The importance of a balanced product portfolio in the furniture industry

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Abstract: *The importance of a balanced product portfolio in the furniture industry.* A product portfolio is comprised of all the products which an organization has. The most successful organizations are going to be the ones that find ways to differentiate themselves. Previous research indicated that 50% of firm's sales today come from new products introduced within the last five years. The product portfolio analysis, conducted for three large case goods companies, confirms that result. Moreover the higher market segment of furniture, the lower percentage of young products in total firm's sale value. Furthermore the research shows the share of young and old furniture collection in A, B, C-category. The average percentage of young furniture collection sales in A-group is the highest, what mean that new products are key for company life (especially for furniture plants from low class market segment).

Keywords: portfolio management, product range, furniture industry, ABC analysis, furniture collection,

INTRODUCTION

A product portfolio is comprised of all the products which an organization has. A study of portfolio management practices in industry reveals three goals: maximizing the value of the portfolio, achieving the right balance and mix of projects, and linking the portfolio to the business's strategy. An estimated 50% of firm's sales today come from new products introduced within the last five years [Cooper et al. 1997].

The viewpoint presented in this article, brings some information about portfolio management in the furniture industry and lets on initial evaluation of product portfolios in the chosen furniture factories by means of *ABC analysis*, which is well known and easy in application. Due to the nature of the furniture industry, in this article the product is defined as a furniture collection, i.e. a set of products related by the style of design and bearing the same name. Whereas a new product is called the collection of furniture which perform the criterion of novelty for 24 months, while the sale was booked by the manufacturer. The newness of the furniture collection can be expressed in a modified, improved design, construction, use of a new material, a new process, a new method of customer service, satisfying new customer needs or in a better way meeting current needs [Olkowicz and Szymanowski 2012].

PARETO ANALYSIS

Good management requires selection of information which company's areas or products can determine it success or failure. Pareto Analysis, which will be discussed in this paper, is one of the basic tool to divide data. It can be described as the 80/20 rule applied to sale-control. The 80/20 rule was originally formalized by Vilifredo Pareto, after studying the distribution of wealth. Pareto Analysis essentially states that 80% of quality problems in the end product or service are caused by 20% of the problems in the production or service processes [Logan 2002]. On the base of the rule, the ABC technique was elaborated. *A-items* are goods which the top 70-80% of the annual sales value of the company typically accounts for only 10-20% of total sold products. *B-items* are the interclass items, those 15-25% of annual sales value typically accounts for 30% of total sold products. *C-items* are, on the contrary, items with the lowest sales value, 5% of the annual sales value typically accounts for 50% of total sold products.

THE CASE STUDY

The aim of this study was to estimate percentage of furniture collections The research was carried on in the second half 2011 in selected, large furniture (case goods) companies. The case study was adopted for the research method. Data were collected using the following techniques: a survey, an observation, an in-depth interview and examination of documents. From the companies, which after the survey have offered participation in the next stage of the research, were selected only three (each one employs about 500 people). The factories were chosen in that way to have their market segments differentiated with respect to price and quality. Therefore the Plant I manufactures quite cheap furniture from chipboards or MDF-boards (the low-price market segment). The portfolio of the Plant II presents the mid-priced products, i.e. the furniture with more complicated constructions, higher quality (application of solid wood elements) and which requires using higher technologies than first manufacturer applies. The last, third chosen factory - the Plant III - delivers on the Polish and foreign market the highest class furniture. Usually they are in whole wooden.

All plants made available qualitative data from the period 2003-2011. The detailed scope of the obtained, quantitative data is presented in Table 1.

Table 1. Range of quantitative data in the studied plants

The Plant	Range of quantitative data*
I	*01.IV.2003 – 31.III.2011* (the 96 consecutive months)
II	*01.IV.2003 – 31.III.2011* (the 96 consecutive months)
III	*01.IV.2007 – 31.III.2011* (the 48 consecutive months)

* *The financial year at each researched plant spans from 01.IV to 31.III of the following year*

Source: own studies

The data of the furniture collections sales in a month was classified into groups: A, B and C, in accordance with Pareto Principle. ABC analysis in each plant was conducted for every month separately. Apart from that, every month of the furniture collection sales was assigned to the group young or old products. If the month number of furniture collection sales was included in the range 1-24, it was called 'young'. If it was more than 24, it was described as 'old'. Then sales data coming from researched plants, including the ABC classification, was compiled to one table and analyzed in the next step.

RESULTS AND ANALYSIS

Some of results obtained after the interviews and the data analysis are presented below. Figure 1 illustrates percentage of the sale value from young and old furniture collections within A, B, C - category in the Plant I. It could be seen that the sale value from young furniture collections compose above 70% of each group. However, in A-products category they account for 72%, whereas in B and C – category 70%. The old furniture collections are regularly substituted for new ones and probably with success. The observation suggests that the new furniture collections are lifeblood of the company. This is probably the feature of factories with an offer dedicated to the lowest market segment.

The average total sale value of the Plant II in mid consists of young and old furniture collections. In this case also the highest share in A-category have the group of the young products (53%). Nevertheless, average percentage of the old furniture collections, which account for 47%, could imply lower success level of newness that were implemented on the market by the Plant II (Figure 2). On the other hand, it may indicate consumer preferences which are focused on more traditional and classical style of products.

In the product portfolio proposed by the Plant III could be noticed that 48% from the sale value of young furniture collections appeared in A-category, whereas in C-category were only

39%. Despite of that wide range, in the product portfolio the average total sale value of young furniture collections accounts for 44%, so it is the lowest result which was obtained in the researched furniture plants (Figure 3).
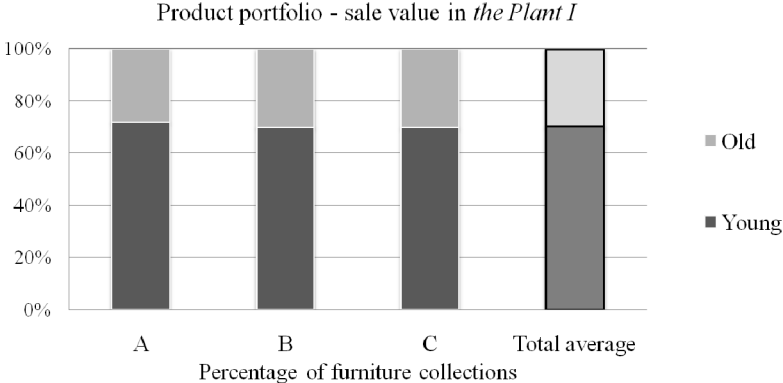

Figure 1. Sale value percentage of the young and old furniture collections within A, B, C - category in the Plant I
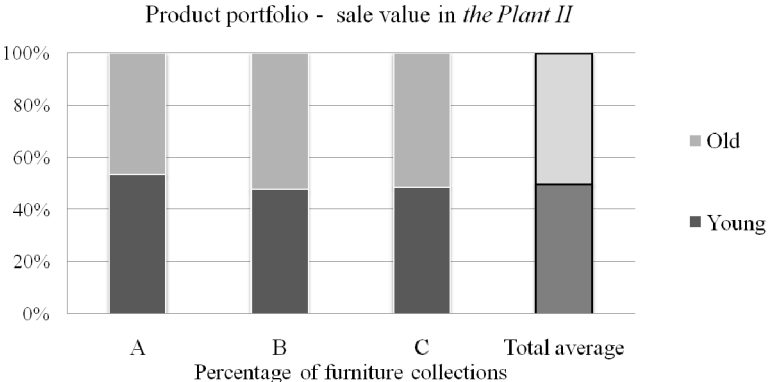*Source: own studies*

Figure 2. Sale value percentage of the young and old furniture collections within A, B, C - category in the Plant II
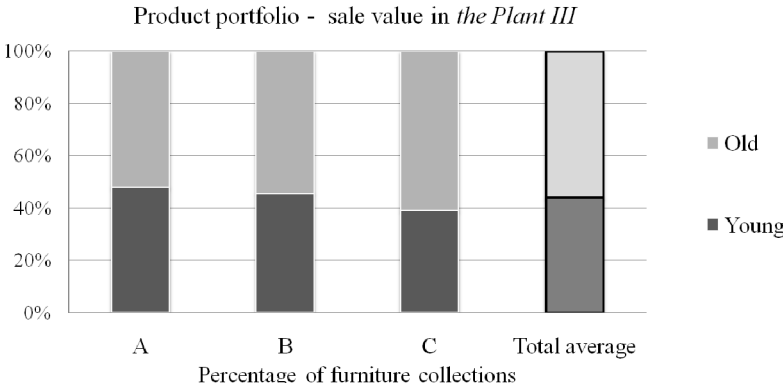*Source: own studies*

Figure 3. Sale value percentage of the young and old furniture collections within A, B, C - category in the Plant III
Source: own studies

Summing up, A-category in the Plant I, i.e. 80% of the total sales value gained for researched period, in 71% comes from the sale of young furniture collections. In the Plant II the percentage amounted 50% and in the Plant III – only 44%. Probably in A-category first of all were found the most expensive furniture collections, either with the longest lifecycles (like

in the Plant III) or sold in large amounts (like in the Plant I). Furthermore considerable differences among the value of sold products could be also seen for C-category (5% of the total sale value). The highest average percentage of sold old furniture collection value in C-group was noted in the Plant III - 56%, whereas in the Plant I, the old collections account for only 29%. The outcomes may be dependent on the new product success, which in the Plant I is much higher than in the Plant III, and could result from the market segment specificity.

The average sale value in the case goods plants in 55% was dependent on sale of the young furniture collection, and in 45% on sale of the old ones (Table 2).

Table 2. Average sale values from young and old furniture collections within ABC classification in the researched plants

Assortment category	Total sale value	Average sale value	
		Young furniture collections	*Old furniture collections*
A	80%	58%	42%
B	15%	54%	46%
C	5%	53%	47%
Total average		**55%**	**45%**

Source: own studies

CONCLUSIONS

In company the average share of young furniture collection in the total sale value is 55%. However in A-category it accounts for 58%, whereas in B and C-category – 53-54%. So it suggests, that 55% of the large furniture firm's sales first of all come from new products. The average percentage of young furniture collection sales in A-group is the highest, what mean that new products are key for company life (especially for furniture plants from low class market segment). Moreover the new furniture collections have even greater meaning for the Plant I – the manufacturer of furniture from the low class segment – because sales from young products it is even 70% of the total sale value. The plants II and III, which offer is directed to consumers with more wealthy wallet and with more traditional taste, have got lower percentage of sold young products value and it average accounts for 44 to 50%. It means that the higher market segment of furniture, the lower percentage of young products in the total firm's sale value.

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Streszczenie: *Znaczenie zrównoważonego portfela produktów w przemyśle meblarskim* W związku z brakiem danych i informacji o strukturze portfolio produktowego dużego producenta mebli, podjęty został temat diagnozy oferty handlowej trzech przedsiębiorstw z branży meblarskiej. Celem niniejszej publikacji jest ocena asortymentu badanych zakładów oraz zarządzania przeprowadzona z wykorzystaniem analizy ABC. Wyniki wskazują, że w branży meblarskiej 80% wartości sprzedaży w 55% pochodzi ze sprzedaży nowych kolekcji mebli, a 45% ze sprzedaży starych. Ponadto im segment rynkowy mebli jest wyższy, tym udział nowych produktów w całkowitej wartości sprzedaży jest mniejszy i odwrotnie.

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