1	NO. <u>Date: / /</u>
	lecture 3
	4 lec tore 3
O	Security Control and risk management.
	s security control direction managment.
	Gecurity controls devided into 3 main categories
	Physical Controls
	o Techinical / Logical Controls
10	
	a Preventive Controls - parts Controls that test to
12	h.
13	· Security mesures that took to provide Bofety
4 F 14	
15	
16	Jebo my grand, 20 miles
9 17	Technical / Logica Control 9: 10 - 2 tostad taxes tol
18	41
19	usage of data and rescources.
	Encryption, Smart card Access control,
21	source that happen alter
22	Administrative control
	o providing security using human factors. Who
	Con accept to what resources,
25	Troining, and awareness
26	Policy and procedures
0 1 1 1 1 0 27	recovery plong, to the miles and and
28	election tempers at at
29	The state of the s
30	
31	
32	
1 , , , ,	1 - 1 - 1 - 1 - 2 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3
	Samanala

	Controls Categorized using functionality
	6 39
4	o Preventive Controls
5	o Detective Controls
6	o Deterrent Controls
7	o Corrective Controls
8	Recovery Controls
9	· Compensating Controls.
10	
11	o Preventive Controls - prot Controls that took to prevent
12	from Bornething happen bad, land
13	· Security measures that took to provide
14	· Detective Controls - Controls that took to find error or
15	unauthorized activities that hoppen or occured.
16	
17	· Deterrent Controls - Controls that took to discourage
18	
19	1 200 avances to bot to sport
1 20	· Corrective Controls - Controls that took to Correct the
21	issuer that hoppen ofter a attack.
22	Alministantina contrat,
	o Recovery Controls - Co Sone as Corrective but more
24	they are used in serious situations to rectare
25	information.
26	Consequenced property
27	· Compensating Controls - Controls that took as backup
28	to the original Control9.
29	
30	
32	
33	
33	

1	NO. Date: / Riok apattle - man risk level that con hold.
2	lisk - possibilitie of damage happening
5	nformation right management (IRM) - process of identify the 196 and reduce it using right mechan; 9m9
6	Monaging Orgke (4 ways)
,	onuging vises a Accept
	o Transfer
1	Mitigate + another most source
	o Avoid.
	if matures infected I have to see
	Accept Avoid - trying to avoid a risk by Go identifyin
	as rets that exposure a risk.
	THE RESERVE WARRANT OF THE PARTY OF THE PART
ngod s	Transfer- hand over the some part of the right o a
ngo-l s	Transfer-hand over the some part of the risk to a third party.
ngol s	
1 00	third party, and of the toll
	third party, and of the toll
+ ua	Mitigate - reducing the risk acceptable level. Accept - after mitigating to acceptable level Accept
t ua	Mitigate - reducing the rish acceptable level.
t ua	Mitigate - reducing the risk acceptable level. Accept - after mitigating to acceptable level Accept
+ ua	Mitigate - reducing the righ acceptable level. Accept - after mitigating to acceptable level Accept the righ.
+ ua	Mitigate - reducing the righ acceptable level. Accept - after mitigating to acceptable level Accept the righ.
t ua	Mitigate - reducing the risk acceptable level. Accept - after mitigating to acceptable level Accept the risk.
+ ua	Mitigate - reducing the risk acceptable level. Accept - after mitigating to acceptable level Acceptable risk.
1 0a	Mitigate - reducing the rish acceptable level. Accept - after mitigating to acceptable level Acceptable rish.
+ ua	Mitigate - reducing the risk acceptable level. Accept - after mitigating to acceptable level Acceptable risk.
1 0a	Mitigate - reducing the risk the text that the sisk the risk the risk the risk that the risk the risk that the risk the risk the risk that the
1 va	Mitigate - reducing the risk acceptable level. Accept - after mitigating to acceptable level Acceptable risk.

the pany - others that can half Ivantitative risk analy 318. To state of It de lotal aggests = 10 % computers prome de moitomotal o income = \$50 per hour -> from 1 computer · total earning for 1 hour = 10 x 60 o from 10 computers = \$500 per hour Recover from falware = 4 hours biovA o if maluare itsfected = 1 x 500 expected bose box tops tois a seus de la SLE + \$ \$2000 (100se) Single lose Expectancy (SLE) - if an insidence happen What will be lose City \$2000) Annualized Rate of Occurrence (ARO) - how many times threat Con be happen withing year. eccept - ofter marinating to eg: Withing 5 years malware infected 25 times. 5 -> 25 ·annual rate = 95. Annualized Loss Expectores (ALE) - how much expected to loone withing a year (BEE x ARO) SLE = \$2000 , ARO = 5

	Safeguard cost [benefit -
	cost benefit -
	alla - 1 100 = VA
	after control,
	Sort 1 bear = 10 000 - 1000 - 7000
	Anti v: ruse = \$ 1000
	ARO = 050001 0001 = 5
	new ALE after control = 2000 x 0
2	Cost / Benefit = ALE before Bafeguard - ALE after Gategu
3	gateguard annual cost.
4	garego a familiar a fa
5	= \$10000 - 0 -\$1000
6	2 4 10000 0 11000
	= \$9000
7	= \$4000
8	t D. I
9	+ -> benefit
0	- → 60°e,
1	
12	Egist after Safeguard ARO is 2.
13	
24	ALE after = 2000 x 2
25	= 4000
26	
27	Cost / benefit = 10 000 - 4000 - 1000
28	= \$ 5000
29	
30	
31	
32	

	NO. Date: / /
2	Eg; if hand I too become fee
3	AV = CON is 7000
4	tertaco rotto
5	Cost 1 ben = 10 000 - 4000 - 7000
6	oport = secon ital
7	= - 1000 C 100se)
8	
9	o v ood = loctor cotto ale vien
10	
11	
12	Cost 1 Denotit = All before Sateguard - All after
13	Potoguand annual coot.
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15	50011-0-000012-
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17	0000\$
18	
19	#170not <- +
20	390d -
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22	tailf offer capacions theo is a
23	
25	2 x 6503 = x8490 31B
26	2543 -2
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28	2004 - 2004 - 200 Ct - 19000 1 tool
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