Understanding Profit and its Components

Byron A. Ellis – November 9, 2017

Profit is the difference between revenue and cost, where revenue is the selling price times the number of items sold, and cost is the sum of wages paid to inputs of the production process and it includes fixed cost. Businesses maximize profits by increasing revenue or reducing cost, or doing both. Thus, it is important to understand the components of profit: revenue and cost as well as their subcomponents. The production function for a firm is a technological relationship between inputs, such as capital, labor and materials; it determines the level and quality of outputs. Many production functions, however, lack best available technologies (BAT) and are unable to optimize output.

A firm's revenue not only depends on BAT, it also depends on its administrative capacity, available production budget, demand for its products, as well as market share. In competitive markets, the demand for the firm output is a function of the output price of its products and consumers' income and the firm cannot control the latter. Competitive firms are price takers. Moreover, when income falls due central bank monetary tightening, the demand for the firm's products and its revenue often falls, due to less currency in circulation.

In the short-run, the firm's costs, production function, and the price of labor and materials are often fixed and difficult to moderate. In the long-run firms can change their production function, control fixed costs and even some variables costs. Firms can control life cycle cost of physical structures and equipment through optimal designs, procurement, best practices and so on. Thus, firms can control capital investment, maintenance costs, employee training and even taxes by lobbying government officials.

Unfortunately, some businesses only focus on controlling costs during economic downturns. World Class firms focus on costs continuously. There are three different concepts of costs that managers should always keep separately, total, average and marginal (Alchian & Allen, 1977). Total cost is the aggregate cost of all inputs to the production process, average cost is the total cost divided by the number of outputs, and marginal cost is difference in the total cost of a production for making one additional unit. For Alchian and Allen the cost of any act is the most valuable alternative forsaken.

Costs incurred in the production process and borne by the public without compensatory remedies are harmful externalities, such as toxic fumes from chemical plants, acidic rain from fossil fuel plants or fertilizer run off from farms. Businesses often evade these costs by disregarding production effluents.

One way of understanding business cost is to use enterprise resource planning (ERP) systems to document and drill down to the lowest cost element. An ERP system is an integrated software package of financial, manufacturing, maintenance, distribution, logistics, quality control, and human resources modules that enables real-time access to information across organizational functions and locations (Aladwani, 2001; Dong, 2001). The basic function of ERP systems is to handle data: getting, storing, and making the data available enterprise-wide in modules of functionality. Most modules are interdependent (Markus, Petrie, & Axline, 2000). ERP systems incorporate graphical interface and can be multi-lingual to accommodate sites in foreign countries. These systems support best practices, such as Business Process Redesign (BPR) across several core business functions.

With a computerized management system, managers can develop metrics, set goals, track and reconcile monthly costs, compare similar outlays between different periods, identify repetitive costs, as well as high cost outlays. Of course, many organization have computerized management systems, but many do not function as accounting systems and often they have multiple legacy systems that are not interoperative. That is, they lack interoperability inherent in ERP systems.

World Class firms use ERP systems to track and reconcile monthly costs and to identify and eliminate or mitigate unwanted repetitive outlays. Thus, they are constantly minimizing organizational costs.

References

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