Unit 21
Performance Management in Decentralized Organizations: ROI Method

ILO1. Decentralization in Organizations
ILO2. Return on Investment

ILO1. Decentralization in Organizations

This section addresses the issue surrounding organizational design and decision making. Particularly we are focusing on decentralization and how decision making is distributed throughout the organization. Here we present a summary of the advantages and disadvantages.

By allowing for decentralization, it has often proved to increase worker morale and thereby motivation and worker retention. Ascending into management, lower level managers gain important decision making experience necessary for promotion. These managers also gain the ability to respond better and more efficiently to customers as it takes advantage of their knowledge of local markets which aids in daily operations. And finally, have a more diversified decision making process allows for upper management to concentrate on planning and strategic initiatives.

There are fewer disadvantages to decentralization, primarily the difficulty in transmission and understanding or reasoning of ideas throughout all levels of an organization. Following this, mid level management can sometimes have differing objectives to upper management due to lack of coordination between the two. Last of all, these same mid tier managers may make presumptuous decisions based on lack of scope and depth.

This relationship between authority and decision making has a big influence over accounting systems, with an emphasis placed on any part of the organization that has impact on the outcomes of decisions being made. Accountability must be considered over costs, profits and investments, hence a "responsibility centre" is often created to monitor and control such actions.

- Cost Centre: This manager has no control or authority over revenue or investments but does oversee costs. Services departments for example admin, legal and other type facilities are usually classified as cost centres. In measuring the performance of the cost centre, standards involving cost variance, and budget variance are considered.
- Profit Centre: This manager controls costs and revenue, and their performance is evaluated by comparing their profits against their targeting profits.
- Investment Centre: This managers has the most authority, with control over costs, revenue, and operating investments. Evaluations of investments are done by using the return on investment (ROI) approach.

ILO2. Return on Investment

As stated above, the investment centre is measured by the return on investment method explained below.

$$ROI = \frac{\text{Net operating income}}{\text{Average operating assets}}$$

Fig 21.1 ROI Formula

To better explain this ROI method, we operating income as the income generated before taxes (EBIT). The sub value of operating assets includes both cash accounts and noncash accounts for example cash, accounts receivable, inventory, equipment, supplies etc. The average then, is the average taken of these assets from the beginning of the year to the end of the year.

One issue regarding this, is the use of net book value which is the asset acquisition cost minus the accumulated depreciation, to calculate the average operating assets determined by the formula. By doing so, ROI increases over time as depreciation similarly increases. However, by replacing a fully depreciated asset with a new acquisition will have a negative affect on ROI and decrease it.

To compensate for this occurrence, accountants use the gross cost of an asset, which ignores said accumulated depreciation. This way, ROI does not increase over time but remains constant, and replacing a worn out asset does not negatively impact ROI.

Organizations have been using ROI as part of their strategy evaluation for the benefits in analyzing margin and turnover; as they relate to assets. Margin is found with the illustration below, and is improved by increasing the number of unit sales, their unit price, or the reduction of operating expense per dollar sales.

$$Margin = \frac{\text{Net operating income}}{\text{Sales}}$$

Fig 21.2 Margin Formula

The turnover we mentioned before refers to the formula below. The variables relate to the responsibility of the investment manager in control of assets. Surplus capital locked into operating assets decrease this turnover and as a result decreases return on investment.

$$Turnover = \frac{\text{Sales}}{\text{Average operating assets}}$$

Fig 21.3 Turnover Formula

To better depict how to increase return on investment, we will use the following example using the simplified formula below.

$$ROI = Margin \times Turnover$$

Fig 21.4 ROI Formula Modified

Alpha Company has the following reports for year end;

Net Operating Income	$30,000
Average Operating Sales	$200,000
Sales	$500,000
Operating Expenses	$470,000

Using our turnover, and margin formulas we can find the return on investment equal to 15% (30,000/200,000).

If we imagine the manager decides to invest $30,000 in acquiring new asset that increases sales by $35,000, but also increasing operating expense by $15,000 then Alpha Company would have the new following reports at year end;

Net Operating Incomes	$50,000
Average Operating Assets	$230,000
Sales	$535,000
Operating Expenses	$485,000

Using our turnover, and margin formulas we can find the return on investment equal to 21.8% (50,000/230,000).

Despite its usefulness, return on investment methodology does has its detractors. For examples managers may not know how to increase the company's return on investment in line with company strategy. Furthermore, numerous manufacturing departments have committed fixed costs that cannot be altered. And as a managers performance can be based on return on investment, they may be reluctant to of investment opportunity that risks their performance assessment.

References:

1. Managerial accounting, Ray Garrison-Eric Noreen-Peter Brewer - McGraw-Hill Education, 16 ed., 2018
2. Managerial accounting, John Wild-Ken Shaw - McGraw-Hill Education, 7ed, 2019
3. Management accounting, Will Seal-Carsten Rohde-Ray Garrison-Eric Noreen - McGraw-Hill Education, 6ed. - 2019