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## An analysis of quality efficiency in small business enterprises

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The possibility of implementation of activity based costing in small enterprises (ABC) in small sized enterprises was investigated. ABC model in small enterprises is established. Cost flow dealing with ABC model in small enterprises is shown.

### 1. INTRIDUCTION

Quality efficiency in anyone enterprises, independently of enterprises size, can be considered with different point of view, measured by different measures of efficiency. Under the Total Quality Management (TQM) usually is accepted definition that TQM is continuous improvements in processes, and consequently in the quality of products. However, to this typically engineering point of view, it can be added quality of earnings, as accountant approach quality of financial reports that users in common with financial statement should understand very well. Quality of earnings measures how much the profits companies publicly report diverge from true operating earnings [1]. High quality means that managers has used little or no of its discretionary influence to report money amounts on the financial statements in a way that serves its interests, while low quality means that managers has used much of its influence in creating figures of financial statements.

Quality of financial reports can be considered as quality of observation and reporting of costs originated in making efforts to improve the quality of production processes and quality of products. For small sized enterprises, that usually have very simple production program, cost-benefit analysis of quality of products and investment in quality is very important and it can be decisively for subsistence in market.

Moreover, small sized enterprises usually have poor educated accountants, and for them have to be established very simple system of costs observation, by which it will be possible managed information for making business decisions.

### 2. ACTIVITY BASED COSTING IN SMALL ENTERPRISES

By very considerate and appropriate manner, fundamental postulations for activity-based costing in large sized enterprises can be accepted for activity-based costing in small enterprises.

In developing activity-based costing for small enterprises should be kept in mind three philosophical foundations:

1. Although management theories and concepts and the language used to describe them may be universal, implementation at a smaller organization cannot be simply the downsized version of a large organizations methods;
2. A great management accounting system will not itself make an organization great, but an inadequate and/or misleading system will keep one from becoming great or, worse yet, cause it to fail;
3. It is better to be approximately correct than to be precisely wrong. Accuracy is preferable to precision [2]

U conventional accounting with absorption costing product costs are included in product costs allocating them to products as they move through production cost centers. Direct costs, i.e. direct labor and direct material, are assigned to products as the direct costs are incurred and paid. Indirect costs such as supervision and facility costs are totaled and traced from expense accounts to inventory or costs of sales. Other kinds of costs that are hard to trace to units of final product or service are general and administrative costs. These costs are usually thought of as the costs of being in business rather than assigned to any particular unit of production. They include executive offices, administrative departments and research departments. Such costs are usually not allocated to products but instead are subtracted from revenue to determine income of period. Thus, absorption cost allocations assign direct and indirect costs to products without clear causal links.

An answer to this problem was developed activity based costing (ABC). Activity-based costing begins with the principle that all costs are incurred to benefit some customer. That customer may be a customer of the company final products or an intermediate process. Whatever the beneficiary of a cost is, there is always some objective in its incurrence, and the costs should be traced and assigned to the beneficiary.

ABC is a great and powerful tool for assessment of total quality costs in its ability to identify the costs actually caused by each downstream activity, department and product. It accords with the principles of TQM in its customer focus and in its databased approach to cost assignment.

### **3. SETTING UP AN ABC MODEL IN SMALL ENTERPRISES**

The steps needed to establish an activity cost model depends of approach: activities defined and listed, collected their costs and traced their beneficiaries; department and define its activities, then trace its outputs to beneficiaries; departments or products and trace backward to the activities whose outputs they use.

Upstream tracing of costs from beneficiary to provider, the steps may be:

1. Define units or products for which activity costs are to be calculated,
2. Determine the activities that are conducted within those units or for those products,
3. Classify the costs of these activities as: direct labor; direct material; indirect production costs; general and administrative costs,
4. Trace resources used in providing direct labor and material (such as training or paying personnel in purchasing, moving and storing material),
5. Trace indirect costs,
6. Determining the costs of each resource, including all of its supporting cost elements,
7. Establish links between activities within the target cost object and activities that provide resources to the target cost object,

8. Select activity measures that relate the amount of activity in supplier organizational units to the outputs that are passed to beneficiaries (for example, the number of issued invoices and received customer claims in sales, or number of checks in payroll activity),
9. Use activity measures to assign activity costs to benefits.

#### **4. COST FLOW PATTERN**

The four cost categories and four cost center categories are set out as eight distinct levels, shown on the diagram. The purpose of this cost diagram is to serve as a means of visualizing the cost flows as the system is under development and to serve as documentation of the final cost flow pattern when the system is completed. Cost flow diagram is shown in Figure 1. The three cost categories, and only in these levels are costs incurred. Level 1. costs, salaries and wages, and level 2. costs, fringe benefits, can flow to any level where labor takes place. Level 3. costs, variable operating cost elements, and level 4, fixed cost elements and discretionary cost elements, are indirect costs that can be charged directly to cost centers. Levels 5. through level 8. represent cost centers. Service centers and support activities are business within the business that can charge their costs to the cost centers, customers or project that demand their services. As a result, level 5, level 6 and level 7 costs can flow to any lower level or the cost objective itself.

Problem in the flow of service center costs and support activities is that it is possible for service or support centers to demand each others services. Maintenance may need to perform work in engineering, and engineering may have to provide support for the tool room. One solution is to use simultaneous equations to calculate the costs of cross charges services. A simpler solution would be to establish a flow hierarchy within the group of service and support centers so that costs could flow in only one direction.

#### **5. CONCLUSIONS**

For small sized enterprises, that usually have very simple production program, cost-benefit analysis of quality of products and investment in quality is very important and it can be decisively for subsistence in market. Usually ABC is very complicated and expensive, and not seized for smaller enterprises. Smaller enterprises do not necessarily represent the only correct cost flow concept, or even the best one. By very considerate and appropriate manner, fundamental postulations for activity-based costing in large sized enterprises can be accepted for activity-based costing in small enterprises. Suggested model significantly simplified ABC system convenient for small enterprises.

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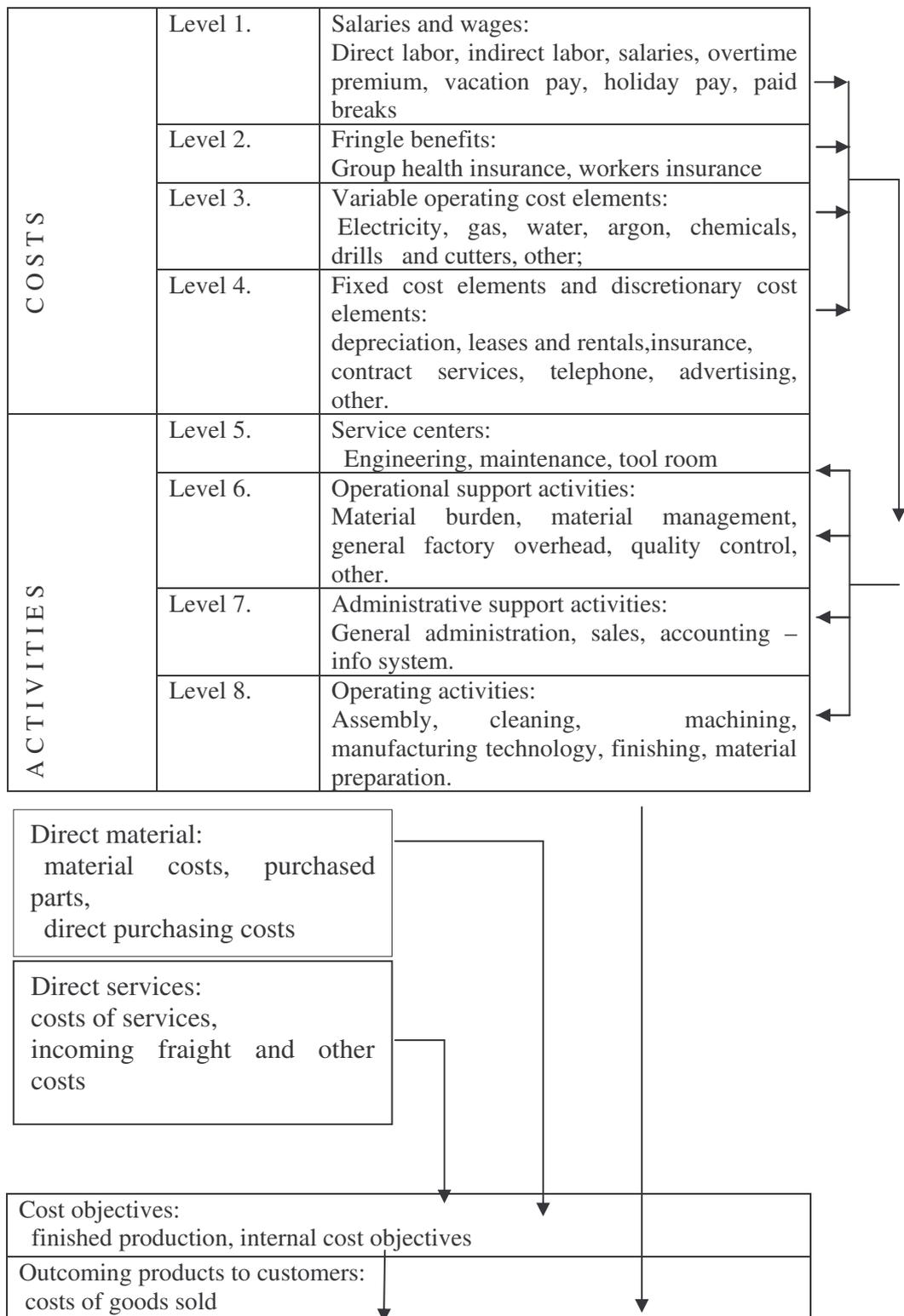


Fig. 1. Cost flow diagram