Increasing of competitiveness in furniture manufacturing by the value analysis principles

"COMPETITIVENESS OF WOOD PROCESSING AND FURNITURE MANUFACTURING"

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Ing. Marek Potkány, PhD.

(Technical University in Zvolen, Faculty of Wood Sciences and Technology)





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Managerial accounting = information support for controlling

Strategic orientation of managerial accounting is reflected in market orientation and customer preferences. Methodic of Target costing.

With a projected cost of the product should be considered already at the stage of research and development.

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Target costing

Allowable costs = target price - target profit

Target profit is usually determined by an absolute amount or the profitability indicators using Return on sales ROS = Profit/Sales, or Return of cost ROC=Profit/Cost

Target Profit = Target price x (ROS/100)

Target Profit = (Target price x index ROC) / (1+ index ROC)

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Value analysis principles represents a systematic approach to evaluation of product characteristics that enables to fix alternatives that can improve the product quality, defined as the proportion of its commercial characteristics and costs. The author of this methodology is <u>Lawrence Delos Miles</u> from the General Electric Company.

Quantity-function deployment (QFD) define the relationship between the customers' requirements on product quality and its individual parameters

<u>Functional costs analysis (FCA)</u> detecting differences between customers' preferences and actual costs level of the product

The marketing analysis of the market for a new development model of PC desk Classic, it was found that in terms of view, potential customers are buying the following essential features with their weights of importance:

- enough storage space 35%,

- spacious working space 30%,

- modular principle 22%,

- sliding bar keybord 8%,
- possibility of ergonomic adjustment 5%

The price survey pointed out that an ideal initial market price would be 120 €. For the company is adequate return of cost on the level 10%. After quantitative functional analysis of customers' requirements on function and its individual components were found the following facts

	Components							
Functions	Corpus	Work tops	Doors and drawer	Connecting materials and forging	Mounts and legs			
Storage space (35%)	35 %	10 %	45 %	10 %	-			
Working Space (30%)	10 %	90 %	-	-	-			
Modular principle (22%)	30 %	-	25 %	40 %	5%			
Sliding bar keyboard (8%)	20 %	-	30 %	50 %	-			
Ergonomic adjustment (5%)	5 %	-	-	-	95 %			

The level of individual components importance is determined as the collation of importance scale of individual customers' preferences and percentage of assurance level of a particular preference by individual components

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1		Components								
Func	Functions	Corpus	Work tops	Doors and drawer	Connecting materials and forging	Mounts and legs				
	Storage space (35%)	12,25 %	3,50 %	15,75 %	3,50 %	-				
	Working Space (30%)	3,00 %	27,0 %	-	-	-				
	Modular principle (22%)	6,60 %	-	5,50 %	8,80 %	1,10 %				
	Sliding bar keyboard (8%)	1,60 %	-	2,40 %	4,00 %	-				
	Ergonomic adjustment (5%)	0,25 %	-	-	-	4,75 %				
	-Total	23,70%	30,50 %	23,65 %	16,30 %	5,85 %				

Allowable cost of individual components: (importance x allowable costs)

Target profit = (120 € x 0,1) / (1+0,1) = 10,9 € Allowable costs = 120 € -10,9 € = 109,1 €

Corpus $-0.2370 \times 109.10 \in 25.86 \in$, Work tops $=33.28 \in$, Doors and drawer $=25.81 \in$, Connecting materials and forging $=17.79 \in$, Mounts and legs $=6.36 \in$

Functional costs analysis detecting differences between customers' preferences and actual costs level of the product is determined as the collation of individual

	components imp by individual con	ortance and				U	
		Components					
Funct	ions	Corpus	Work tops	Doors and drawer	Connecting materials	Mounts and legs	Total

	·	·	arawer	and forging	and legs	
Storage space	8,295 %	3,050 %	10,6425 %	1,630 %	-	23,62 %

Storage space	8,295 %	3,050 %	10,6425 %	1,630 %	-	23,62 %
Working Space	2,370 %	27,450 %	-	-	-	29,82 %

30,50 %

5,9125 %

7,095 %

23,65 %

6,520 %

8,150 %

16,30 %

0,2925%

5,5575 %

5,85 %

19,83 %

19,99 %

6,74 %

100,00 %

7,110 %

4,740 %

1,185 %

23,70%

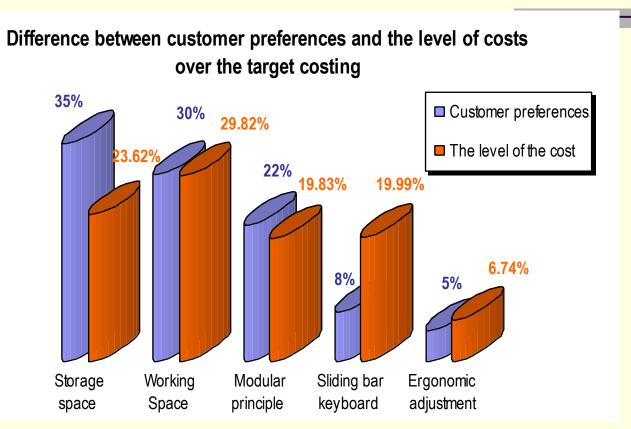
Modular principle

Sliding space keyboard

Ergonomic adjustment

Total

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The biggest disproportion -between the customer's preference and the level of functional costs for the function of sliding space for keyboard of PC desk furniture. While customers' preferences are at the level of 8 %, the costs for this function reach 20 % from the total costs. Removing this function can probably lower the sales volume but on the other hand there can be reached a reduction of total cost of 20% which can be used to lower the selling price or improve other important functions.

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Benefits of aspplication Target costing

- -focused on the customer properties, production methods and product costs are in proportion in relation to price and customer requirements
- focused on reducing the cost pre-production phases,
- determined target or allowable costs for subcontractors
- implementing the strategic ex ante, before the manufacturing process, together with precise marketing research

Risk of aplication Target costing:

SCIENCES AND TECHNOLOGY

- -application especially in the electronics and engineering industry,
- quality development of quantitative functional deployment of customers' requirements
- -alternative for determining the amount allowable cost components





Thanks for your attention



Ing. Marek Potkány, PhD.

potkany@vsld.tuzvo.sk Technical University Zvolen Faculty of Wood Sciences and Technology Department of Enterprise management