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A PATH FOR HORIZING YOUR INNOVATIVE WORK

RISK MANAGEMENT OF CONSTRUCTION, I.B.S.S COLLAGE OF ENGINEERING, AMRAVATI

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Abstract: This Study Shows Now a day's construction industry is increasingly uses. The effective and deliberate risk management, so as to optimize the project deliverable and mitigate the various risks to prevent the project from running into trouble.

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INTRODUCTION

Now a day's construction industry is increasingly uses. The effective and deliberate risk management, so as to optimize the project deliverable and mitigate the various risks to prevent the project from running into trouble.

1.1 Risk Definition

In construction industry variation occurs in time, quality and cost is called risk. Generally the risk is the possibility of suffering loss, in development project, the loss is the impact to the project which could be in the form of diminished quality of end product, increased cost, delayed completion.

1.2 Risk and Opportunity

Risk and opportunity go hand in hand and as organization try to pursue opportunity the elements of risk involved is also escalating.

Risk is particularly high in those areas, where organization is trying to improve current capability and achieve something that others have not done earlier.

1.3 Risk Management

Risk management is the process of identifying, analyzing and responding to project risk events.

Risk management is software engineering practice with processes, methods and tools for managing risks in a project.

2. WHAT DOES SUCCESS LOOK LIKE?

A successful risk management practice is one in which risks are continuously identified and analyzed for relative importance. Risks are mitigated, tracked and controlled to effectively use program resources. Problems are prevented before they occur personnel consciously form on what could affect quantity cost and schedules

3. TYPES OF RISKS

(1) Cost Risks :-

That risks which impact on estimated cost of project or, when no enough money exists to do the required job.

(2) Schedule Risks:-

Those risks which impact on estimated schedule of project. Or, when no enough time exists to do the required job.

(3) Quality Risks :-

Those risks which impact on quality of project due to lack of performance.

4. MAJOR RISKS ELEMENTS

Financial

(1) Low credibility of shareholders

(2) Fluctuation of exchange rate

(3) Fluctuation of interest rate

(4) Fluctuation of inflation rate

(5) Bank raptly of partner

(6) Currency restrictions

(7) Cash flow problems of client.

Legal / cultural

(1) Incomplete control terms

(2) Breach of contracts by partner

(3) Loss due to insufficient low

(4) Uncertainties of court justice

(5) Cultural differences

Management

(1) Change of organization

(2) Improper planing and budgeting

(3) Improper feasibility study

(4) Improper selection of project type

(5) Improper selection of partner

(6) Incompetence of management team.

(7) Poor relationship with partner.

(8) Disagreement on account of profit.

(9) Disagreement on staff allocation.

(10) Disagreement of work allocation.

Market

1) Increase of material prices

2) Increase of labor prices

3) Local protectionism.

Policy / Political

1) Cost increase due to change of policies

2) Loss incurred because of corruption and bribery.

3) Political changes.

4) Loose due to bureasricacy for late approval

Technical

1) Design changer

2) Requirement failure

3) Error in design drawing and specification

4) Material shortage

5) Poor quality of procured material.

6) Subcontractors low credibility

7) Unknown site condition

8) Shortage of skilled labour.

9) Tendering mistakes

10) Little co – ordination between activities during project execution.

11) Delay because of bureaucracy for late approval by consultant

12) Subletting work to incompetent subcontractor who are part of the partner group.

5. OBJECTIVES OF RISK MANAGEMENT

i) Identify risk in project

ii) Categorize risk and uncertainties

iii) Quantify risk and uncertainties.

iv) Allocate resources and team to manage and monitor risks.

6. PURPOSE OF RISK MANAGEMENT

i) To reduce future damage of loss.

ii) To minimize total cost of risk and identify, contract and limit the impact of risks.

7. RISK MANAGEMENT STRATEGIES

Risk Avoidance

Risk avoidance is just that avoiding the risk associated with a specific task activity or project risk avoidance is strictly a business decision, and sometimes a very good strategy if construction documents are unclear, ambiguous or incomplete.

Risk Retention

Risk retention is a good strategy only when it is impossible to transfer the risk.

The consideration in retain a risk is when the probability of loss is so high that to transfer the risk, it would cost almost as much as the cost of the worst lost that could ever occur i.e. if there is a high probability of loss it may be best to retain the risk instead of transferring it.

Risk Transfer

Risk transfer is the shifting of the risk burden from one party to another. It is usually done through conventional insurance as a risk transfer mechanism and through the use of contract indemnification provision.

Risk Allocation

Risk allocation is the sharing of the risk burden with other parties. This is usually based on a business decision when a client realizes that the cost of doing a project is too large and need to spread the economic risk with another firm. Also, when a client lacks a specific competently that is a requirement of the contract e.g. designs capability for a design – build project. A typical example of using a risk allocation strategy is in the formation of joints venture.

8. RISK OF CONSTRUCTION JOINT VENTURE IN EGYPT OVERVIEW AND CASE STUDIES

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CASE STUDY – I

Major facility complex named “City Stars App.”

The project consists of 5 – star hotels, shopping centers and residential and office towers.

The division of projects area is

Total built up area - 750,000 m2

Hotel and residence - 50,000 m2

Net rentable area of commercial center - 190,000 m2

Residential building - 150,000 m2

Underground parking - 210,000 m2

General Service - 120,000 m2

Storage - 30,000 m2

According to plan, the project duration was estimated to be 33 month starting from 1 august till 30 April 2002. The actual amount of delay for this project was 88 % from its original duration.

Reasons

- Design changes
- Improper planning and budgeting
- Errors in drawing and specification
- Incompetence of some members of the project management team.
- Little co - ordination between activities during project execution.

9. CONCLUSIONS

Risks and uncertainty are inherent in all construction, no matter what the size of project or the capabilities at the company execution it could be.

Project risk management is a very standard useful technique to complete the project within budget, within scheduled date and with proper quality.

If we manage all the risk properly by using some strategies, tools and techniques and some software's related to project risk management then we are able to eliminate or reduce the impact of risk on the project.

10. REFERENCES

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