Portfolio Management of Builders

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Abstract - *When a construction company invests in a variety of projects, the combination can be viewed as a portfolio of projects. Such a portfolio is efficient if the contractor can diversify the projects. It is important to recognize that investment in construction projects differs somewhat from those in securities.*

***Key Words*: Portfolio of projects, diversification, recognize investments in projects.**

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.

2. METHODOLOGY

2.1. Accounting Rate of Return (ARR)

ARR- it is also known as *Average Rate of Return.* it is a financial ratio used in capital budgeting without considering time value of money. ARR calculates the return, generated from net income of the proposed capital investment.

ARR is calculated as $\frac{NET\ PROFIT}{AVERAGE\ ANNUAL\ INVESTMENT} \times 100$

And net profit = $\sum$ net income or gain - $\sum$net outcome or expenditure.

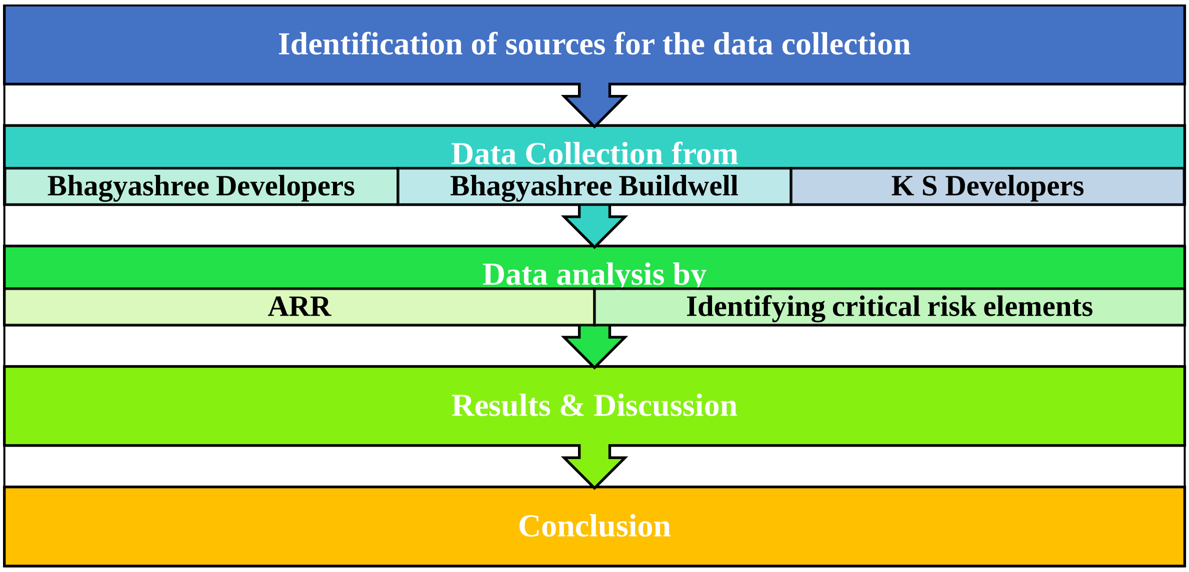
Occurrence					
5	5	10	15	20	25
4	4	8	12	16	20
3	3	6	9	12	15
2	2	4	6	8	10
1	1	2	3	4	5
Impact	**1**	**2**	**3**	**4**	**5**

Identifying critical risk elements based on its Impact and Occurrence on a 5-point scale

2.2. Identifying critical risk elements

Table 1: Combined risk with percentage and significance

Combined Risk	Percentage	Significance
20-25	75-100	Very High Risk
10-20	45-75	Medium Risk
5-10	20-45	Low Risk
1-5	1-20	Very Low Risk



Flow Chart showing the research methodology

3. DATA Collection

The source of data for the purpose of study will be both primary and secondary:

- Primary Data: The data provided by the firm/ individual was been analyses by using Investment year and Portfolio interest rate determine the net returns.
- Secondary Data: the data is used in this study is of secondary nature. the data collected from source such as web sites, journals and bank.

Table 2: Returns from Business (Bhagyashree Developers)

Portfolio Analysis						
Returns from the Business (Bhagyashree Developers)						
Year	Yearly overhead	Land		Real Estate(Residential)		Discounted Rate
2011	2	150				8.75%
2012	2			60	50	9.25%
2013	2			75	150	9.50%
2014	2			15	150	9%
2015	2				50	10%
Total	10	150		150	400	9.30%

Table 3: Returns from Business (Bhagyashree Buildwell Pvt Ltd)

Portfolio Analysis								
Returns from the Business (Bhagyashree Buildwell Pvt Ltd)								
Year	Yearly overhead	Land		Real Estate(Residential)		Real Estate(Commercial)		Discounted Rate
		Cash Inflow	Cash Outflow	Cash Inflow	Cash Outflow	Cash Inflow	Cash Outflow	
2014	5	200						8%
2015	5					87		9%
2016	5			75	100		100	9.25%
2017	5			75	215		22	9.75%
2018	5			50	115		22	10%
2019	5				75			10.25%
Total	30	200		200	505	87	144	9.38%

Table 4: Returns from Business (K S Developers)

Portfolio Analysis						
Returns from the Business (K S Developers)						
	Yearly	Land		Real Estate(Residential)		
Year	overhead	Cash Inflow	Cash Outflow	Cash Inflow	Cash Outflow	Discounted Rate
2013	3	105				8%
2014	3			70		8.50%
2015	3			70	65	9%
2016	3			35	125	9.50%
2017	3				80	9.75%
2018	3				24	10%
Total	15	105		175	394	9.13%

4. DATA ANALYSIS

ARR Calculations:

1. ARR of real estate residential business from table 2

$$\frac{(400-310)}{(310 \div 5)} \times 100 = 145.161\%$$

2.1. ARR of real estate residential business from table 3

$$\frac{(505-430)}{(430 \div 6)} \times 100 = 113.154\%$$

2.2. ARR of real estate commercial business from table 3

$$\frac{(87-63.63)}{(63.63 \div 6)} \times 100 = 113.154\%$$

3. ARR of real estate residential business from table 4

$$\frac{(394-295)}{(295 \div 6)} \times 100 = 201.356\%$$

5. RESULTS AND DISCUSSIONS

We have analyzed the three various firms as follows:

1. Bhagyashree Developers

2. Bhagyashree Buildwell Pvt. Ltd.

3. K S Developers

As per the ARR calculations and the data available from the firms it seen that the ARR for the given above firms is as below:

1. ARR = 145.161%
2. ARR = 113.154%
3. ARR = 201.356%

We have also determined the risk for the firms in their project involved:

1. **Low Risk for Bhagyashree Developers:** The reason for low risk in the firm is basically if there is a small project and that too a residential one there are only a few parameters to look out so the risk involved in such projects is very low.
2. **Medium Risk for Bhagyashree Buildwell Pvt. Ltd.:** The reason for medium risk in the firm is because it is a residential as well as commercial project, so there are many factors to be taken into consideration and many parameters to look out so the risk involved in such projects is medium.
3. **Medium Risk for K S Developers:** The reason for medium risk in the firm is because it is a residential project which is on the large scale so there are many factors to be taken into consideration and many parameters to look out so the risk involved in such projects is medium.

The above results give us an idea about where to invest and how much to invest and in what it should invest. It is seen that that the best investment strategies which maximizes net returns. The returns based on their studies and area.It also gives the associated probable risk involved and how to mitigate the risk.The parameters required for portfolio design are evaluated such as risk, period of investment, returns, strategy for investing, different portfolios etc.Basically, it helps us to decide according to the risk in which project the investment should be made.

6. CONCLUSIONS

It is seen that that authors have found out the best investment strategies which maximizes net returns. Some authors have formulated the returns based on their studies and area. Research authors have also found associated probable risk involved and how to mitigate the risk. The parameters required for portfolio design are evaluated such as risk, period of investment, returns, strategy for investing, different portfolios etc.

The study helps in determining the risk-return characteristics for various businesses 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 risk factors associated with the investment to be made? What is the significance of the risk? In short instead of making investment blindly the study gives the concrete decision for investment which is ultimately beneficial for firm/company to maximize net profit.

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