

DIU Risk Management

Risk Appetite and Risk Tolerance (Table: a)

No.	Threat-sources	Risk Scenarios	Risk Appetite (Frequency per year)	Risk Tolerance
1.	Technology Obsolescence	System Unavailable	3	± 10%
2.	Hardware Failures	HDD crashed	10	± 20 %
3.	Malware Attack	System Compromised	40	± 20 %
4.	Human Error	Disclosure of Password	15	± 20%
5.	Environmental	Long-term power failure	5	± 30%

Likelihood Scale (Table: b)

Rating	Likelihood	Likelihood of Occurrence
0.1	Low	Not expected, but there's a slight possibility it may occur at some time.
0.5	Moderate	The event might occur at some time as there is a history of casual occurrence.
1	High	There is a strong possibility the event will occur as there is a history of frequent occurrence.

Assets + Vulnerabilities + Likelihood Scale = Risk Frequency Rating

Risk frequency based on Risk Scenarios on assets if vulnerability is present or not (Table: c)

No.	Assets	Risk Scenarios	Risk Frequency Evaluation Details/Paragraph		Vulnerabilities (Yes / No)	Likelihood Scale (Table: b)		Risk Frequency Rating
1.	Technology Obsolescence	System Unavailable	-	+	No	Likelihood Scale (Table: b)	=	0.1
2.	Hardware Failures	HDD crashed	-		No			0.1
3.	Malware Attack	System Compromised	-		Yes			1
4.	Human Error	Disclosure of Password	-		Yes			0.5
5.	Environmental	Long-term power failure	-	No	0.1			

Impact Scale (Table: d)

Rating	Magnitude of Impact	Impact Definition
100	High	Occurrence of the risk: May result in stoppage of the service for DIU's customer or serious disruption of service; May result in the loss of resources or sensitive data; or May significantly harm, or impede the ABCBANK's mission, reputation or interest.
50	Moderate	Occurrence of the risk: May result disruption of service for the client or users; May increase customer dissatisfaction; or May violate, harm, or impede the DIU's mission, reputation or interest.
10	Low	Occurrence of the risk: May result disruption of service for certain area of service or the branch; May noticeably affect the DIU's mission, reputation or interest.

$$\text{Likelihood} \times \text{Impact} = \text{level of risk}$$

Level of Risk (Table: e)

No.	Assets	Risk Scenarios	Risk Frequency Rating from Likelihood Scale (Table: c)	X	Impact (Table: d)		Level of Risk
1.	Technology Obsolescence	System Unavailable	0.1	X	10		1
2.	Hardware Failures	HDD crashed	0.1		10		1
3.	Malware Attack	System Compromised	1		100		100
4.	Human Error	Disclosure of Password	0.5		50		25
5.	Environmental	Long-term power failure	0.1		10		1

Total Level of Risk: 1 + 1 + 100 + 25 + 1 = 128

Overall Risk Rating Calculation

$$128 \div 500 \times 100 = 25.6 \%$$

Overall Risk Rating

Rate	Value	Condition
Strong	1	If the percentage is below 8%
Satisfactory	2	If the percentage is below or equal 16% and above or equal 8%
Fair	3	If the percentage is below or equal 25% and above 16%
Marginal	4	If the percentage is below or equal 30% and above 25%
Unsatisfactory	5	Above 30%