CIDM 6341-01 Current issues in Cybersecurity

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Assignment: Personal risk assessment

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| **ID** | **Asset Name** | **Description** | **Sys ID** | **CIA Asset Value** | **Priority** | **Threat Categorization** | **Vulnerability Description** | **ARO** | **Controls in Place** | **Uncertainty** | **Risk Value** | **Controls Needed** | **Action Plan ID** |
| 1 | Mariam Adegbindin | Myself | People | $2.0Mil | Vital | Confidentiality, High | Health issues, social engineering, Compromise password, phishing emails, Getting drugged | low, .05 | Not giving out sensitive information, identifying critical assets which attract criminals and paying attention to digital footprint, Avoiding sketchy place (.7) | 0.5 | $36,000 | Life insurance plan, Using strong passwords for all my applications, Health insurance | Getting a life insurance plan, Using an authenticator app as a second layer of security |
| 2 | Contact List | My personal and business contacts | Data | $500,000 | Vital | Confidentiality, High | Unauthorized Access, Lost of phone or damage | Low, .05 | Restrain unauthorized Access with strong password, Backup to cloud, manual copy (.8) | 0.1 | $5,500 | Improve backup system, Accept the risk | Weekly back up to cloud |
| 3 | Laptop | My laptop | System | $3 Mil | Vital | Availability, High | Access to research papers, Access to work information. | Very low 0.01 | Back up to cloud, Touch id to access laptop (.8) | 0.2 | $7,200 | Applecare (insurance), transfer the risk to insurance | Install a tracking software. |
| 4 | Outlook | Checking email before heading out | Procedure | $100,000 | Vital | Integrity, High | Unauthorized Access, cyber attack, malware, phishing | Very low .0.01 | Use strong, unique passwords , checking email before my day gets busy, Not opening emails if I don’t have the time to read it (.7) | 0.3 | $390 | Verify email senders’ identity, multi-factor authentication | Enable spam filter, Checking for SSL certificate |
| 5 | Wells Fargo account | Mobile banking app | Software | $300,000 | Vital | Confidentiality, High | Unauthorized access, password breach, lost of phone | low .05 | 2-factor authentication, security question access login, Access login to 2 device deactivated(.8) | 0.2 | $3,600 | 2-factor authentication, strong password use | Use of strong passwords, Restrain unathorized access to device |
| 6 | iPhone 11 | My mobile phone | Hardware | $2000 | Vital | Availability, High | Ability to lose the phone or have it stolen | Low .01 | Use face id to unlock phone, find my iPhone is enable on the device (.8) | 0.1 | $4.4 | Backing up data to iCloud weekly | Installing prey on my phone |

**Assets Name: Mariam Adegbindin**

**System: People**

On risk assessment for my people system ID, I choose to assess myself. As an individual, my personal safety and well-being are vital to me. To ensure this, I take personal safety measures such as avoiding sketchy places and situations. My CIA was capped at $2.0million which is broken down into risk of losing my current job as a graduate assistant. Loss of future income as a product designer, valued at $100k per years. Loss that can occur due to disclosure of personal information of my clients as a freelancer which can lead to lawsuits and penalties amounting to ($100,000). My confidentiality test was considered high because if some confidential information on my job and business is disclosed without authorization, it can cause company disruption and lawsuits from clients. The vulnerabilities associated with my confidentiality threat includes drunkenness, health complications leading to memory loss, compromised password, phishing emails. My ARO was rated 0.05, though I get phishing emails, I have been trained on not to open or click on any link I did not subscribe to. My control effectiveness was rated 70% to mitigate this risk, I avoid sketchy places, don’t do drugs, have a health insurance, I use strong passwords for personal information security, had trainings on phishing emails identification. I plan to regularly review my personal information security measures and update them as needed. I have chosen to transfer the total risk value of $42,000 by getting a life insurance.

**Asset Name: Contact List**

**System ID: Data**

My contact list consists of personal and business contact information of my clients, friends and family. My contact list data has been built up for over 2 decades stemming from contacts I made back home in Nigeria, and contacts I made while in the UK for more than 2 years and contacts made in the United States so far. I categorized the disclosure value at $500,000, because it represents the value of confidential information that might be lost if it is used wrongly to impersonate my identity to my contact. Maybe in demanding for money which in this case could be in the different currencies according to the country I have lived in or other valuable information. This vulnerability can be due to unauthorized access to my phone, loss or damage of phone, data backup breach. The ARO is rated low at 0.05 because of control measures in place, as a restrain unauthorized access to my phone by use of strong password, backup my data to cloud. My uncertainty is low at 0.1 and my total risk value is $5,500. I have chosen to accept this risk.

**Asset Name: My laptop (MacBook Air)**

**System ID: System**

My laptop as a Hardware asset can be assigned a damage and consequences value of $3million, this is represented by the value to replace the laptop if it gets lost and the value of data that the laptop contains. The number of research work I have stemming from my undergraduate to my master’s degree. How much I would have to use to defend myself in court $500,000 if the design files for companies gets leaked or worse being used by a competitor. My ARO was rated as low (0.01) because I have my design files and other research work backed up and encrypted. My uncertainty is low at 20% because I have the feature to find my MacBook by using my iPhone since they are both apple products. Vulnerabilities/threats to the system is it being stolen and gaining access to the data stored on it. Controls in place are backing up my data to iCloud just in case I get the laptop back damaged or don’t get it back at all. The resulting risk is $7200. Additional controls needed is to install an external tracking device so I can track it using other devices with the residual risk being transferred to Apple because I pay yearly for apple care.

**Asset Name: Outlook email**

**System ID: Procedure**

The outlook email system is my main email I use to interact with people and apply for jobs. The system consists of correspondence between myself and employers, information about software’s I have registered for. The system is used for official responses in my job as a graduate assistant at OCPD. Integrity, high is the worst-case categorization for the following reasons: I do not use the system to transfer sensitive information about students or myself, nor do I use the system to do social media posts or personal communications. This makes confidentiality impact low as no real damage would occur should my emails be exposed. Vulnerabilities/threats to the system are unauthorised access, malware and phishing attacks. Controls in place are using strong and unique passwords, locking my desktop when I’m way from it, Not opening emails I don’t have time to give attention to. The resulting risk is $390. Additional controls needed are using multifactor authentication and verifying email senders’ id with the residual risk being accepted.

**Asset Name: Wells Fargo account**

**System ID: Software**

I valued this at $300,000. This is gotten by how much I have in my account (less than $1000) and how much I would lose if my account was being hacked into or if there has been fraudulent activity. Also, how much it would take to sue the bank. The system consists of personal information that could affect other assets I have such as shopping applications where I have my bank linked to make a purchase. Confidentiality, high is the worst-case categorization because I use my face id to login when I am in public so that I do not need to type in my information to log in to avoid shoulder surfing. I also do not share my banking information details with anybody and do not store my card information on the internet, I would rather fill in the information every time I need to use it. The ARO is measured at 0.5 because of the control measures I have in place such as Face Id and 2 factor authentication. My uncertainty is low at 20% because I only have the app on my phone and if by chance my phone gets missing, I can call the bank to deactivate the account from the device. My total risk value is $3,600 and I have chosen to transfer that to the bank because they are liable for any fraudulent activity on the account if reported immediately.

**Asset Name: iPhone 11**

**System ID: Hardware**

I valued this at $2000. This is gotten by how much it would cost to replace my phone and buy additional peripherals such as a charger, earpiece, phone case etc. The system consists of everything thing from photos, contact list and banking details. Confidentiality, high is the worst-case categorization because it won’t be easy to access the phone without face id making availability to the phone almost impossible. The ARO is measured medium (.01) because of as much as I try to protect my phone and not be careless there is a chance, I would have to give it up if held at gun point. My uncertainty is in between at 10% because I am always aware of where my phone is and have had previous experience where I lost an old phone, so I am more alert about my surroundings. Controls in place are using face id to unlock my phone so it won’t be say to bypass security and using a strong password. The resulting risk is $4.4. Additional controls needed are installing the software prey so that together with the tracking device that comes with the phone I can catch the culprit also. I have chosen to accept this risk