RISK MANAGEMENT

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We are constantly considering risk without even realizing it. From driving on the highway, to choosing a career, to starting a business or even running projects within an organization. We evaluate the possibilities of positive or negative outcomes and make decisions that will maximize the positive outcomes while reducing the effect of negative ones.

Importance

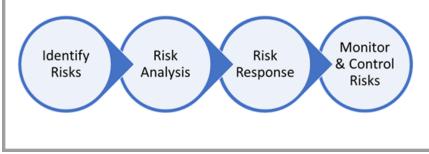By implementing a robust risk management plan,

⇒ Organizations can make smarter investment decisions

⇒ Companies can establish standard procedures to avoid potential threats or minimize their impact

⇒ Organizations can strive to reach their goals confidently

⇒ We will make smarter decisions in our personal lives as well

Definition

⇒ **Risk** is the effect of an uncertainty on our objectives

⇒ **Risk Management** is the practice of identifying those uncertainties in advance, analysing them and taking precautionary steps. Through risk management you work to increase the probability and impact of **opportunities** while decreasing the impact of **threats**

⇒ **Uncertainties** are events that may happen

⇒ **Opportunities** are positive risks

⇒ **Threats** are negative risks

Risk Management Process

The process of managing risk is shown below

- **Identifying Risk** means determining potential uncertainties that may affect the project.

  Techniques used to identify risk includes :

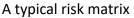 | Brainstorming | Root Cause Analysis |
  |---|---|
  | Conducting Interviews | Checklist Analysis |

  A **risk register** may be created

- **Risk Analysis:** The probability and impact of the identified risks are estimated, examined and ranked in this stage. A **qualitative or quantitative assessment** may be carried out in this stage.

  ◊ **Quantitative Analysis** is a more objective analysis and can be determined using:

  ⇒ Expected monetary value analysis (EMV)

  ⇒ Decision Tree analysis

  ⇒ **Expected monetary value (EMV)** is the product of the probability and impact.

  $$EMV = Probability\ (\%)\ x\ Impact\ (₦)$$

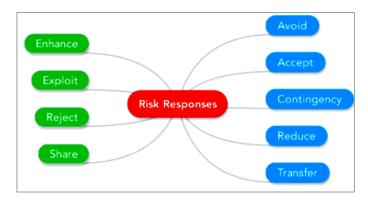 A **Decision Tree** helps you choose between alternatives.

Likelihood ->	Never heard of in industry	Has occurred in industry	Has occurred in company	Occurs often in company	Occurs often at site
Consequence					
No Injury	LOW	LOW	LOW	LOW	LOW
Slight injury	LOW	LOW	MED	MED	MED
Minor injury	LOW	MED	MED	HIGH	HIGH
Major injury	MED	MED	HIGH	HIGH	VERY HIGH
Fatality	MED	HIGH	HIGH	VERY HIGH	VERY HIGH
Multiple fatality	HIGH	HIGH	VERY HIGH	VERY HIGH	VERY HIGH

VERY HIGH	Rectify immediately
HIGH	Rectify with urgency, unless clearly impracticable
MED	Reduce risk as far as practicable
LOW	Accept, but manage through competency and awareness

A typical risk matrix

◊ <u>Qualitative Analysis</u> involves ranking risks according to their probability of occurrence and impact. Both the probability and the impact can be used to create a **Probability and Impact matrix** (diagram above).

♦ **Plan Risk Responses**

What do we do about each top risk?

Outputs of the plan response stage includes:

⇒ Contingency plan
⇒ Risk triggers
⇒ Fallback plans
⇒ Secondary risks
⇒ Reserves

♦ **Monitor & Control Risks**

Monitoring and controlling risks is making sure everything goes according to plan.

◊ **Proactive Controls** prevent the occurrence identified threats in the first place

◊ **Reactive Controls** constitute mitigation and prevention measures to reduce the effect identified threats.

The location of proactive and reactive controls can be clearly seen in a bow-tie diagram.

Work that is part of controlling risks includes:

⇒ Workarounds
⇒ Risk reassessments
⇒ Risk Audits
⇒ Meetings
⇒ Reserve Analysis

Bow Tie Diagram

A bowtie diagram visualizes identified risks in an easy to understand picture. It gives an overview of multiple possible scenarios in a single picture. Proactive controls and reactive controls are clearly differentiated as well

For more information on this, send us an email at lagos@feddogroup.com