Group Meeting 2 - 2/10/2022

Times recorded in ICT timezone.

17:04: Everyone is here

17:11: Financial risks, Network risks, Operation risks

- Competition → can destroy business with hacking
- · Keeping the brick and mortar store, digitalisation transition process
 - · Hybrid model
- · (Economic) Barriers to entry
 - Digitalisation process → cost analysis
 - Advertising
 - · Customer service
 - · Online or by phone?
 - · Robot or a human?
 - · Website portal
 - Database
 - · Warehouse portal
 - Supplier portal
 - Logistics and transport
 - · Will it stay local, or will it expand?
 - 50% expansion
 - · Costs increase compared to customer increase
 - Delivery logistics
 - Payment transactions
 - Online payment with digitalization
 - Secure network
 - · Employee training
 - Bad reviews
 - Black Swan Theory in Risk Assessment
 - How some small event can demolish entire RA model
- · Hardware security
 - Log-ins
 - Punch cards digital version

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- Clickbait \rightarrow can bring a whole company down
- Open Source Intelligence (OSINT)

17:26: Decide which areas to investigate

- · Lit dump to match statistics for growth and decline
 - · Semi-quantified data
 - SME specific
 - · Pet-food industry
 - · 3-4 studies per question
 - · Go to the methods section and the discussion section
 - · Look for keywords about your question
 - If there are no numbers no need to read it
 - Once you find 3-4 studies with the data, then go for it
 - 1. Could an online presence grow the business by up to 50%?
 - Lee
 - 2. Could changing to an inter/national supply chain reduce costs by up to 24%?

• International: Celine

· National: Marios

- 3. Could the business lose up to 33% of its existing customers if the business doesn't provide some online features?
 - Bali
 - Risk assessment business model/risk appetite, etc.
- Marios: Scare the customer: disease and cure
 - All the danger of digitalisation, and why you should do it anyway (esp. With our company)
 - · List of risks
 - · Technical risks

18:17: Questions have been decided

• 3-4 studies will be due on Sunday 09/10/2022

Group Meeting 3 - 09/10/2022

Minutes recorded in ICT timezone

17:06: Lee, Marios, Celine present

17:07: Recap talk with Doug

- Should not do quantitative data analysis with the numbers that we found
 - Qualitative analysis
 - · Celine: interviews, surveys, thematic coding, keywords, categories

17:32: Bali joins

17:37: Focus

- · Before and After digitalization models
- · Legal ramifications of a breach/compliance failure
 - · Protecting personal information
 - · Financial information
- · Government involvement in digital orgs
 - How they impact information storage, etc.
- · Data security
 - · Using the Cloud completely
- Hybrid model
 - Transport costs
 - Discounts for shop pickup?
 - Nike shares went up 10%
 - Incentives
- · Technical security
 - · Show how the risks are outweighed by the benefits
 - · There are some risks, but here's what you will gain
 - · This will grow your business
 - And this will keep the data safe(r)
 - · How much money will this make
 - · Cost effective mitigation tools

17:46: Checklist

- 1. [25%] Before Digitalisation
 - 1. Profit risk assessment
 - 1. Logistics POV Lee
 - 2. Customer POV Marios

- 3. Data POV Celine
- 4. Legal/compliance POV Bali
- 2. Octave Operationally Critical Threat, Asset and Vulnerability Evaluation
 - 1. Asset less than 40 ppl in a company
- 3. List of mitigations (threat trees?)
- 2. [15%] After Digitalization
 - 1. Profit risk assessment
 - 1. Logistics
 - 2. Customer POV
 - 3. Data POV
 - 4. legal/compliance POV
 - 2. List of proposed changes:
 - 1. Interactive web application
 - 1. Customer portal
 - 1. Web and mobile
 - 2. Supplier portal
 - 1. Web and mobile
 - 3. Administrative portal
 - 1. Owner
 - 4. Manager portal
 - 1. Owner and managers
 - 5. Wix for the web app
 - 2. Database
 - 1. Amazon or Microsoft
 - 2. Insurance
 - 3. Back up
 - 4. Third party deniability
 - 3. Staff knowledge
 - 1. Threat awareness
 - 1. Phishing
 - 2. Passwords
 - 3. Usernames
 - 4. malware
 - 4. Customer welcome tutorial + help article
 - 1. Pop-up on the website
 - 1. Threat advice
 - 2. Good password practices
 - 3. Good username practices
 - 5. Payment
 - 1. Credit card

- 2. Paypal
- 3. Banking security
- 4. Two/multiple factor auth
- 5. PCI compliance (pcicompliance.org)
- 3. Octave and (threat trees?)
- 4. Potential mitigations
 - 1. Have beta testers
 - 2. Authentication, session mgmt, access controls
 - 3. Staff training
 - 4. Customer tutorials
 - 5. Database security
- 3. Final summary
 - 1. Will do

Group Meeting 4 - 16/10/2022

Minutes recorded in AET timezone

21:00: Bali and Celine present

21:01: Marios joins

Helpful links:

- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8071260/
- https://www.researchgate.net/publication/
 350908055_Risk_Assessment_of_the_SME_Sector_Operations_during_the_COVID 19 Pandemic
- chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.oecd.org/industry/smes/PH-SME-Digitalisation-final.pdf
- chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.diva-portal.org/smash/ get/diva2:1115635/FULLTEXT01.pdf
- 21:29: Previous meeting's action items share findings and reference links
- 21:40: Lee joins
- 21:53: Douglas wants threat/attack trees
- 17:58: Data discussion
 - Marios articles include theory, related to data; Ukraine war, Brexit drivers
 - · Celine agriculture risks, transport, manufacturing firms, data harmonization
 - · Lee Attack index, STRIDE graphic
 - · Bali Octave methodology

BST TIME

12:13 pm : To be completed by 23/10./2022

- · Each member will write 1000 words
 - · Should include every requirement from the assignment prompt
 - Graphs/comparisons from spreadsheet for before vs after digitalisation
 - To be combined to make up final project.

Octave S and attack trees.

12:17 pm: Questions for to discuss with Doug during team meeting this week.

· What is the timeline diagram/Gantt chart?

12:20 pm: Digitalisation benefits and downsides

- · Current analog model is open to many digital threats
 - · Because no CSec, attacks would be fatal
 - · Disclose customer and supplier information
 - Personnel, LAN and OS/browser is particularly weak
 - · Perceived weakness kills business/profit
- Digitalization
 - Expansion of customer and supplier base
 - More profit
 - · Open to more attacks
 - · Not just personnel, LAN, and OS/old browser
 - Have a website with multiple portals
 - · Have to mitigate many more types of attack
 - · More resources for mitigation
 - · Authentication, access control, session mgmt, firewall, VPN, proxy, etc
 - · Can use major 3rd party vendors
 - Wix
 - Cloud
 - Amazon db

12:40: End of meeting

Group Meeting 5 - 20/10/2022

Minutes recorded in BST timezone

Group 1's meeting with Doug

12:00: Everyone is attending on time

12:05: Octave-s and Stride we will follow, Doug suggests Allegro

12:07: STRIDE and DREAD are technically focused tools but miss other aspects of the Risk Management Process (RMP).

· Doug suggests not only using STRIDE and DREAD by itself.

12:08: OCTAVE analyses in Appendix.

• Think of the report as an executive summary in 1000 words.

12:10: Combine, take the best bits of each framework

OCTAVE + STRIDE/DREAD when necessary

12:12: Include: insider threats - high risk.

12:13: Threat models – Don't use bits of other frameworks without saying why

• We'll use X, Y, Z because... (make sure to justify).

One or two literature sources is fine.

12:17: Second question: justify why they should go international

· quality may be affected

· international supply chain

· might lose customers if not digital

If can't find reports or numbers, just say so

12:19: Use tables to outline business and the changes

· a table each for before and after digitalisation.

Mix and match bullet points and tables.

• Picture of existing system + table that explains plan

12:24: Something to think about: James joining our team

12:27: Peer review: a new system

• Scale 1 -> 5

Score of 3 is satisfactory -> If we've done everything we said we'd do, then we get a 3

If someone's done something exceptional -> 4

• If people aren't giving you the work -> 2

• Reserve the 1 and the 5 for very unusual cases

1 -> hasn't participated, shown up to the meetings

5 -> If someone does everything, basically, because we're all sick

12:34: Doug exits & team discussion

We can focus on what we are most interested in:

· Celine: Gantt chart

· Lee: Threat tables/stats

Marios: Everything Bali: Everything

• Will have next meeting on Sunday at 10AM BST

13:04: End of meeting

Group Meeting 6 - 23/10/2022

23.10.2022 Minutes. Noon List of Adversaries and Categories

- 12:00 pm Type of IT infrastructure in cloud computing with AWS and Microsoft Azure.
- 12:05 pm Possible use of Automated tools.
- 12:12 pm Resources for Octave-S compared
- 12:16 pm Supply Chain question under consideration to find resources.
- 12:20 pm Demographic for the use of online services. 12:20 pm
- 12:35 pm Microsoft Azure for Database and Security and Wix for Site hosting.
 - · Customer Portal or Application
 - · Separate Wifi for Customers and Enterprise Operations.
- 12:45 pm Next meeting for Next Saturday and Sunday, 29/10/2022 and 30/10/2022
- 12:40 pm Meeting officially ended

Group Meeting 7 – 29/10/2022

Meeting Minutes 29/10/2022

Timing in BST

10:00 am Everyone joined the meeting

10:20 am Graphs regarding stride and octave were presented

10:34 am Mitigations measures and graphs shared

10:35 am Digitalisation using Azure and AWS platforms, I will explain how it is done.

10:39 am GDPR and PCI-DSS application

10:41 am Backups physical and cloud based, I will develop them

10:48 am Upload each individual piece of work in the drive

Yearly/annual financial review

11:30 am meeting is finished.