

"A Proposed Approach to Developing an Activity Cost Accounting System for Accounting for Product Lifecycle Cost - An applied Study"

Research objective:

The objective of the research is to increase the efficiency and effectiveness of the role of the cost accounting system in rationalizing the company management by studying the reasons for the failure and shortcomings of traditional cost systems and providing a proposed framework for the accounting system of the product life cycle costs, to provide the cost information that serves the new decisions throughout the product life cycle, and to help for Increasing the effectiveness of cost management, profitability and quality of the product throughout its life cycle.

Research problem:

the changes and developments in the business environment and industry impact on the cost accounting system as one of the main information systems of the company , It has become clear that increasing the degree of development and technological progress and the intensification of competition and the diversity of the wishes and demands of customers so that the continuation of institutions in the market is governed by their ability to create new high quality and competitive price products, And the development and modernization of new products in short times at close intervals, as a result of which the product life cycle has become short, so that the chances of influencing on profit are concentrated in the stage of the product development and design, in which the largest percentage of cost are determined

Under the developments in the modern environment of manufacturing, and the multiplicity of products, the shortening of their life cycle, and the increasing of the quantity and quality of decisions required to be taken, the traditional cost systems are not suitable for modern environment characteristics. As a result, the cost systems should be developed to provide cost information rapidly, and in a timely, It is one of the most important systems that have been called upon to develop and introduce is the product life cycle cost accounting system, and that is the problem of research, which the researcher seeks to submit proposals to contribute to solving.

Research findings :

- 1- The development of the product life cycle cost accounting system have been in several Dimensions: concept, objectives, system components, development and use of accounting and cost management methods, procedures and steps of this

system in order to measure, control and reduce the total cost of the product life cycle.

- 2- The product life cycle cost accounting system is an integrated information based on the description, planning and measurement of all the sacrifices and benefits expected from the product to be produced, over its lifetime, whether these sacrifices and benefits are short term or long term, and whether tangible or intangible, depending on a set of components and methods cost accounting and management, so that the cost and benefit information can be provided in which appropriate characteristics are available for different cost objects and activities, And to report all such information in such a way as to enable decision-makers to make appropriate management decisions.
- 3- The product life cycle cost accounting system provides the base to measure and manage the cost of many cost objects, including quality costs, environmental costs and other, which lead to increase the effectiveness of quality improvement over the product life cycle and reduce costs.

Recommendations: In light of the conclusions of the research, the researcher recommends the following:

- 1- The necessity of coordinating the related ministries by manufacturing in Egypt, the Ministry of Industry and the Ministry of Scientific Research as well as the related bodies in order to raise the awareness of the producers to take the concept of the product life cycle and product profitability management from a comprehensive perspective at the stage of development and design of the product. As well as the participation of these bodies to the development of a comprehensive industrial database of the latest models and their components and activities and the nature and conditions of each stage, and the conditions of global competition and others, which supports the factories with the information it needs as a start to develop products competing globally.
- 2- Continuing the flow of the results of scientific research and specialized studies in all fields in general and cost accounting in particular to ensure that all new are provided to industrial companies in order to achieve their development and increase their competitiveness and international standing. This can be achieved by ensuring continuous flow of scientific research results, through:
 - A- Establish a committee that includes specialties from all scientific research establishments that are in Continuous contact and connect with the industrial companies.
 - B- Holding educational sessions for cost accountants
 - C- Holding periodic conferences gathering researchers and industrialists to present the results of scientific research and at the same time receive problems in industrial companies to contribute to their solution.