7.4: Accounting Methods

In recent years, overhead costs have become an increasingly significant part of product cost. Managers need high quality cost information to maintain greater control of processes and achieve quicker responses to competitive pressures. As a result, firms are using **activity-based costing (ABC)** to pinpoint internal company costs associated with each step in a production or service-related activity.Kaplan and Cooper (1998). While ABC is appropriate for financial reporting according to Generally Accepted Accounting Principles (GAAP), sustainable businesses seek to account for all costs over the long term. That is, sustainable businesses are looking beyond internal costs and are including broader considerations such as costs associated with the entire value chain or, as discussed in past chapters, the costs associated with cradle to cradle activities. **Sustainability costing** seeks to internalize those costs that have been historically externalized. The sustainable business now considers the financial costs of products and services over their lifetime and throughout the supply chain rather than passing those costs to society and the environment.

Accounting methods taking a longer term orientation include life cycle costing, life cycle environmental cost analysis, and full cost accounting. **Life cycle costing (LCC)** or life cycle cost analysis seeks to fully capture and internalize costs by examining the total cost from inception costs of products (development or purchase, delivery, installation) to operating costs (energy, water, maintenance, and repair) to end-of-life costs of products (removal, replacement, salvage, disposal).Barringer (2003). LCC cannot be used for financial reporting and, in general, is not consistent with GAAP, but is a useful tool for managers in costing from a planning standpoint.

Life cycle environmental cost analysis (LCECA) is another form of LCC; however, the objective of LCECA is to include eco-costs into the total costs of the product, or the direct and indirect costs of the environmental impacts caused by the product. With LCECA, sustainable businesses can more clearly identify feasible alternatives for cost-effective, environmental products.Kumaran, Ong, Tan, and Nee (2001).

Full-cost accounting (FCA), also known as total cost accounting, broadens the assessment of external costs and incorporates future costs. This approach seeks to determine the full cost of the societal, economic, and environmental impact (triple bottom line) of a given manufacturing or service activity. Fundamental to FCA is the valuation of the opportunity costs, hidden costs, or trade-offs that were made when the option to use a particular limited resource was selected.Carter, Perruso, and Lee (2008).

Accounting professionals are in a unique position to help the organization accurately measure and report social, economic, and environmental impacts. Various accounting methods and measurement and accounting tools aid in capturing the real costs of products and processes. Furthermore, a common sustainability-reporting framework exists to guide organizations in understanding what items to report. Lastly, guidelines for assurance and stakeholder engagement also exist to provide assistance for businesses.