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"OPTIMISATION OF RISK ON RETURNS BY PORTFOLIO ANALYSIS"

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Abstract - *Working capital plays an important role in any organization and to raise working capital, investments are to be made. To make such investment in any sector the knowledge of portfolio is necessary as it not only predicts returns on investment but also it evaluates the associated risk with the investment. People / companies are investing lot of money on construction industry to gain more and more profit on the investment but at the same time they have to bear some risk which causes loss or at worst case heavy loss. This study identifies those risk elements of investment and gives proper ideas to investor whether to invest or not. Portfolio analysis requires period for which an investment is to be made, risk, rate of return and market condition. This portfolio analysis gives range of returns to investor so that they can predict returns on investment made. Through this analysis one can arrive at the decision whether to invest in single asset or in multiple assets. Portfolio management is a deterministic tool which maximizes the profit of an organization / investors.*

Key Words: **NPV, BCR, IRR**

1. INTRODUCTION

Portfolio management is a dynamic decision process, whereby a business's list of active new product (R&D) projects is constantly up-dated and revised. In this process, new projects are evaluated, selected and prioritized, existing projects may be accelerated or killed, and resources are allocated and reallocated to the active projects. The portfolio decision process is characterized by uncertain and changing information, dynamic opportunities, multiple goals, strategic considerations, interdependence among projects, multiple decision makers and locations.

The portfolio decision process encompasses or overlaps a number of decision making processes within the business, including periodic reviews of the total portfolio of all projects (looking at the entire set of projects, and comparing all projects against each other), making Go/Kill decisions on individual projects on an ongoing basis and developing a new product strategy for the business, complete with strategic resource allocation decisions. Portfolio Management is defined as the art and science of making decisions about the investment mix and policy, matching investments to objectives, asset allocation for individuals and institutions, and balancing risk against performance.

1.1What is Portfolio analysis?

Portfolio analysis is the art and science of making decisions about investment mix and policy, matching investments to objectives, asset allocation for individuals and institutions, and balancing risk against performance.

Portfolio analysis is all about strengths, weaknesses, opportunities and threats in the choice of debt vs. equity, domestic vs. international, growth vs. safety, and many other trade-offs encountered in the attempt to maximize return at a given appetite for risk.

1.2 Need for Portfolio Management

Portfolio management presents the best investment plan to the individuals as per their income, budget, age and ability to undertake risks.

Portfolio management enables the portfolio managers to provide customized investment solutions to clients as per their needs and requirements.

Portfolio management minimizes the risks involved in investing and also increases the chance of making profits.

Portfolio managers understand the client's financial needs and suggest the best and unique investment policy for them with minimum risks involved.

2. Methodology of the work

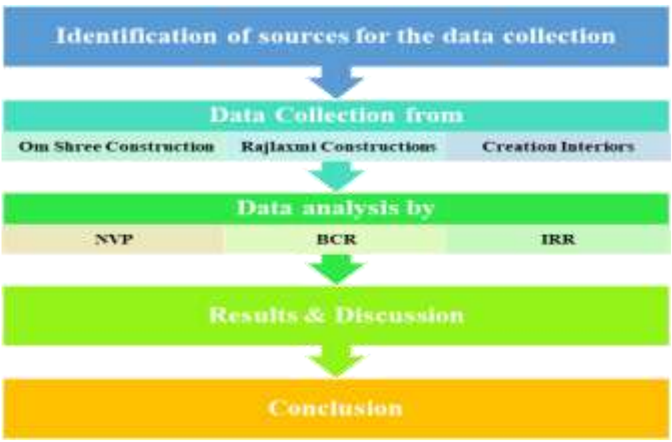

Figure 1 Methodology Flowchart

3. Data collected from the prominent firm Om Shree Construction (Price is lacs rs)

Table 1 Data collection from Om Shree Construction

Portfolio analysis												
Returns from the business (OM SHREE CONSTRUCTIONS)												
Year	Yearly overhead /	Contracting		Land		Real estate		Real estate		Consultancy		Discounted rate
		Cash outflow	Cash inflow	Cash outflow	Cash inflow	Cash outflow	Cash inflow	Cash outflow	Cash inflow	Cash outflow	Cash inflow	
2011	2.1											8.75%
2012	2.22			91		144						12.50%
2013	1.3											12.50%
2014	1.6											13.00%
2015	4.4				113		257					12.50%
2016	3.8			125						2.5	6	13.00%
2017	3.11			112		225.5						14.00%
2018	4.1				277+							14.00%
2019	3.9						238.8					14.50%
Total	26.53			328	390	369.5	495.8			2.5	6	12.75%

4. Data Analysis

The collected data is been analyzed through the; Net Present Value, Benefit Cost Ratio & Internal Rate of Return. As these methods not only provides the base for futuristic investment but also provides true fact that whatever may be investment in any year, the returns which client, contractor fetches from the investment made consists of Time Value of Money meaning that, The time value of money (TVM) is the concept that money available at the present time is worth more than the identical sum in the future due to its potential earning capacity. This core principle of finance holds that, provided money can earn interest, any amount of money is worth more the sooner it is received. TVM is also sometimes referred to as present discounted value.

These three methods are best suited for the most of the cases to determine the profitability of the project.

1. Net Present Value (NPV)

What is Net Present Value?

The net present value rule is the idea that company managers and investors should only invest in projects, or engage in transactions that have a positive net present value (NPV). They should avoid investing in projects that have a negative net present value. It is a logical outgrowth of net present value theory.

2. Benefit-Cost Ratio – BCR

What Is A Benefit-Cost Ratio – BCR?

A benefit-cost ratio (BCR) is an indicator used in cost-benefit analysis to show the relationship between the relative costs and benefits of a proposed project, expressed in monetary or qualitative terms. If a project has a BCR greater than 1.0, the project is expected to deliver a positive net present value to a firm and its investors.

3. Internal Rate of Return (IRR)

What Is the Internal Rate of Return (IRR)?

The internal rate of return (IRR) is a metric used in capital budgeting to estimate the profitability of potential investments. The internal rate of return is a discount rate that makes the net present value (NPV) of all cash flows from a particular project equal to zero. IRR calculations rely on the same formula as NPV does.

A. NPV calculations

For Om Shree Construction

- NPV = ⍰ 57.14 lacs ⍰

B. BCR Calculation

For Om Shree Construction

- BCR = 1.23

C. IRR calculations

For Om Shree Construction

- IRR = 22.75%

5. Results and Discussions

This study helps in determining the Investment - Returns characteristics for various business and the outcome of the results gives the best strategy for the firm/ company where to invest the money. How much to invest? What are probable factors associated with the investment to be made? What is the significance of the returns?

In short instead of making investment blindly the study gives the concrete decision for investment proposal which is ultimately beneficial for firm/ company to maximize the net profit.

- From the NPV calculations it is clearly seen that the Om Shree Constructions is earning a great profit. The NPV value should be positive which confirms that the firm is not making any loss out of the investments.
- From the BCR calculations it is clearly seen that the Om Shree Constructions is having BCR valur greater than 1 shows that all the firm are making profit.
- From the IRR calculations it is clearly seen that the Om Shree Constructions is having higher IRR value. However higher the value of IRR is recommended for choosing the project.

6. Conclusion

The money or working capital is required for growing / expanding business. This study will prove to be useful for construction industry in order to make wise investment plans by reducing the associated risk and predicting optimum returns on capital investment. The benefits gained by the companies / individuals will be in terms of increased in net returns on some capital investment.

The huge losses experienced by the companies / individuals due to unreasonable investment; this study will be remedial measure for getting maximum returns on investments. The portfolio management sets benchmark for minimum returns on the investment made, so that one can be assured of getting net returns after stipulated years of investment. It is clear that Om Shree Constructions is making huge profit out of their investments.

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