TOPIC TWO: RISK ASSESSMENT

Risk assessment = F(Likelihood of risk occurring / probability or chances of risk occurring and the likely impact of the risk)**.**

Risk assessment process

1. Identify the likely risks in the organization

Risk identification techniques

- Observation
- Brainstorming
- Interviewing
- Performance evaluation
- Delphi – method
- Benchmarking
- SWOT analysis
- Internal auditing
- External auditing
- Inspections / reviews
- Analysis of past data
- Research
- Etc

2. Estimate the likelihood / probability of risk occurrence (what are the chances that the risk will occur).

SCALE: 0 to 1 (0 to 100%).
For e.g., What are the chances that fuel prices will increase from Ugx 6000 to Ugx 7000 in the next one month? 0.8 (80%).

The probability can be estimated scientifically using technological methods or using judgement (experience/knowledge).

Zero = Low chances of risk occurring
1 = higher chances of risk occurring

3. Estimate the likely impact of the risk = likely loss

Scale: 1 to 10
Increase in fuel prices from 6000 to 7200
Impact = percentage increase = {6000-7200 / 6000} * 10 = 2 (2 out of 10) / (20%)

Risk score: Probability * impact
Total risk score = 1 * 10 = 10 (100%)
Risk score is from 1 to 10
Risk Score = 0.8 * 2 = 1.6 (Medium risk)

Risk	**Range 0 to 10**	**Range 0 to 100%**
Low	0 to 1	0 to 10%
Medium	> 1 to 2.5	>10% to 25%
High	>2.5	>25%

OR
Low probability, low impact = low risk
High probability, low impact = High risk
Low probability, High impact = Higher risk
High probability, High impact = Highest risk (highest losses and sometimes illegality)

Risk assessment matrix

	1									0.9	
	0.9										
	0.8		1.6								
	0.7										
	0.6										
Probability	0.5										
	0.4										
	0.3										
	0.2										
	0.1										
		1	2	3	4	5	6	7	8	9	10
	Impact										

High probability is > 0.25
High Impact is > 0.25

Example two:
Arts teacher's strike Probability
= 1
Impact = 0.9
Risk score = 1 * 0.9 = 0.9 (90%).

4. Take-action [Respond to the assessed risk]

- Auditor's response in ISA 330
- Management's response = transfer, diversification, internal controls, accept, avoid, etc

Risk assessment is a systematic process of evaluating the potential risks that may be involved in a projected activity or undertaking. It involves estimating the likely impact and probability if risk occurrence. Risks can be assessed qualitatively or quantitatively as explained below:

Qualitative risk assessment: Most risk assessments will fall under this category. When carrying out a qualitative assessment, the assessor will use their personal judgement to identify hazards around the workplace, assess risks and plan control measures.

Risks may be classed as high, medium or low-level after the assessor has considered both the probability and severity of the risk in question.

Qualitative risk assessment tends to be more subjective. It focuses on identifying risks to measure both the likelihood of a specific risk event occurring during the project life cycle and the impact it will have on the overall schedule should it hit. The goal is to determine severity. Results are then recorded in a risk assessment matrix (or any other form of an intuitive graphical report) in order to communicate outstanding hazards to stakeholders.

		Likelihood				
		1 Rare	2 Unlikely	3 Possible	4 Likely	5 Almost Certain
Consequences	5 Catastrophic	5	10	15	20	25
	4 Major	4	8	12	16	20
	3 Moderate	3	6	9	12	15
	2 Minor	2	2	6	8	10
	1 Negligible	1	2	3	4	5

Risk = Low Moderate High Extreme

Quantitative risk assessment

This type of risk assessment uses quantitative tools and techniques to measure the level of risks. A risk matrix may be used so that a value can be assigned to the likelihood and severity of risks. For example, you might use a 3×3 matrix with the following values:

3×3 Risk Matrix — Probability

- Highly Unlikely = 1
- Likely = 2
- Highly Likely = 3

3×3 Risk Matrix — Severity

- Slight = 1
- Serious = 2
- Major = 3

To calculate the level of risk, the following equation can then be used:
Risk = Severity x Likelihood

Furthermore, **Quantitative Risk Assessment** is objective. It uses verifiable data to analyze the effects of risk in terms of cost overruns, scope creep, resource consumption, and schedule delays. Simply, quantitative risk assessment assigns a numerical value to extant risks — e.g., risk A has a 40% chance of occurring, based on quantifiable data (fluctuations in resource costs, average activity completion time, logistics etc.) and a 15% chance of causing a delay of X number of days. It's entirely dependent upon the quantity and accuracy of your data.

Qtn

PPE Supermarket Ltd is one of the leading supermarkets in Uganda with branches in different cities across the country. It has been in operation for 5 years. Its capital structure ratio is 8:2 for ordinary share capital and debt respectively.

The supermarket deals in general merchandise, household items, kitchenware, electrical appliances, hardware items and first moving goods. It had a turnover of Shs 960 million for the year ended 30 December 2020 and employs approximately 50 staff across the country to serve both individual and institutional customers.

Management has a policy of placing orders to suppliers with 10% increase based on the sales of the previous month to ensure that the demands of their customers are met. In a recent management meeting, the managers discussed the issue of Covid 19 which has affected the economy and subsequently the purchasing power of customers. Many customers who used to pay cash now take goods on credit and some pay in instalments.

Due to reduced purchasing power, many products are being shelved for long; there are late payments to suppliers, delays in payment of staff salaries and other operational expenses. There are also signs of suppliers compromising on the quality of goods as there has been increase in sales returns. The staff morale has gone down. Some staff require tips on customer care, handling suppliers' documents and there are dangers of fraud. Some departments are starting to realise high staff turnover and missing documents on files.

The director of finance projected a negative outcome during the recent semi-annual board review meeting. The supermarket will not be able to post any interim dividends to shareholders. Consequently, the board directed management to hire a risk management expert to scan the business environment with a view of proposing possible ways of minimising losses.
You are a risk management expert at BSA Consults Uganda, which has been awarded a contract to profile risks at PPE Supermarket for the year ended 31st December 2021.

Required:

a) Discuss the significant risks affecting PPE supermarket. [10 marks]
b) Advise the management on how to mitigate the risks facing PPE Supermarket. [10 marks]
c) Explain the concept of risk assessment and using an illustration, demonstrate how risks can be assessed quantitively. [5 Marks]

Solution

Significant risks are risks which have high probability and high amount involved. From the analysis of the case scenario the following are significant risks and the respective mitigations:

a) Significant risks	**b) Mitigations**
• Bad and doubtful debts. Many customers who used to pay cash now take goods on credit and some pay in instalments.	• The management of PPE should send constant reminders to the customers. • Factoring of debtors
• Liquidity risk. The risk that an entity, although solvent, cannot maintain or generate sufficient cash resources to meet its payment obligations in full as they fall due, or can only do so at materially disadvantageous terms. Failure of PPE supermarket to settle its obligations is likely to arise because the money is tied up in debts. PPE is also failing pay workers and other operational expenses.	• Explore short term loans • Request for extended credit period from suppliers
• Business risk. Business risk is the risk of earnings variability, resulting in operating revenues not covering operating costs after excluding the effects of market risk, credit risk, structural interest rate risk and operational risk. The director of finance projected a negative outcome during the recent semi-annual board review meeting.	• Continue to improve system production stability and reliability to minimize disruption of digitally enabled services to clients. • Business continuity plans are prepared for all business areas and tested. • Simplify the IT landscape to improve agility, enhance customer experience and ensure the relevance of services the bank offers to its clients.

• Market risk. Market risk is the risk of a change in the market value, actual or effective earnings, or future cash flows of a portfolio of financial instruments, including commodities, caused by adverse movements in market variables such as equity, bond and commodity prices, currency exchange and interest rates, credit spreads, recovery rates, correlations and implied volatilities in all of these variables. Due to COVID 19 PPE Supermarket is experiencing reduced purchasing power of customers which is a movement in the market.	• Giving discounts • Embracing online trading • Entering new markets
• Inventory obsolescence and likely overvaluation of inventory. Due to reduced purchasing power, many products are being shelved for long.	• Reduce on the stock levels / purchases • Ensure proper valuation of inventory in accordance with IAS 2 inventory
• Credit risk. There are late payments to suppliers. PPE supermarket has a policy of placing orders to suppliers with 10% increase based on the sales of the previous month to ensure that the demands of their customers are met.	• Formulating credit policies in consultation with business units, covering collateral requirements, credit assessment, risk grading and reporting, documentary and legal procedures, and compliance with regulatory and statutory requirements.
• Employee risk. Due to delays in payment of staff salaries. Also, some departments are starting to realize high staff turnover.	• Pay in time • Recruitment due to the turnover • New terms with workers
• Operational risk is the risk of loss incurred as a result of the inadequacy of, or failure in, internal processes, people and/or systems or from external events. PPE supermarket is experiencing delays in the payment of staff salaries, high turnover of staff and failure to pay other operational expenses.	• Management as well as Committee reporting and organizational structures emphasize accountability, ownership and effective oversight of each business unit's operational risk exposures.
• There are also signs of suppliers compromising on the quality of goods as there has been increase in sales returns.	• Check good on receipt and confirm the quality

• Reputational risk is the risk of potential or actual damage to the Bank's image which may impair the profitability and/or sustainability of its business. Reputational risk is due to the fact that management has found out that there's inadequate customer care.	• Customer care training
• Fraud i.e., there are missing documents on files which may indicate fraudulent financial reporting.	• Enhanced digital detection capability covering people, processes and technology. • Development of predictive fraud detection and prevention capabilities using agile methodologies
• Shareholder risk since the supermarket will not be able to post any interim dividends to shareholders.	• Adequate communication to shareholders • Bonus shares

Approach

a) Significant risks	B) Mitigation
Approach: - Risk - Condition leading to risk (evidence from the case scenario) - Impact	