Farabi University

- Pricing strategies based on COST\ Target costing
- Management Department
- “Cost Management” Course
- Dr., professor Adambekova A.A.

Let us repeat - Classification of costs according to their dynamics - variable, constant, conditionally variable, conditionally constant

- *One of the tasks of management is to prepare information for internal users necessary for them to make management decisions, and to timely communicate this information to the management of the organization.*
- *In relation to changes in production volume, variable and fixed costs are distinguished (for example, rental and insurance payments, depreciation, etc.).*
- *Fixed costs are those whose value does not depend on changes in production volume or output.*
- *Variables include costs, the value of which changes depending on changes in production volume or output.*
- *The growth of variable costs with an increase in production volume can be: directly proportional (linear); faster than the growth of production volumes; less rapid than the growth in production volumes.*
- *Per unit of output, variable costs remain constant.*

- By classifying costs into fixed and variable, you can solve a number of important problems:
- a) calculate the cost per unit of production, which, unlike the cost formed in accounting, gives managers a more accurate idea of the distribution of costs;
- b) analyze the relationship between costs, sales volume and profit, which makes it possible to establish the degree of influence on the financial result of each product, each type of activity and level of business activity of the enterprise;
- c) make informed management decisions, often opposite to those decisions that would have been made if accounting data had been used as the initial information.

Example 1.

The organization produces and sells 50 thousand units monthly products at a price of $12 per unit. The total production cost is $400 thousand ($8 per unit of production).

In this case, fixed costs are equal to $100 thousand, variable costs are $300 thousand (6 dollars per unit of production).

The management of the enterprise needs to decide whether it is advisable to accept an additional order for the production of 20 thousand units. products that can be sold for $7 per unit.

According to the cost accounting system, the order should have been abandoned, since it involves the sale of products at a price below cost.

But, since the company knows the distribution of costs into fixed and variable, the order should be accepted for execution.

Additional revenue will be $140 thousand (20 thousand units x $7); additional costs - $120 thousand (20 thousand units x $6).

Thus, an additional profit of $20 thousand (140 thousand - 120 thousand units) can be obtained.

- Variable costs increase or decrease in proportion to the volume of production (provision of services, turnover), i.e. depend on the business activity of the organization.
- Business activity is the production activity of an organization, which can be measured both in kind and in value (for example, the business activity of a university is determined by the number of students; a bank - by the number of clients served; a hospital - by the number of beds).
- Both production and non-production costs can be variable.
- Examples of manufacturing costs include direct material costs, direct labor costs, auxiliary materials costs, and purchased semi-finished products.
- Variable costs characterize the cost of the product itself, all others (i.e. fixed costs) – the cost of the enterprise itself.

- The market is not interested in the cost of the organization, it is interested in the cost of the product.
- Total variable costs have a linear dependence on the indicator of the organization's business activity, and variable costs per unit of production are a constant value.
- Fixed costs are the costs of renting premises, security, and other general expenses.
- Conditionally variable (conditionally fixed) costs contain both variable and fixed components.
- An example is the payment for using a telephone, which consists of a fixed subscription fee (fixed part) and payment for long-distance calls (variable component).

Target costing

Target costing is the concept of preventive control of production costs in accordance with market realities. The concept is based on determining the cost of production as a function of price.

Price = Cost + Profit

Cost = Price - Profit

The traditional pricing formula as a function of price has been modified into a function of cost.

Target costing - reverse movement

The concept of target costing involves calculating the cost of products based on a predetermined selling price. This price is determined through market research and is the expected market price.

To determine the target cost of production, the amount of profit that the company wants to receive is subtracted from the expected market price.

Next, all participants in the production process work to design and manufacture a product that meets the target cost.

- Target costing (from the English target costing - target cost) is a method of managing the cost (production costs) of products. The essence is to reduce the cost of products throughout its entire production cycle, through the use of production, engineering, scientific research and development.
- Modern target costing (Japanese name - genka kikaku) originated in Japan in the 1960s. This method was first introduced into practice by the Toyota Corporation in 1965, although some, more primitive forms of it were used by General Electric back in 1947. This company has long used a target cost management system.
- The term was introduced into management accounting by Toshiro Hiromoto in 1988.

Target costing

- Target costing is a management concept that supports a cost reduction strategy and implements the functions of planning the production of new products, preventive cost control and calculating target costs in accordance with market realities.

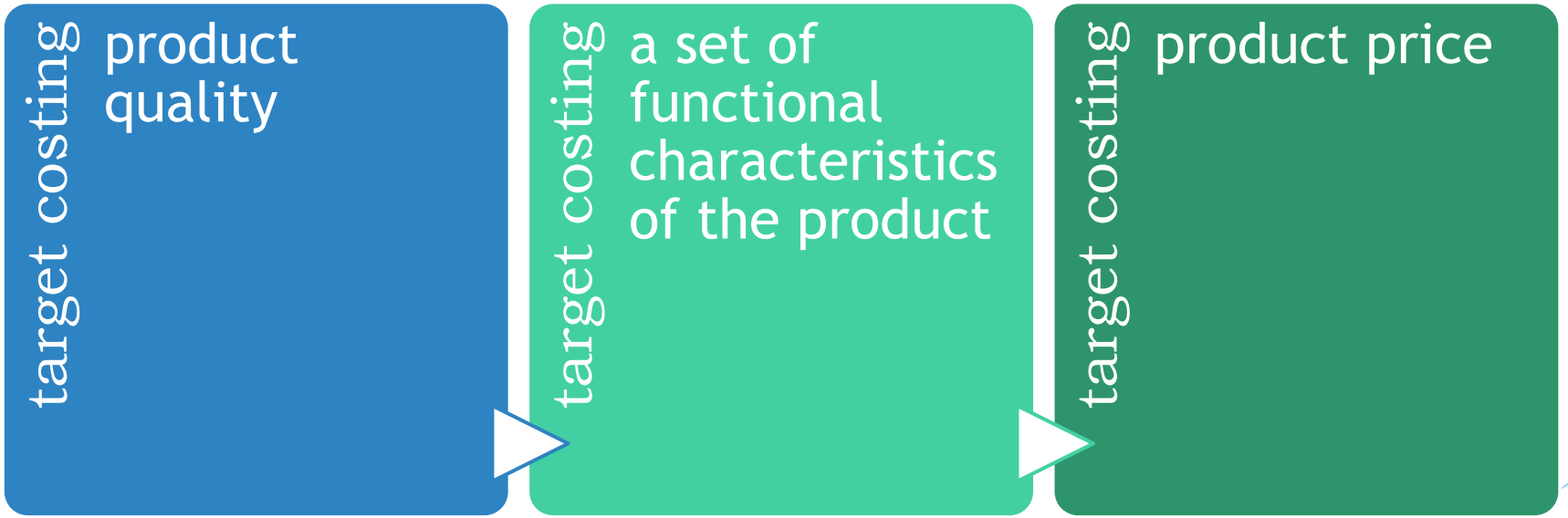
Table - SHARE OF SURVEYED GERMAN ENTERPRISES THAT IMPLEMENTED TARGET COSTING (% of the number of respondents)

Production	As a management tool	As a tool for engineers	Total (implemented)	Not used
Electrical products	48	22	70	30
Vehicles	64	19	83	17
Measuring tools	36	14	50	50
Machines and mechanisms	33	26	59	41
Metal products	29	7	36	64
Total	45	21	66	34

Targeted cost management system

- The target costing system of targeted cost management is based on a very simple idea: if for a successful business a product needs to be sold at a price not exceeding the market price, then determining the cost of future products begins with setting the price for it. The traditional pricing method is simply turned inside out. First, the market price for a given type of product is determined, then the desired profit margin is established, and then the maximum allowable cost is calculated.
- Thus, the allowable amount of cost using the target costing method is determined as follows:
- Price – profit = cost

- The market price in this method is called the target price, the desired difference between the cost and the selling price is called the target profit, and the cost at which the product should be manufactured is called the target cost.
- The process of setting the target price of a product involves the use of a three-level analysis :



Target cost

- The concept of “target cost” differs from the concept of “planned cost” used in domestic economic practice. The main difference is that the planned cost is calculated based on the rules and regulations that exist at a particular enterprise.
- The standards, in turn, are focused on existing production technologies and traditional characteristics of manufactured products. In accordance with this, the planned cost will be nothing more than the average (in some cases the best) values of costs of previous periods, and is completely tied to the internal capabilities of engineering and production.
- Target cost is the cost value that is the maximum allowed (acceptable) by market conditions.

- Thus, the principles of the target costing system are the following:

Primary and constant focus on the requirements of the market and customers

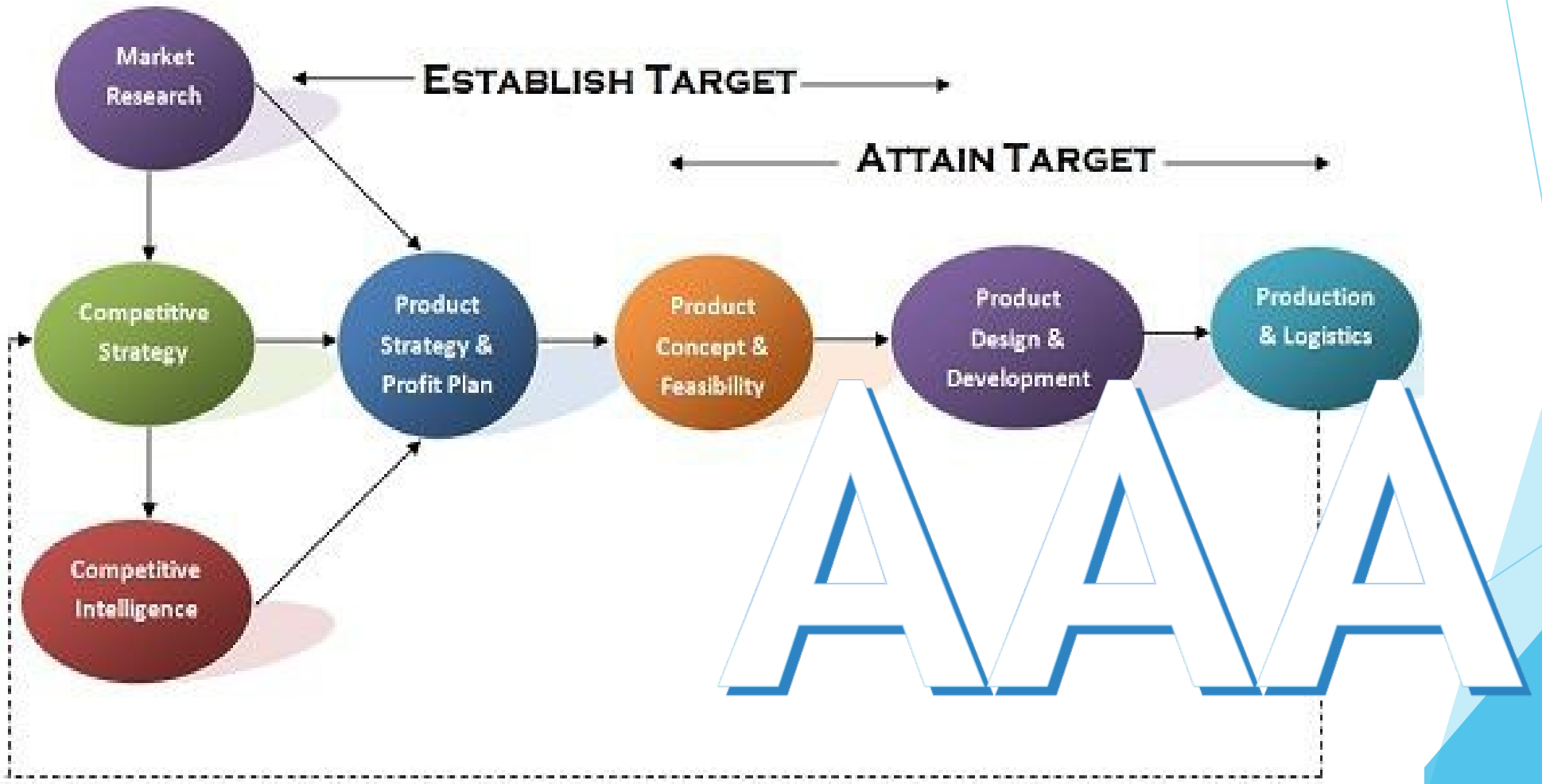
Calculation of target costs for new products, as well as their components, allowing to achieve the desired, predetermined profit under existing market conditions

Taking into account the impact on the cost of production of consumer wishes for quality and production time

Use product life cycle concepts.

Cost management process using target costing

Cost management process using target costing



Case 1

Ming Ltd has the following information:
Costs are variable.
What is the total projected cost in the third month?

	Month 1	Month 2	Month 3
Production (un.)	500	600	700
Production costs	5500	6780	?
Price index	110	113	112

Solution

- Price in month 1 = $5,500 / 500 units. = $11 per unit
- Price in month 2 = $6,780 / 600 units. = $11.30 per unit
- Price in month 3 = ($11 / 110) x 112 = $11.20
- (or using month 2 price = ($11.30 / 113) x 112 = $11.20
- Cost in month 3 = $11.20 x 700 units. = $7,840
- Correct answer: 7840

let's repeat, Case 2

The company produces a single product. The budget for the next month contains the following data:
Production and sales - 120,000 units Break-even volume - 90,000 units
What is the safety margin?

Solution

Safety factor in units = 120,000 – 90,000 = 30,000 units.

Safety factor in % = 30,000 units / 120,000 units. = 25%

Correct answer: 25%

Case 3

- The organization produces the following two products:

	M($)	N($)
Selling price per unit	40	50
Marginal profit per unit	12	20
Budget implementation	4000	6000

- The organization has fixed costs allocated to both products of $120,000 and wants to earn a profit of 40,000.
- How many total units must be produced per order to achieve the target profit level?

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Solution

- Weighted average contribution margin per unit =
- $\frac{(\$12*4000)+(\$20*6000)}{(4000+6000)}=\frac{\$168000}{\$10000}=\$16,80$
- Quantity required to achieve target profit = ($120,000 + $40,000) / 16.80 = 9,524 units
- Correct answer: 9,524 units