**REFLECTIVE PIECE**

My GitHub address is [Chijioke Igwe](https://igwechijioke.github.io/chijioke_igwe.github.io/SecurityandRiskManagement.html).

The introductory aspect of this module equipped me with a critical understanding of digitisation, and the industrial revolution. I have critically analysed the ‘Industry 4.0’ and given some real-world examples of risks associated with them. This is in addition to providing peer review to a fellow student (Pok Chi) where I highlighted a few risks posed by the ‘Industry 4.0’.

Adopting the Johari window (Shrestha, 2023), I am agree that digitisation has impacted me - aided my study and relationship with others. I am now more aware of the risks, and the consequences of misuse.  
I have critically reviewed the risk management process and have been able to apply it in my household, study, and workplace. I have signed up to an insurance product within this module, to transfer the impact of a risk in my household if it occurs. I have assessed risks using qualitative and quantitative methods like the Monte Carlo simulation as simulated in my individual project (executive summary).

My awareness to envisaging threats has increased - ranging from accepting cookies to downloading on the internet. I think as an attacker would, if they intend defrauding, attacking, or stealing my data. Attack simulations like the Lockheed Martin cyber kill chain, STRIDE, Attack trees have increased my threat awareness.

I critically analysed and enumerated threats associated with a large international airport based in the United States of America using the ‘Attack Tree’ threat modelling technique (from Seminar 4). This has equipped me with an ability to simulate the goals of an attacker, and the sub-goals needed to achieve them.

My team (Group B) critically designed a risk identification report that comprises an assessment of the business without digitisation, and migrating digital. We divide ourselves to two units (one assessing the digital scenario, and other the non-digital). Collaboration done using WhatsApp, Google Meet and Microsoft Teams as agreed. I contributed to sharing idea on designing the report, pruning the word count, and quality checking the document produced. I was able to share my screen, make presentation, and share documents with team members.

I have learnt patience, tolerance, perseverance, collaboration, discipline, and time management while learning independently and through the group. I have also provided feedback on how others contributed to the group activity on the peer review document.

Stakeholders in the industry are challenging the Common Vulnerability Scoring System (CVSS). I agree with them because any system, whose integrity is in doubt, will not be reliable. I critically reviewed the characteristics of CVSS and an alternative recommendation as raised by Spring et al. (2021).

I am now able to create a business continuity (BC) and disaster recovery (DR) plan. This aspect has engendered a sense of responsibility in determining a ‘plan B’ for whatever project I engage in. I always ensure I create an alternative to reaching my objective in case the main option fails. The module resource gave me requisite understanding of how to prepare and design disaster recovery solution with specific Recovery Time Objective and Recovery Point Objective timings - highly required or not.

I am now more equipped to embrace the limitless possibilities of digitisation (however being cautiously optimistic) - as the future holds endless possibilities ranging from cloud computing, artificial intelligence, quantum computing, IPv6, and others.

**Knowledge Acquired**  
I now understand risk management and confident in leading a team or providing support as a team member. I feel more coordinated – especially when I know where to research for information or who to contact. I was getting discouraged due to enormous demand of the academic study and my work. However, with resilience and knowledge on this module, I am more committed to acquiring additional knowledge to completing my programme.

**Challenges**  
Inability to attend Seminars as they were usually at my working hours. However, I had to always critically review the recordings from the module announcements, and ensure I give an attempt to the assignments.

The Monte Carlo simulation entailed the use of some mathematical calculations, which I was not familiar with. I critically reviewed the unit readings, and researched more on how to complete it.

**Standards:**I now review details of websites and products I use, to determine if compliant with relevant standards and regulations. The provisions from the General Data Protection Regulation (GDPR) 2018 has created an awareness on how my data is to be used/processed. Other standards like the International Organisation for Standardisation (ISO), Payment Card Industry Data Security Standard (PCI- DSS), National Institute of Standards and Technology (NIST) have spurred my critical review when transacting online.

I am now aware of the consequences to non-compliance on family, my organisations, and me. I have paid little or no attention to how my data is used on most platforms, but I am now emboldened to interrogate instances where my data needs to be given out, or even initiate a Subject Access Request (SAR) where necessary.

**Skills Benchmark**I have used the BCS Skills Framework:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Benchmark/Skill** | **Skill Type** | **Description** | **Achieved** | **Plan to Action** |
| Teamwork | Behavioural Skills | People interaction, and working collaboratively, | I have worked with the Group B team using collaborative tools to complete our project. | Identify additional collaboration tools. |
| Critical and Analytical Thinking | Behavioural Skills | Understanding of problems and concepts by applying critique and analysis. | I have analysed and critically reviewed my projects. | Improve my analytical thinking. |
| Time Management | Behavioural Skills | Effective use of own time | I have mapped out time to study, go over Seminar recordings, research, and provide feedback. | Identify what is not urgent and not important which I focus mainly on. |
| Risk, Health and Safety Management | Technical Skill | Methods and techniques for risk, health and safety management. | I constantly identify, assess, manage and report risk. | Gain additional knowledge on how to manage risk, health and safety. |
| Cybersecurity and Safety Engineering | Technical Skill | Understand cybersecurity concepts, and apply safety engineering on system development. | I have adopted safe development practices, and elicited tendencies for cyber security threats using threat-modelling tools. | Identify other ways to modelling threat. |

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| **Action Plan** | **Description** | **Date Achieved** |
| Collaboration | I have discovered a few more tools (Slack, Azure DevOps, and GitHub) that will help me collaborate. | In progress. |
| Analysis | I now adopt questioning methods, and visual mapping to aid my critical thinking. | In progress. |
| Time Management | I now spend less time on social media. I also set an alarm to prompt me to study. | In progress. |
| Additional Skill | Planning a BCS Practitioner Certificate in Information Risk Management after my Masters programme. | In progress. |
| Threat Modelling | I now use the OWASP Threat Modelling Cheat Sheet for this purpose (OWASP, 2025). | In progress. |

**Reference**

BCS The Chartered Institute for IT, Skills Framework for the Information Age © SFIA Foundation 2020. Available from: [sfiaplus.bcs.org/Skills/BURM/2/SkillAtLevel/338#KnowledgeBases](https://sfiaplus.bcs.org/Skills/BURM/2/SkillAtLevel/338#KnowledgeBases) [Accessed 25 January 2025].

OWASP Cheat Sheets Series Team, Threat Modeling Cheat Sheet. Available from: <https://cheatsheetseries.owasp.org/cheatsheets/Threat_Modeling_Cheat_Sheet.html> {Accessed 25 January 2025].

Shrestha, R., 2023. Discover yourself: open up your “Johari window” with “Dohari” Feedback. Kathmandu Univ Med J, 83(3), pp.333-6.