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An Analysis of Costing Systems

The US has a great economy, one of the largest in the world. The government and its regulations certainly do play a major role. But we mostly owe our successful economy to the several businesses across the country and their daily transactions. Whether it is a corporation, a LLC, or a small business, our economy is just the reflection of their overall success. A business can either sell goods or provide some kind of service or even do both. No matter what their main activity is, to be successful, providing a good or service must bring in more money than it costs to provide it. It is therefore essential to be able to accurately track costs. One question that comes to mind: how to keep track of costs accurately? There are many ways of costing—assigning costs to cost objects—or costing systems.

Job-order costing best suits businesses with many different kinds of products or services. In this type of company, each order—called job—is different from the others. So, the costs are directly traced and allocated to jobs. The unit product cost refers to the average cost per unit. It is equal to the total cost of a job divided by the number of units in it. The total cost of a job is made up of the following: the direct materials costs, direct labor costs—labor that is easily traced to the job, and any other manufacturing overhead costs that apply. The quantity of each type of material needed to complete a unit product is listed on a document called the bill of materials (Garrison). After this step, the company will negotiate and hopefully reach an agreement with the client about the quantities, prices, and shipment date for the order. It is only then that the company will issue a production order. On the other hand, keeping track of the labor is not as

Ngandu | 1

demanding. With the technology we enjoy today, most companies can easily and accurately keep track of labor hours spent on a specific job. Finally, the manufacturing overhead cost is needed to determine the total cost of the job. Manufacturing overhead being an indirect cost, it is either impossible or difficult to assign these costs to a particular job (Garrison). So, instead of tracing overhead costs, they are allocated to products. The company picks an allocation base, and before the accounting period begins, they compute a predetermined overhead rate. The rate is equal to the total estimated overhead of the period divided by the total estimated amount of allocation base. Throughout the period, they assign overhead costs to each specific job by multiplying the predetermined overhead rate by the amount of the allocation base incurred by the job. At the end of the job, they will sum up all the three type of costs that have been incurred by the job. Thus, the total cost via job-order costing is the sum of the direct materials and labor plus the overhead assigned.

Industries that convert raw materials into homogenous products prefer process costing systems. Companies in these industries have processing departments through which materials go to get transformed into finished goods. In this system, the cost isn't traced to an order but rather to a specific department (Garrison). As in job-order costing, direct materials, direct labor, and manufacturing overhead costs make up the cost. Unit costs are computed for each department, which are equal to the total cost incurred in that department divided by all the units that have flown through it for a certain period. The total cost of a product is therefore the sum of every cost it has incurred in all of the different departments it went through. Cost are traced very similarly to the job-order costing system with a slight difference in the computation of the overhead. In the process costing, each department has its allocation base and therefore its own predetermined overhead rate. So, the manufacturing overhead is allocated by multiplying the overhead rate by

the total allocation base incurred in that department. Then, the total cost of each department is put together to come up with the total cost through the process costing system.

Activity-based costing—abbreviated ABC—gives a better picture of the costs that really impact the activities of a company. Though it cannot be used for external reports as it doesn't follow GAAP, it can be a very useful extra tool for important internal decision making. Unlike any other costs, direct material and labor costs are traced pretty accurately with most costing systems. ABC costing focuses on the costs that cannot be easily traced to the product but still are incurred by it. It wouldn't be efficient to spend extra resources on costs that are already accurately traced. Activity-based costing uses a cause-effect basis to assign costs. So, manufacturing or nonmanufacturing costs can be assigned to a product, and some manufacturing cost might not even be counted. Any event that consumes overhead resources is described as an activity.

Costs related to a single activity are regrouped in activity cost pool. The cost driver which is the allocation base of an activity, is called an activity measure. Instead of allocating costs based on the volume of production like most other systems, ABC uses levels of activity (Garrison). There are five of them: unit-level, batch-level, product-level, customer-level, and organizational-sustaining activities. Once the activities, activity pools, and activity measures have been clearly defined, the next step is to assign the overhead costs to activity pools. In this step, the indirect costs from the general ledger are assigned to the different cost pools of the company via the allocation process called first-stage allocation (Garrison). It is usually based on the results of interviews with employees who have first-hand knowledge of the activities. After that, the company will proceed to the computation of the activity rate for each cost pool except for the organizational-sustaining activities. The activity rate is equal to the cost of an activity pool divided by its total activity. The rate reflects the average consumption of resources by an activity.

Finally, the overhead costs are applied via the second-stage allocation (Garrison). In this step, the activity rate is multiplied by the actual activity of a cost pool to get the overhead assigned via ABC system. The total cost of a product is therefore equal to the direct costs traced plus the sum of all the ABC overhead costs.

Among the three costing systems aforementioned, I have a preference for the job-order costing system. The ability to know how much each order costs can only help the efficiency and profits of the company. An example of a company that would use job-order costing might be Caterpillar, Inc., which is a corporation that designs, develops, engineers, manufactures, markets, and sells engines and large machinery, among other items. The goal is to make profit off all its products. So, knowing the exact cost of a product that is being ordered helps determining the profit-maximizing price.

Works Cited

Garrison, R. H., Noreen, E. W., & Brewer, P. C. (2018). *Managerial accounting* (Sixteenth ed.). New York, NY: McGraw-Hill Education.