1, l_2, \dots, l_L)$  denotes quantities of goods;
- $\mathbf{m}=(m_1, m_2, \dots, m_M)$  denotes quantities of services;
- $\mathbf{p}=(p_1, p_2, \dots, p_K)$  denotes prices of products;
- $\mathbf{q}=(q_1, q_2, \dots, q_L)$  denotes prices of goods;
- $\mathbf{r}=(r_1, r_2, \dots, r_M)$  denotes prices of services.

Then, the sales  $S$  in period  $t$  can be specified as

*Equation 2*

$$S_t = \mathbf{kp} + \mathbf{lq} + \mathbf{mr} = \sum_{i=1}^K k_i p_i + \sum_{i=1}^L l_i q_i + \sum_{i=1}^M m_i r_i$$

The salon growth rate  $g$  can be represented by the change in sales volume  $S$ , where  $\Delta t$  represents the amount of time.

*Equation 3*

$$g = \frac{dS}{dt} \approx \frac{\Delta S}{\Delta t} = \frac{\Delta \left( \sum_{i=1}^K k_i p_i + \sum_{i=1}^L l_i q_i + \sum_{i=1}^M m_i r_i \right)}{\Delta t}$$

The equation can be further decomposed into two terms. Let  $C$  denote the number of customers visiting the hairdressing salon. Then the sales growth can be specified as

*Equation 4*

$$g = \frac{\Delta \left( \sum_{i=1}^K k_i p_i + \sum_{i=1}^L l_i q_i + \sum_{i=1}^M m_i r_i \right)}{\Delta t} = \frac{\Delta \left( \sum_{i=1}^K k_i p_i + \sum_{i=1}^L l_i q_i + \sum_{i=1}^M m_i r_i \right)}{\Delta C} \times \frac{\Delta C}{\Delta t} = B \times f$$

We will call the first term **average bill** ( $B$ ) and the second term **frequency of visits** ( $f$ ). The average bill can be rewritten as

Equation 5

$$B = \frac{\Delta \sum_{i=1}^K k_i p_i}{\Delta C} + \frac{\Delta \sum_{i=1}^L l_i q_i}{\Delta C} + \frac{\Delta \sum_{i=1}^M m_i r_i}{\Delta C}$$

The number of visiting customers  $C$  can be represented by the sum of existing customers  $E$  and new customers  $N$ . So the frequency of visits can be further rewritten as

Equation 6

$$f = \frac{\Delta C}{\Delta t} = \frac{\Delta(E + N)}{\Delta t} = \frac{\Delta E}{\Delta t} + \frac{\Delta N}{\Delta t}$$

and finally, the whole sales growth can be specified as

Equation 7

$$g = \left( \frac{\Delta \sum_{i=1}^K k_i p_i}{\Delta C} + \frac{\Delta \sum_{i=1}^L l_i q_i}{\Delta C} + \frac{\Delta \sum_{i=1}^M m_i r_i}{\Delta C} \right) \times \left( \frac{\Delta E}{\Delta t} + \frac{\Delta N}{\Delta t} \right)$$

Growth of sales may be increased by increasing the average bill or frequency of customer visits. These factors vary by industry, some goods are characterized by a low frequency of visits, but a high average bill (e.g. car dealership), while other sectors are characterized by a high frequency of visits and a low average bill (e.g. stationery).

### 3.1 Increasing the average bill

The average bill, i.e. the amount of sales over the number of customers, can be increased by

- increasing unit prices of products, goods or services (components of  $\mathbf{p}$ ,  $\mathbf{q}$  or  $\mathbf{r}$ );
- increasing quantities of existing products, goods or services (components of  $\mathbf{k}$ ,  $\mathbf{l}$  or  $\mathbf{m}$ );
- selling new products, goods or services (increasing  $K$ ,  $L$  or  $M$ );

The first way to increase the average bill is to increase unit prices of products, goods or services. The possibility of increasing the unit prices of products, goods and services depends on their positioning. These options are limited with regard to the demand curve and its elasticity. Products, goods and services with premium positioning (e.g. luxury goods such as sport or recreation) will have higher price levels and margins, but these will be offset by

a lower number of units sold. In contrast, more affordable products, goods and services will have lower profit margins, but will be bought by a considerably higher number of consumers.

The economic theory suggests that the quantity demanded, i.e. the volume of products, goods or services sold, is a function of the price. This fact has to be taken into account when adjusting prices. The price elasticity of demand determines the effect of price changes on the total revenue. If the demand is inelastic and the price is increased, the total sales are growing (it is a case of necessary goods such as food or accommodation). If the demand is elastic and the price is raised, the total revenue declines (e.g., the aforementioned luxury goods). It is also necessary to take into account the fact that the price elasticity of demand is not constant, but it varies across different intervals of price changes. The price elasticity of demand also depends on brand loyalty; loyal customers are less sensitive to price changes [9].

The second way of increasing the average bill is to offer and sell more products, goods or services per one customer. This may be achieved by selling more existing types of products, goods and services, or by offering and selling new types of products, goods and services.

In addition, it is necessary to take into account the fact that small businesses typically have a limited time capacity. Time capacity  $T$  of a small business can be defined as

Equation 8

$$T = N \times h \times P_L$$

where  $N$  denotes the number of workers,  $h$  is the number of working hours per worker and  $P_L$  denotes the average labor productivity in the company, which can be calculated as a percentage of useful working time (not all workers work a full day, for example, education, pauses, etc.) This capacity should be utilized the most effectively possible. The decision-making on the selection of products, goods or services, to which the company will concentrate, should be based on managerial decision-making tools such as cost-benefit analysis.

For businesses that are focused on service provision but are not able to offer more services, a good way to increase the average bill is the sale of goods or products. In particular, this is advantageous because the sale of a product or good takes only a short time, but the provision of a service usually takes longer.

Similarly, small manufacturing businesses or commercial enterprises that are not able to increase

their sale of products or goods may increase the average bill by offering additional services, such as transport of goods, etc.

### 3.2 Increasing the frequency of visits

The second term in the eq.7, the frequency of visits  $f$ , increases when:

- existing customers buy more frequently;
- new customers are acquired.

Making the existing customers buy more frequently is associated with offering a larger number of products, goods or services or introducing new products, goods, or services discussed in the previous section.

This can be supported by increasing the customer loyalty, which is associated with the soundness of the product in all its concepts, not just the core product, but related services like warranty etc.

The frequency of visits may be also supported by tools of sales promotion and loyalty programs. Loyalty programs directly motivate the customer to visit the company more frequently. Among other tools which positively affect the frequency of visits, we can cite the customer databases, CRM systems and other IT tools.

Acquiring new customers is linked to the marketing strategy of the company. Small businesses often focus on fragmented markets and have a very limited budget. For this reason, the marketing possibilities are limited both in terms of extent and activity. As we already mentioned, small businesses are characterized by the omnipresence of the owner in all processes, including the marketing activities. The marketing of small business is often simple, chaotic, and very dependent on the actions of competitors [2]. The marketing concept is mainly focused on the production and price.

The most powerful, yet least expensive tool is unquestionably the word-of-mouth, since it is the most reliable source of potential clients. Small business may also carry out sales promotions programs such as discounts for existing customers that will attract new customers, etc.

Another possibility is to trailer random passers-by the outer premises of the company, by advertising in the neighborhood, or, where appropriate, by cooperating with other businesses in the area that are focused on a similar segment of clients (cross-marketing).

### 3.3 Two axes of client segmentation

In line with the two axes of our model – average bill and frequency of visits – we can propose a useful tool for customer segmentation. An effective

segmentation based on purchase behavior of consumers can help to effectively manage marketing and sales efforts and focus them on key issues of the salon growth.

In order to manage our growth model, we will divide consumers into nine different categories based on their average bill (low, medium, high) and their frequency of visits (low, medium, high). The intervals of each category will depend on every specific case (based on size of the firm, type of clientele, etc.). Afterwards, we calculate the % of total clients that belong to each category and the % of total turnover generated by the company. This type of segmentation will allow us to identify key issues of the company – should it focus on increasing average bill or is the bigger problem low frequency of visits? Both axes require different marketing and sales tools and could be very costly. More effective way is to clearly understand where do clients belong and address them in order to increase profitability of the salon. The most profitable group of customers is located in the bottom-left corner of the matrix. The segmentation is illustrated in Fig. 1.

**Figure 1: Segmentation according to  $B$  and  $f$**

		Frequency of visits		
		low	medium	high
Average bill	% clients % turnover			
	low			
	medium			
	high			⊗

## 4 The Use of the Model –Examples

The model we described in the previous sections can be used in seeking to increase sales of small businesses. In this section, we illustrate the use of our model by the case of a hairdressing salon. Most hairdressing salons belong to the small companies. The hairdressing industry is driven by the lifestyle, fashion trends and new technologies. A hairdressing salon is an integral part of a specific distribution channel, the intermediary between professional products manufacturers (e.g. L'Oréal, Schwarzkopf, or Procter&Gamble) and the customers.

Hairdressing salons offer services (haircuts, coloring, styling...), which is very specific and

consists of the professional product and the knowledge and skills of the hairdresser. However, salons also offer goods – professional products for home use. In comparison with goods offered in retail stores, the prices in hairdressing salons are higher, which is justified by a higher technological level of the products and additional services, in particular consulting and care of the hairdresser.

In line with the proposed model, we will now analyze the possibilities of increasing sales growth of a luxurious hairdressing salon. The illustration is based on interviews with hairdressing salons' owners and training of hairdressers carried out in the Czech republic and Slovakia between 2012-2013.

#### **4.1 Increasing the average bill**

When adjusting prices, it is necessary to take into account that the luxurious nature of hairdressing services, which results in low price elasticity of demand. However, we can assume that another feature of this industry is the high income elasticity of demand [8], which means that when the income of households increases, the demand for hairdressing services increases more quickly than the demand for necessary goods. Another important aspect is the fact that the customers are characterized by the loyalty to one particular brand, which means they are less sensitive to price changes. The customers will appreciate a stable level of prices, so the possibilities of increasing prices are very limited.

However, we can propose several ways of offering new services, in particular when the salon is focused on premium brands of professional hair care. One of them is to make use of educational programs for hairdressers and to offer new fashionable services such as fashionable coloring or haircut. Then, a salon may clearly communicate to its clients that the best level of services is guaranteed due to ongoing education of its hairdressers and build its image on this fact. Further, the average bill may be increased by incorporating more hair care products (shampoos and conditioners) into classical services.

Another suitable way of increasing the average bill is to sell more goods (haircare products for home use). The margins of such sells are high and the time requirements are generally low. There are four key requirements that increase the probability of successful sales. First one is visibility of the offer in the salon, because clients would not buy what they cannot see. The second is the clarity of the offer, which helps hairdressers to communicate it to clients and clients will easily understand. The third is time pressure; when offer is only valid for certain

amount of time, it increases the probability that clients will buy the offering. The fourth key requirement is the motivation of hairdressers and engagement from the part of manager, which is often the crucial part as hairdressers consider themselves to be artists rather than sellers. They can be motivated by offering a share on profits on goods sold, or various types of contests.

#### **4.2 Increasing the frequency of visits**

A higher frequency of visits can be achieved by offering more services. Further, it is possible to offer more additional services, such as light brightening, gloss increasing, etc. Other services, such as hair blowing, are very profitable and can be performed repeatedly, even on a weekly basis.

New customers can be attracted in several ways. In the case of hairdressing salons, which are always located at a fixed location, it is possible to use several communication channels. The most powerful tool is the classical word-of-mouth, when the existing clients become a "walking advertisement" for the hairdressing salon. However, this implies that it is necessary to provide excellent services.

Salons may also use recommendations through sales support. Another way of promoting the salon is the use of windows and exterior of the salon. It is important to pay attention to the first impression upon entering the salon, which raises the need for education and development of communication and business skills of hairdressers and receptionists. Hairdressing salons may also interact with nearby stores, such as fashion stores. In this case we are talking about cross-marketing, which can be implemented by various methods, such as gift certificates, coupons, etc. Another option is to promote the salon in commercial and administrative centers in the vicinity of the salon.

## **4 Conclusion**

In this paper, we suggested a model of sales growth which can be used in the management of small businesses. The first part of the article was dedicated to the business growth and its measurement, and we also discussed the factors influencing growth in small firms. In the second part, we formalized our model in several equations, which resulted in the proposition that the sales growth of a small company can be decomposed into two terms: the average bill and the frequency of visits. The average bill, i.e. the amount of money per customer, can be raised by increasing unit prices of products, goods or services, by increasing quantities of existing products, goods or services,

and by selling new products, goods or services. On the other hand, the frequency of visits can be increased by making the existing customers buy more frequently and by acquiring new customers.

In the final part, we demonstrated the use of our model in the case of hairdressing industry. The proposed methods are the result of interviews and round tables with hairdressing salon owners from Czech Republic and Slovakia between 2012-2013.

### Acknowledgments

This paper was written with financial support from the Internal Grant Agency of the University of Economics in Prague under the research project No. MF/13/2012 “*Business Strategy on Globalized Markets*”.

### References:

- [1] G.R. Carroll, M.T. Hannan, *The Demography of Corporations and Industries*. New Jersey: Princeton University Press, 2000.
- [2] D. Carson, S. Cromie, Marketing Planning in Small Enterprises: A Model and Some Empirical Evidence, *Journal of Marketing Management*, 1989, Vol.5, No.1, pp.33-49.
- [3] P. Davidsson, F. Delmar. Some Important Observations Concerning Job Creation by Firm Size and Age. In: *Rencontres St. Gall*, September 1998, Gallen, Switzerland, 1998.
- [4] F. Delmar, Measuring growth: Methodological considerations and empirical results. In R. Donckels R., A. Miettinen,(ed.): *Entrepreneurship and SME Research: On its Way to the Next Millennium*. Aldershot a Brookfield: Ashgate, s. 190-216, 1997.
- [5] G. G. Dess, D. W. Beard, Dimensions of Organizational Task Environments, *Administrative Science Quarterly*, 1984, Vol.29, No 1, pp.52-73.
- [6] L. E. Greiner, Evolution and revolution as organizations grow, *Harvard Business Review*, 1972, Vol.50, No.4, pp.37-46.
- [7] R. C. Higgins, How Much Growth Can the Firm Afford?, *Financial Management*, 1977, Vol.6, No.3, pp.7-16.
- [8] D. Keeble, J. Bryson, P. Wood, Small Firms, Business Services Growth and Regional Development in the United Kingdom: Some Empirical Findings, *Regional Studies*, 1991, Vol.25, No.5, pp.439-457.
- [9] L. Krishnamurthi, S. P. Raj, An Empirical Analysis of the Relationship between Brand Loyalty and Consumer Price Elasticity, *Marketing Science*, 1991, Vol.10, No.2., pp. 172-183.
- [10] D. L. Lester, J. A. Parnell, W Crandall, M. L. Menefee, Organizational lifecycle and performance among SMEs: generic strategies for high and low performers, *International Journal of Commerce and Management*, 2008, Vol.18, No.4, pp.313-330.
- [11] G. V. Milano, Postmodern Corporate Finance, *Journal of Applied Corporate Finance*, 2010, Vol.22, No.2, pp.48-59.
- [12] D. Miller, P.H. Friesen, A Longitudinal Study of the Corporate Life Cycle, *Management Science*, 1984, Vol.30, No.10, pp.1161-1183.
- [13] R. R. Nelson, S. G. Winter, *An Evolutionary Theory of Economic Change*, Cambridge: Belknap Press of Harvard University Press, 1982.
- [14] E. T. Penrose, Biological analogies in the theory of the firm, *American Economic Review*, 1952, Vol.42, No. 5, pp. 804-819.
- [15] P. D. Reynolds, S. B. White, *The entrepreneurial process: Economic growth, men, women, and minorities*. Westport: Quorum Books, 1997.
- [16] W. W. Rostow, *The Stages of Economic Growth*. Cambridge: Cambridge University Press, 1960.
- [17] M. Samuelsson, Modeling the Nascent Venture Opportunity Exploitation Process Across Time. In W. D Bygrave et al. (ed.): *Frontiers of Entrepreneurship Research*, Wellesley: Babson College, pp. 66-79, 2001.
- [18] J. SooCheong, P. Kwangmin, Inter-relationship between firm growth and profitability, *International Journal of Hospitality Management*, 2011, Vol.30, No.4, pp. 1027–1035.
- [19] D. Storey, *Understanding the small business sector*, London: Routledge, 1994.
- [20] J. Wiklund, *Small Firm Growth and Performance: Entrepreneurship and Beyond*. Doctoral dissertation thesis. Jönköping: Jönköping International Business School, 1998