IAS Risk Management Assignment - August 2020

This coursework allows you to extend your knowledge and understanding of the use of "information asset risk worksheet" introduced in OCTAVE-A framework presented during the lectures. This is a pair-work assignment (2 members). This coursework counts for 30% of the overall marks for the module.

BACKGROUND

The scenario is as follows, you are being asked to compose 5 critical "information asset risk worksheets" for a chosen organization. The organization can be an existing company which you are/were working for, or you may create a made-up scenario. You also have the option of choosing SLIIT as your organization. However you will not get access to internal technical information and therefore the components have to be made-up by yourself. Note the scale of the organization is irrelevant, although your choice of organization will affect the number of potential threats.

TASK DESCRIPTION

1. Identify potential 5 risk scenarios for the organization.

- Through a thorough assessment of the organization you choose, you are to identify key critical assets, which can be hardware or software based.
- You should then identify potential threats to these assets.
- Out of these threat scenarios you can choose top 5

2. Complete 'Allegro Worksheet 10' for each scenario in '1'.

- You should complete one worksheet per scenario you identify
- You should predict 'probability' level for each scenario based on a solid justification. Justification for each probability level should be included in the Appendix.
- You should assign respective 'impact' values for each scenario based on a solid justification. Justification for each probability level should be included in the Appendix.
- You should also propose risk mitigation techniques for each scenario (No need of extensive technical details).
- Include at least 1 mitigation step for each scenario.
- Include references in IEEE Format wherever necessary.(<u>Click here</u> to learn IEEE referencing format)

3. VIVA Presentation

- During an upcoming Lab Session, You will bring a printed copy of your work
- 2 members will present the work to lab instructors
- Instructors will ask questions if necessary to clarify your worksheets

Important:

- Clearly indicate two names and IT numbers on a coversheet.
- Allegro Worksheet '10' can be found in Appendix A, further details can be obtained through CourseWeb.
- Impact Areas may depend on the organization you choose and you can introduce new areas of impact if necessary.
- > Sample completed worksheets are provided in Courseweb.

ASSESSMENT CRITERIA

The following will be considered in the assessment of this coursework:

- The accuracy of identified risk scenarios.
- Justifications for perceived 'impact' and 'probability' ratings.
- The quality of the proposed mitigation techniques. (Quality being defined as 'fit for purpose')
- Scope and technical accuracy of the overall worksheets.
- The correct use of relevant references to support the arguments you make.
- The overall presentation clarity of discussion, organization and professional appearance.

SUBMISSION INFORMATION

- The quality of the proposed mitigation techniques. (Quality being defined as 'fit for purpose'
- Completed worksheets and Appendix to be uploaded via Course-Web, using the provided link.
- Online submission link will be available on Courseweb.
- The deadline for submission of the completed coursework will be announced during one of the lectures.
- Late submissions are **NOT** allowed and **Plagiarism** will not be tolerated.
- You should bring a **printed copy** of your assignment to your viva session.

MARKING SCHEME

The marking scheme of this assignment is based on several components with corresponding weights, given as follows:

- Critical Analysis & the use of Risk Management Concepts 30%
- Scope and Technical Accuracy 20%
- Use of Literature and Theory 10%
- Referencing & Presentation (Viva & Written) 40%

APPENDIX – A Allegro Worksheet 10

Alle	gro - W	orksheet 10	INFORMATION ASSET	RISK WORKSH	EET				
Information Asset Risk	Threat	Information Asset							
		Area of Concern							
		(1) Actor Who would exploi	it the area of concern or						
		(2) Means How would the actor do it? What would they do?							
		(3) Motive What is the actor	's reason for doing it?						
		(4) Outcome		☐ Disclosur	re 🗆 Dest	ruction			
		What would be the resulting effect on the information asset?		☐ Modifica	tion 🖵 Inter	ruption			
		-	Requirements formation asset's security oreached?						
		(6) Probabili What is the likelih scenario could oc	nood that this threat	□ High	☐ Medium		Low		
	(7) Co	onsequences		(8) Severity					
			to the organization or the info come and breach of security re	How severe are these consequences to the organization or asset owner by impact area?					
				Impact Area	Value	Score			
					Reputation & Customer Confidence				
				Financial					
				Productivity					
				Safety & Health					
				Fines & Legal Penalties					
					User Defined Impact Area				
	Relative Risk Score								

(9) Risk Mitigation Based on the total score for this risk, what action will you take?												
☐ Accept		Defer		Mitigate		Transfer						
For the risks that you decide to mitigate, perform the following:												
On what container would you apply controls?	What administrative would still be accept	, technical, and phy ted by the organizat	ysical controls we	ould you apply on th	is container? W	nat residual risk						