ISO Based Controls Playbook

Development Note

The ISO Based Controls Playbook was developed by Rob Dodson, SCF and is based on the Open Information Security Risk Universe and is therefore considered to be available under the Creative Commons Zero v1.0 Universal License.

Please provide updates to Phil Huggins and the Github repository https://github.com/oracuk/oisru.

Risk Universe – Threat Actors

- Malicious External Actor
 - Cybercriminals
 - Nation States
 - Hacktivist
- Malicious Internal Actor
 - Disgruntled Employee
 - Compromised Vendor
- Non-malicious Actor
 - Internal Accidental
 - Internal Ineffective
 - External

Risk Universe – Vulnerabilities

- People
 - Employees
 - Contractors
 - Third Party Suppliers
- Process
 - Security Activities
 - Security Roles
 - Security Documentation
- Technology
 - Operational Support
 - Security Tools

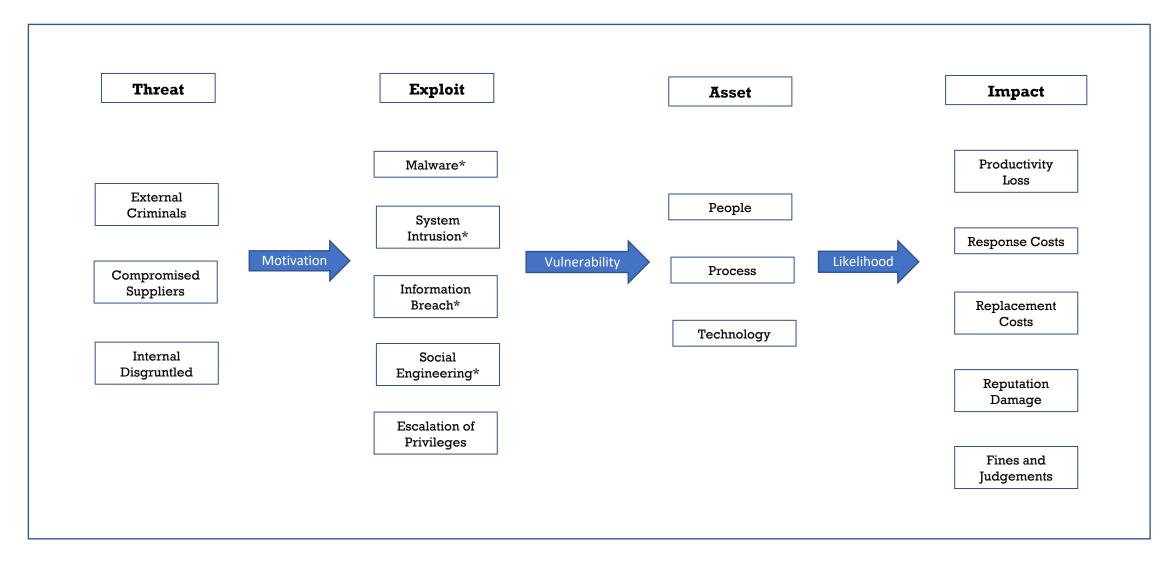
Risk Universe – Exploits

- Malware
 - Ransomware
 - Rootkits
 - Virus
- Service Interruption
 - DDoS
- System Intrusion Breach
 - Cross Site Scripting
- Information Breach
 - Data Theft
 - Supply Chain Attack
 - Escalation of Privileges
- Social Engineering
 - Phishing, Vishing, Smishing
 - Whaling

Risk Universe – Impact

- Productivity Loss
- Response Costs
- Replacement Costs
- Reputation Costs
- Fines and Judgements

Risk Universe



^{*}High level term for a family of risk events. See Bow Tie charts for details.

Controls Explained

Controls presented in this Playbook are either Preventative Controls or Mitigating Controls. These controls are based on the Five Focus Areas outlined in the NIST Cybersecurity Framework (CSF). The Focus Areas have been aligned with other Frameworks. The Focus Areas are:

Identify (Preventative)

Protect (Preventative)

Detect (Mitigating)

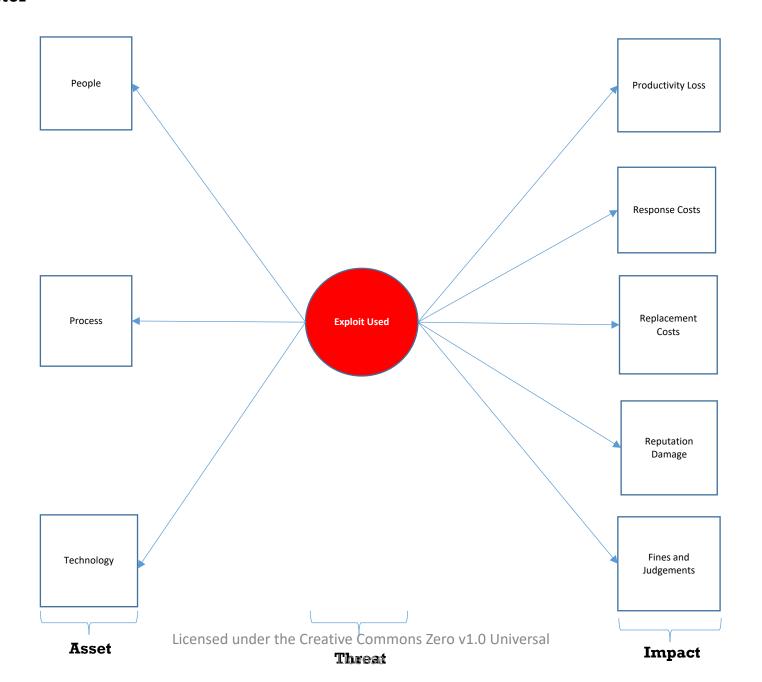
Respond (Mitigating)

Recover (Mitigating)

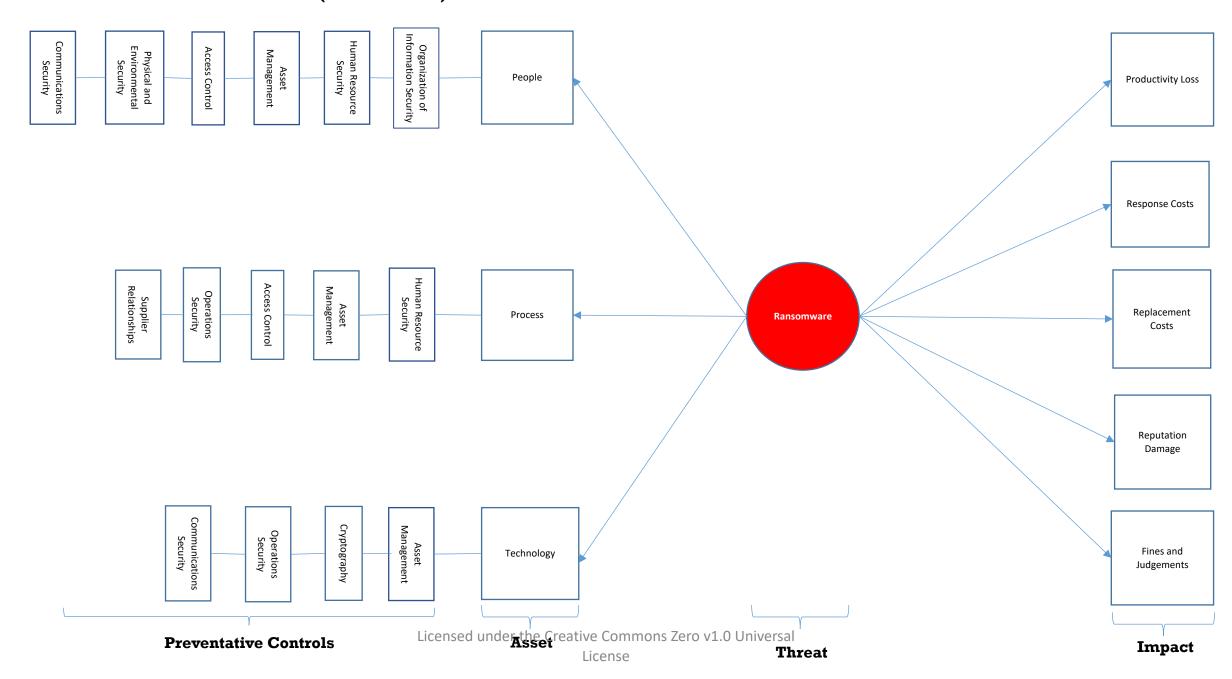
Controls Explained, continued

- The Identify Function assists in developing an organizational understanding to managing cybersecurity risk to people, Process, and technology.
- The Protect Function supports the ability to limit or contain the impact of a potential cybersecurity event.
- The Detect Function enables timely discovery of cybersecurity events.
- The Respond Function supports the ability to contain the impact of a potential cybersecurity incident.
- The Recover Function supports timely recovery to normal operations to reduce the impact from a cybersecurity incident.

Threat Action – Threat Actor



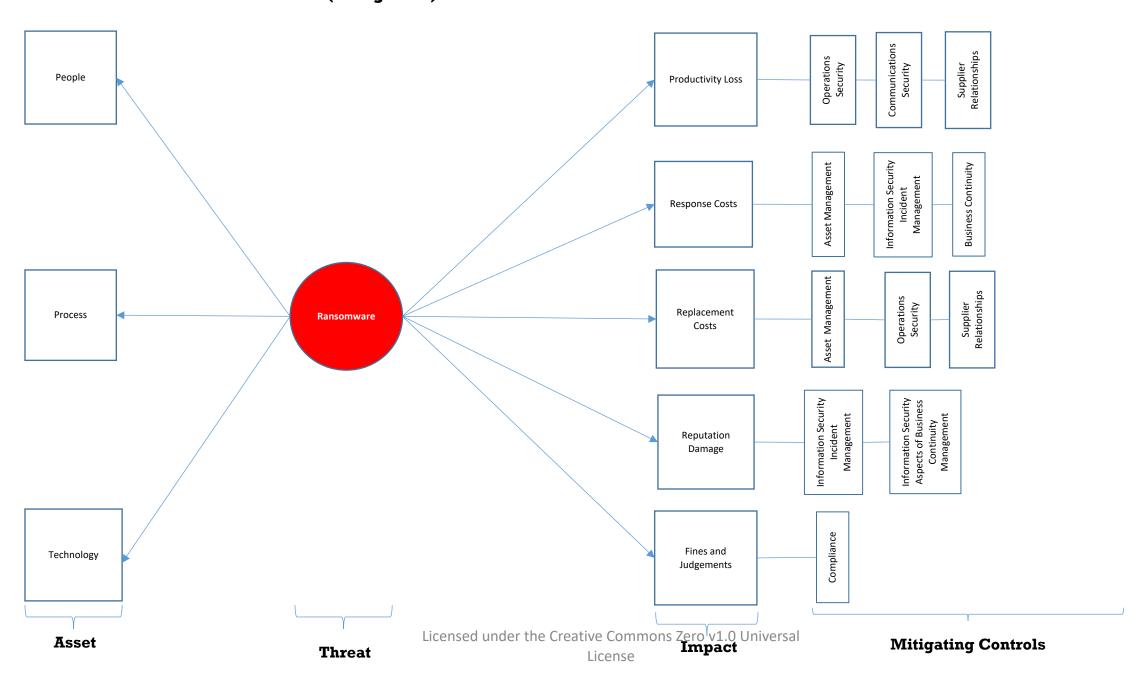
Malware – External Threat Actor (Preventative)



Malware – External Threat Actor (Preventative)

| Asset | Organization of Information Security | Human Resource Security | Asset Management | Access Control | Physical and Environmental Security | Communication Security |
|------------|---------------------------------------|--|--|---|---|------------------------------|
| People | 6.1 Internal Organization | 7.2.2 Information Security Awareness, Education and Training | 8.2 Information Classification | 9.1.2 Access to Networks and Network Services | 11.2.8 Unattended User Equipment | 13.2 Information Transfer |
| - cope | 6.2 Mobile Devices and Teleworking | | 8.3 Media Handling | 9.4.1 Information Access Restriction | | |
| | Human Resources | Asset Management | Access Control | Operations Security | Supplier Relationships | |
| Processes | 7.2 During Employment | 8.1 Responsibility for Assets | 9.1.2 Access to Networks and Network Services | 12.1 Operational Procedures and Responsibilities | 15.1 Information Security in Supplier Relationships | |
| | | 8.2 Information Classification 8.3 Media Handling | 9.4.1 Information Access Restriction | | | |
| | | 6.5 Media Franding | | | | |
| | Asset Management | Cryptography | Operations Security | Communications Security | | |
| | 8.3 Media Handling | 10.1 Cryptographic Controls | 12.3 Backup | 13.1 Network Security Management | | |
| Technology | | | 12.4 Logging and Monitoring | 13.2 Information Transfer | | |
| | | | 12.6 Technical Vulnerability Management | , | | |
| | | | 12.7 Information Systems Audit Considerations | | | |

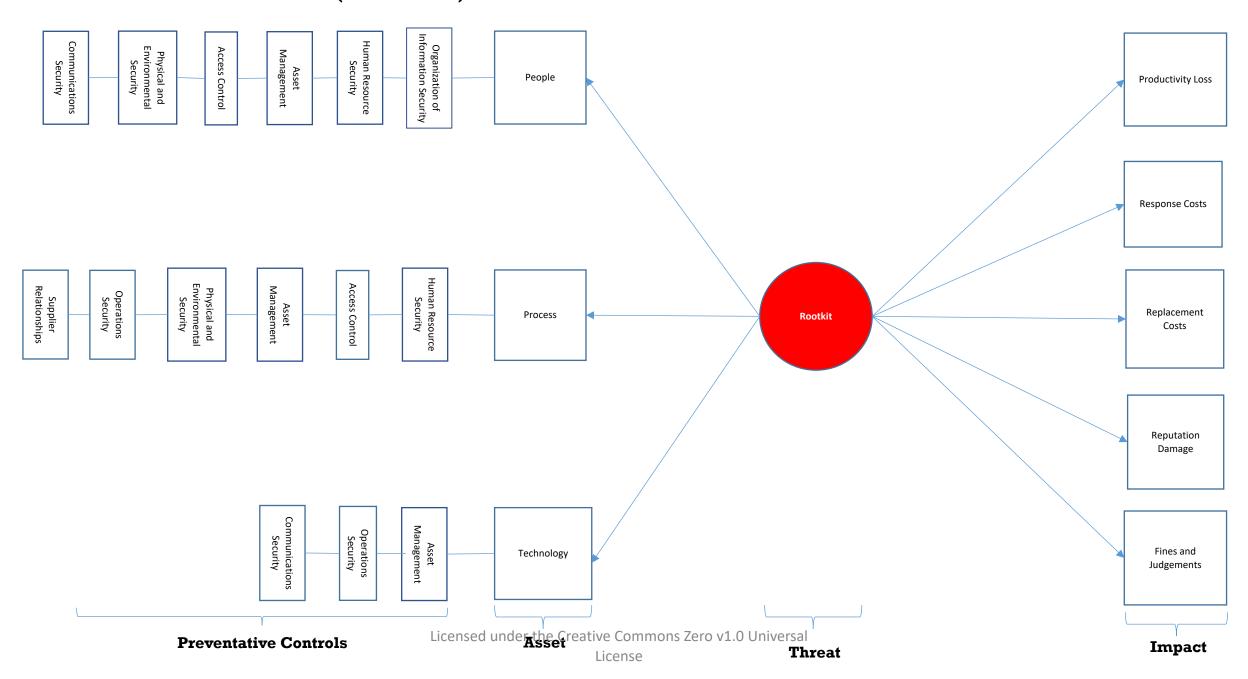
Malware – External Threat Actor (Mitigation)



Malware – External Threat Actor (Mitigation)

| Impact | Operations Security | Communications Security | Supplier Relationships |
|---------------------|--|---|---|
| Productivity Loss | 12.3.1 Information Backup | 13.1 Network Security Management | 15.1 Information Security in Supplier Relationships |
| • | 12.4 Logging and Monitoring | | |
| | | | |
| | Information Security Incident Management | Business Continuity | |
| Response Costs | 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity | |
| | | 17.2 Redundancies | |
| | | | |
| | Asset Management | Operations Security | Supplier Relationships |
| | 8.1 Responsibility for Assets | 12.2 Protection from Malware | 15.1.2 Addressing Security within Supplier Agreements |
| Replacement Costs | | 12.3 Backup | 15.3 Information and Communication Technology Supply Chain |
| | | 12.4 Logging and Monitoring | 15.2.1 Monitoring and review of supplier services. |
| | | 12.5 Control of Operational Software | 15.2.2 Managing Changes to Supplier Services |
| | | 12.6 Technical Vulnerability Management | |
| | | | |
| | Information security Incident | Information Security Aspects of | |
| | Management | Business Continuity Management | |
| Reputation Damage | 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity | |
| | | 17.2 Redundancies | |
| | 0 11 | | |
| | Compliance | | |
| Fines and Judgement | 18.1 Compliance with Legal and Contractual Requirements | | |
| | 18.2 Information Security Review Licensed under the Cre | ative Commons Zero v1.0 Universal | |

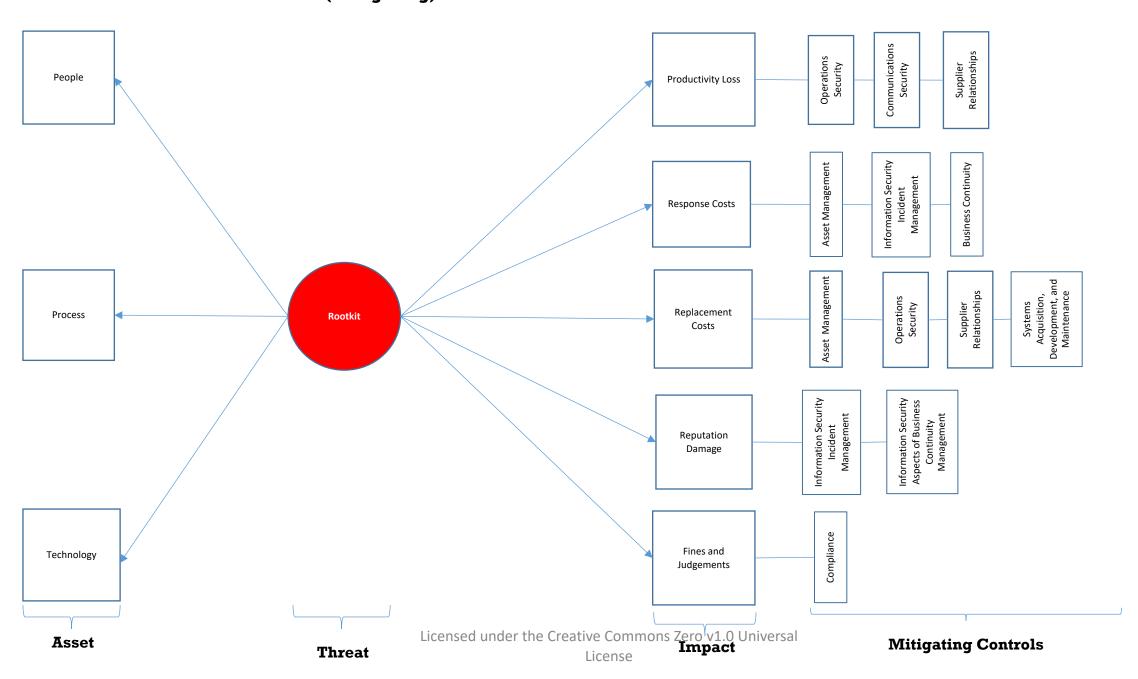
Malware – External Threat Actor (Preventative)



Malware – External Threat Actor (Preventative)

| Asset | Organization of Information Security | Human Resource Security | Asset Management | Access Control | Physical and Environmental Security | Communications Security |
|------------|---------------------------------------|--|---|---|--|---|
| People | 6.1 Internal Organization | 7.2.2 Information Security Awareness, Education and Training | 8.2 Information Classification | 9.1.2 Access to Networks and Network Services | 11.2.8 Unattended User Equipment | 13.2 Information Transfer |
| reopie | 6.2 Mobile Devices and Teleworking | Training | 8.3 Media Handling | 9.4.1 Information Access Restriction | | |
| | Human Resource Security | Asset Management | Access Control | Physical and Environmental Security | Operations Security | Supplier Relations |
| Processes | 7.2 During Employment | 8.1 Responsibility for Assets | 9.1.2 Access to Networks and Network Services | 11.1 Secure Area | 12.1 Operational Procedures and Responsibilities | 15.1 Information Security in Supplier Relationships |
| | | 8.2 Information Classification | 9.4.1 Information Access Restriction | | _ | - |
| | | 8.3 Media Handling | | | | |
| | Asset Management | Operations Security | Communications Security | | | |
| | 8.3 Media Handling | 12.3 Backup | 13.1 Network Security Management | | | |
| Technology | | 12.4 Logging and Monitoring | 13.2 Information Transfer | | | |
| | | 12.6 Technical Vulnerability Management | | | | |
| | | 12.7 Information Systems Audit Considerations | | | | |

Malware – External Threat Actor (Mitigating)

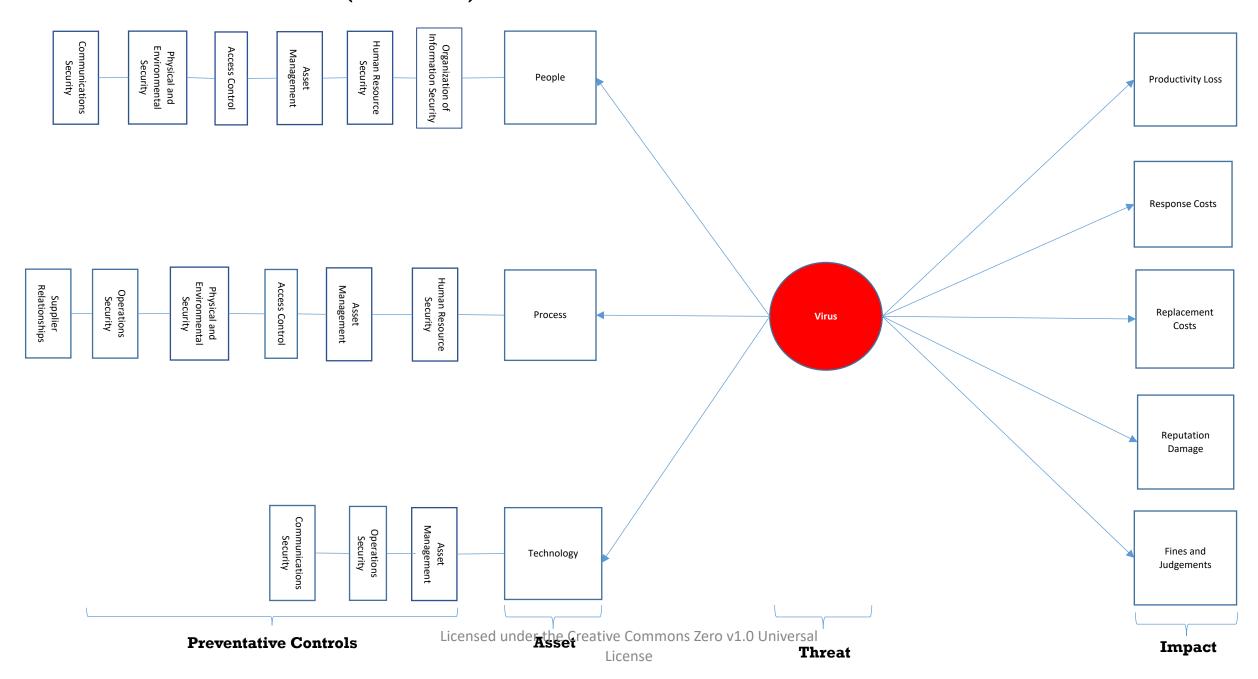


Malware – External Threat Actor (Mitigating)

| Impact | Operations Security | Communications Security | Supplier Relationships |
|---------------------|--|--|---|
| Productivity Loss | 12.3.1 Information Backup | 13.1 Network Security Management | 15.1 Information Security in Supplier Relationships |
| • | 12.4 Logging and Monitoring | | |
| | | | |
| | Systems Acquisition, Development, and Maintenance | Information Security Incident Management | Business Continuity |
| Response Costs | 14.1 Security Requirements of Information Systems | 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity |
| | | | 17.2 Redundancies |
| | | | |
| | Asset Management | Operations Security | Supplier Relationships |
| | 8.1 Responsibility for Assets | 12.2 Protection from Malware | 15.1.2 Addressing Security within Supplier Agreements |
| Replacement Costs | | 12.3 Backup | 15.3 Information and Communication Technology Supply Chain |
| | | 12.4 Logging and Monitoring | 15.2.1 Monitoring and review of supplier services. |
| | | 12.5 Control of Operational Software | 15.2.2 Managing Changes to Supplier Services |
| | | 12.6 Technical Vulnerability Management | |
| | | | |
| | Information security Incident Management | Information Security Aspects of Business Continuity Management | |
| Reputation Damage | 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity | |
| | | 17.2 Redundancies | |
| | | | |
| | Compliance | | |
| Fines and Judgement | 18.1 Compliance with Legal and Contractual Requirements | | |
| | 18.2 Information Security Review | ative Commons Zero v1.0 Universal | |

License

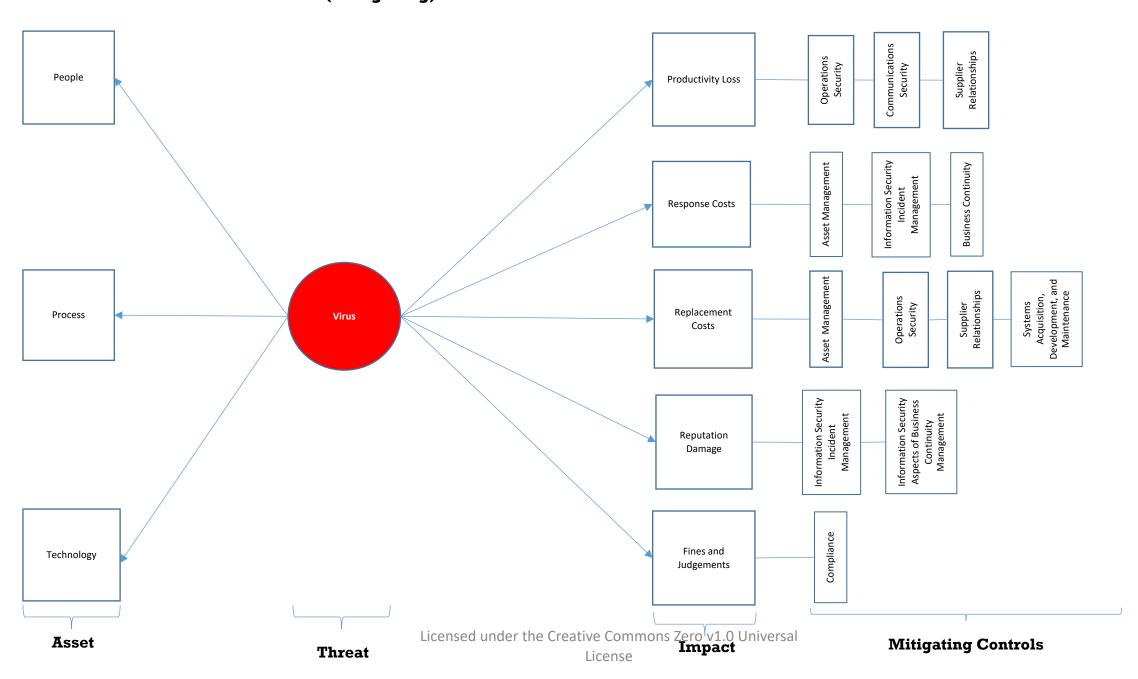
Malware – External Threat Actor (Preventative)



Malware – External Threat Actor (Preventative)

| Asset | Organization of Information Security | Human Resource Security | Asset Management | Access Control | Physical and Environmental Security | Communications Security |
|------------|--|--|---|---|--|---|
| People | 6.1 Internal Organization | 7.2.2 Information Security Awareness, Education and Training | 8.3 Media Handling | 9.1.2 Access to Networks and Network Services | 11.2.8 Unattended User Equipment | 13.2 Information Transfer |
| reopie | 6.2 Mobile Devices and Teleworking | Training | | 9.4.1 Information Access Restriction | | |
| | Teleworking | | | Access Restriction | | |
| | Human Resource Security | Asset Management | Access Control | Physical and Environmental Security | Operations Security | Supplier Relation |
| Processes | 7.2 During Employment | 8.3 Media Handling | 9.1.2 Access to Networks and Network Services | 11.2.8 Unattended User Equipment | 12.1 Operational Procedures and Responsibilities | 15.1 Information Security in Supplier Relationships |
| | 7.3 Termination and Change of Employment | | 9.4.1 Information Access Restriction | | | |
| | Acces Management | On anations Sometime | Communications | | | |
| | Asset Management | Operations Security | Security | | | |
| | 8.3 Media Handling | 12.3 Backup | 13.1 Network Security Management | | | |
| Technology | | 12.4 Logging and Monitoring | 13.2 Information Transfer | | | |
| | | 12.6 Technical Vulnerability Management | | | | |
| | | 12.7 Information Systems Audit Considerations | | | | |

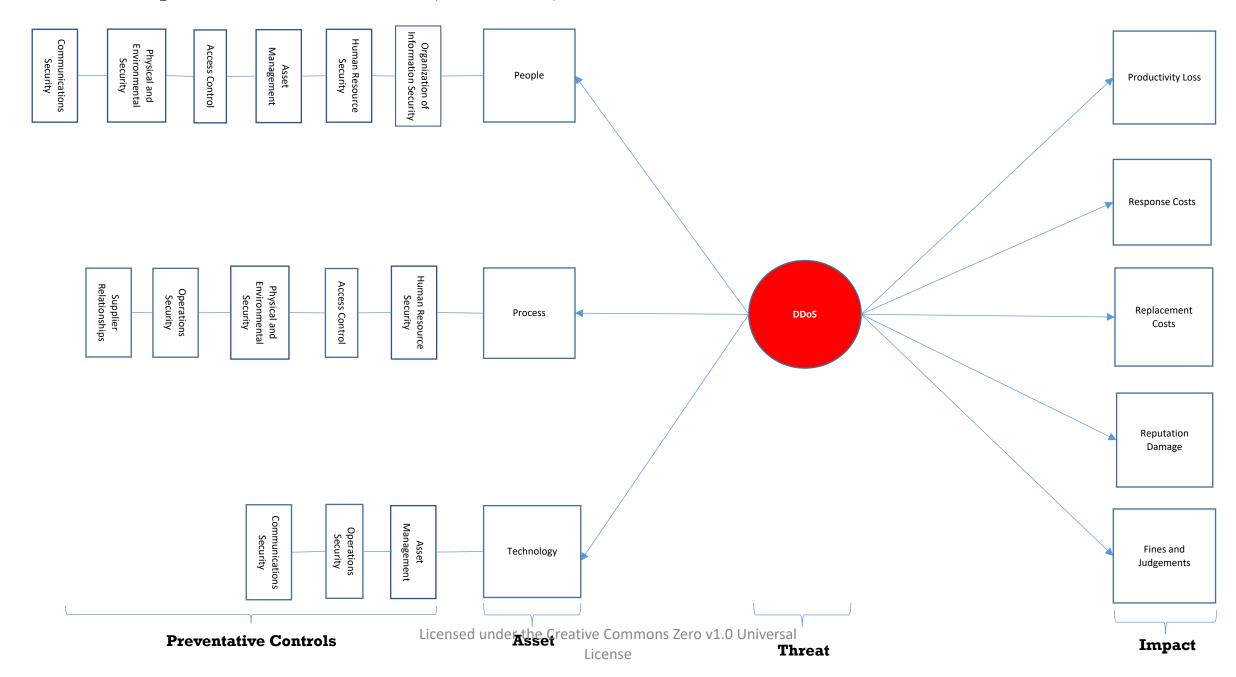
Malware – External Threat Actor (Mitigating)



Malware – External Threat Actor (Mitigating)

| Impact | Operations Security | Communications Security | Supplier Relations | |
|---------------------|--|--|---|---|
| Productivity Loss | 12.3.1 Information Backup | 13.1 Network Security Management | 15.1 Information Security in Supplier Relationships | |
| · | 12.4 Logging and Monitoring | | | |
| | | | | |
| | Information Security Incident Response | Business Continuity | | |
| Response Costs | 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity | | |
| | | 17.2 Redundancies | | |
| | | | | |
| | Asset Management | Operations Security | Supplier Relations | System Acquisition, Development and |
| Replacement Costs | 8.1 Responsibility for Assets | 12.5 Control of Operational Software | 15.3 Information and Communication Technology Supply Chain | 14.1 Security Requirements of Information Systems |
| | 8.2 Media Handling | | 15.2.1 Monitoring and review of supplier services. | 14.2 Security in Development and |
| | | | | |
| | Information Security Incident Response | Information Security Aspects of Business Continuity Management | | |
| Reputation Damage | 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity | | |
| | | 17.2 Redundancies | | |
| | | | | |
| | Compliance | | | |
| Fines and Judgement | 18.1 Compliance with Legal and Contractual Requirements | | | |
| | 18.2 Information Security Review | | | |

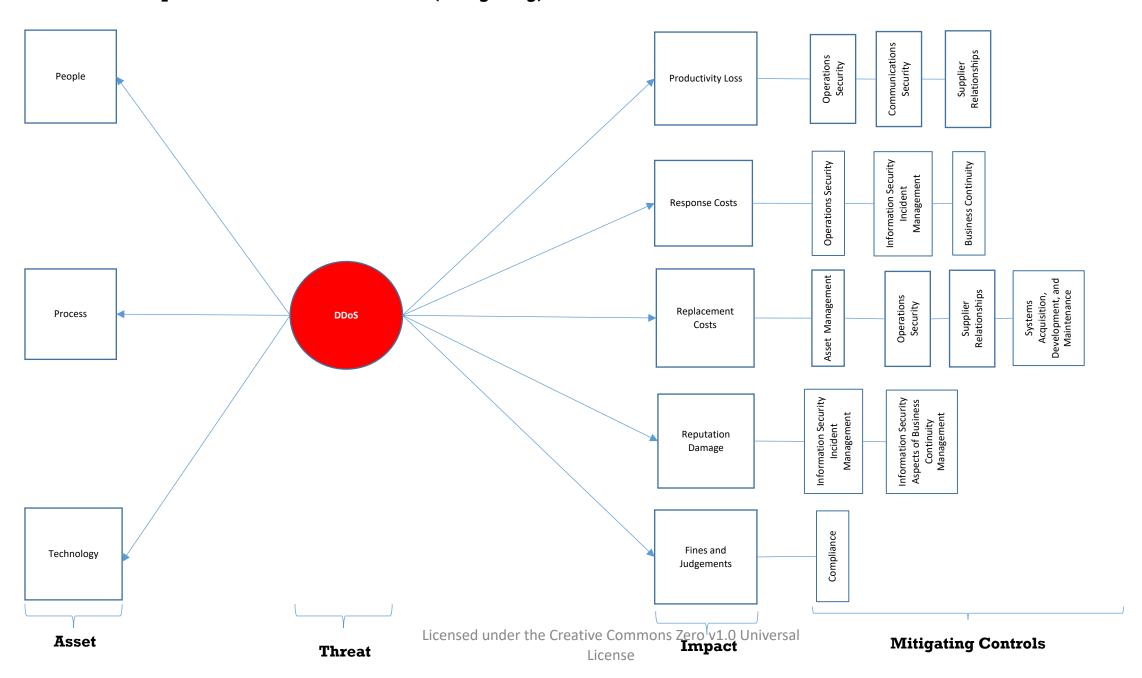
Service Interruption – External Threat Actor (Preventative)



Service Interruption – External Threat Actor (Preventative)

| Assets | Organization of Information Security | Human Resource Security | Asset Management | Access Control | Physical and Environmental Security | Communications Security |
|------------|--|--|---|---|--|---|
| People | 6.1.3 Contact with Authorities | 7.2.2 Information Security Awareness, Education and Training | 8.3 Media Handling | 9.1.2 Access to Networks and Network Services | 11.2.8 Unattended User Equipment | 13.1 Network Security Management |
| | 6.1.3 Contact with Special Interest Groups | | | | | |
| | 6.2 Mobile Devices and Teleworking | | | | | |
| | | | | | | |
| _ | Human Resources | Asset Management | Access Control | Physical and Environmental Security | Operations Security | Supplier Relationships |
| Process | 7.2.2 Information Security Awareness, Education and Training | | 9.1.2 Access to Networks and Network Services | 11.2.8 Unattended User Equipment | 12.1 Operational Procedures and Responsibilities | 15.1 Information Security in Supplier Relationships |
| | Training | | | | Responsibilities | Relationships |
| | Asset Management | Operations Security | Communications Security | | | |
| | 8.3 Media Handling | 12.3 Backup | 13.1 Network Security Management | | | |
| Technology | | 12.4 Logging and Monitoring | | | | |
| | | 12.6 Technical Vulnerability Management | | | | |

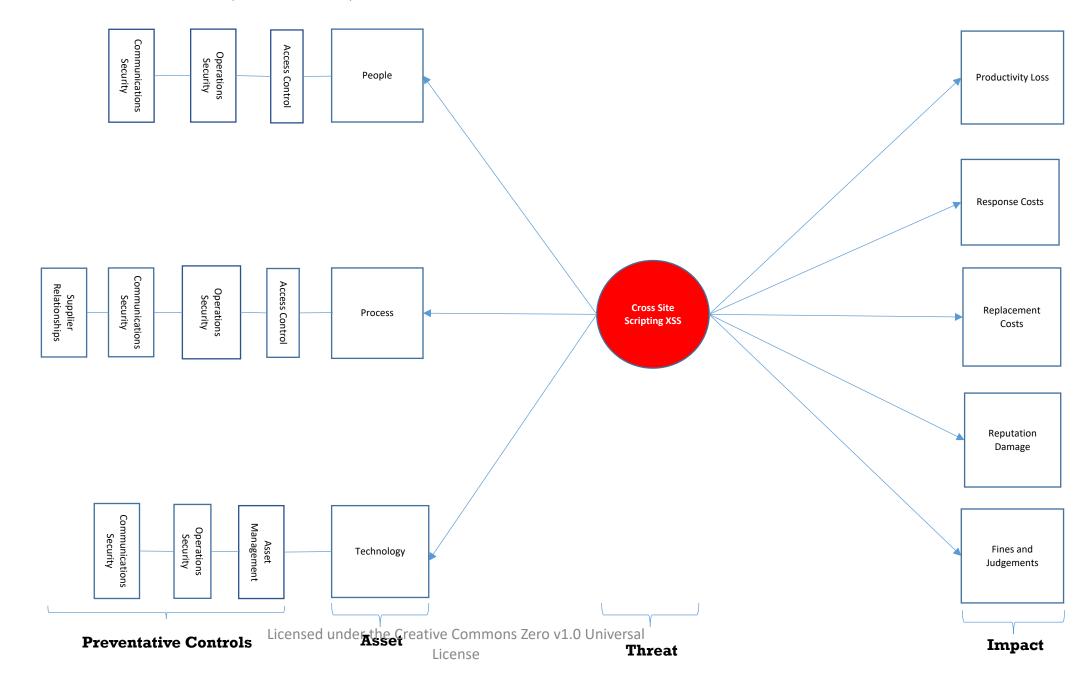
Service Interruption – External Threat Actor (Mitigating)



Service Interruption – External Threat Actor (Mitigating)

| Impact | Operations Security | Communications Security | Supplier Relations |
|---------------------|--|--|--|
| Productivity Loss | 12.3.1 Information Backup | 13.1 Network Security Management | 15.1 Information Security in Supplier Relationships |
| • | 12.4 Logging and Monitoring | 13.2 Information Transfer | 15.2 Supplier Service Deliver Management |
| | | | |
| | Operations Security | Information Security Incident Response | Information Security Aspects of Business Continuity Management |
| Response Costs | 12.3.1 Information Backup | 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity |
| | | | 17.2 Redundancies |
| | | | |
| | Operations Security | Supplier Relations | System Acquisition, Development and Maintenance |
| Replacement Costs | 12.2 Protection from Malware | 15.3 Information and Communication Technology Supply Chain | 14.1 Security Requirements of Information Systems |
| | 12.3 Backup | 15.2.1 Monitoring and review of supplier services. | 14.2 Security in Development and Support Processes |
| | | | |
| | Information Security Incident Response | Information Security Aspects of Business Continuity Management | |
| Reputation Damage | 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity | |
| | | 17.2 Redundancies | |
| | | | |
| | Compliance | | |
| Fines and Judgement | 18.1 Compliance with Legal and Contractual Requirements | | |
| | 18.2 Information Security Review | | |

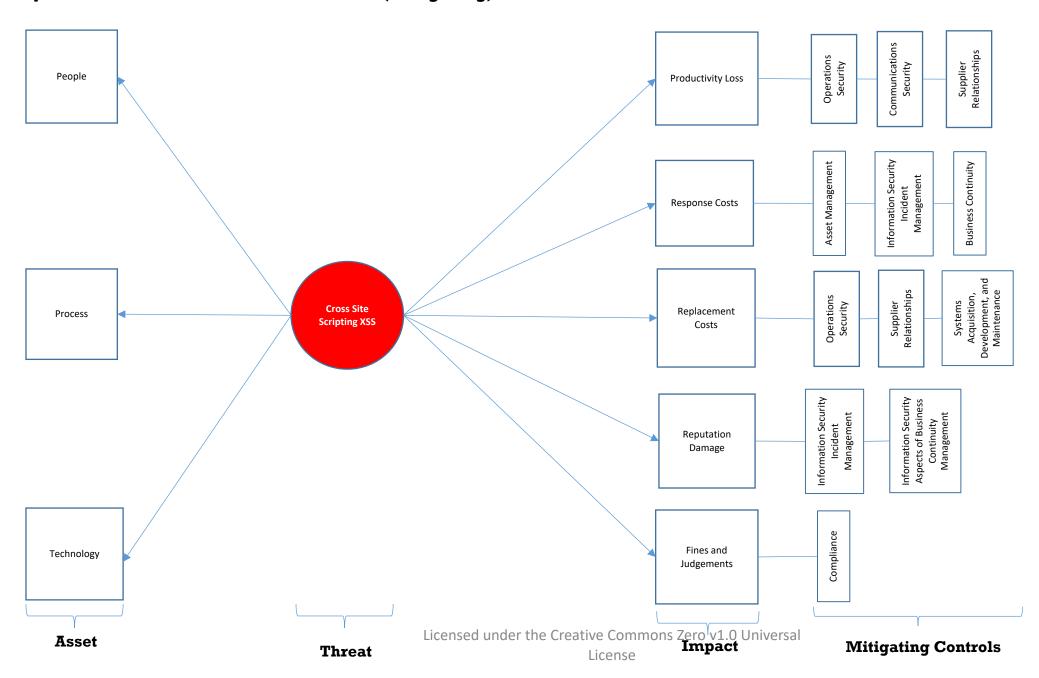
System Breach – External Threat Actor (Preventative)



System Breach – External Threat Actor (Preventative)

| Asset | Access Control | Operations Security | Communications Security | |
|------------|---|--|----------------------------------|------------------------------------|
| | 9.1.2 Access to Networks and Network Services | 12.4 Logging and Monitoring | 13.1 Network Security Management | |
| Doomlo | 9.4 System and | 12.6 Technical | Management | |
| People | Application Access Control | Vulnerability Management | | |
| | | | | |
| | Access Control | Operations Security | Communications Security | Supplier Relationships |
| | 9.1.2 Access to Networks | 12.1 Operational | 13.1 Network Security | 15.1 Information |
| | and Network Services | Procedures and Responsibilities | Management | Security in Supplier Relationships |
| Processes | 9.4 System and | 12.4 Logging and | | 1 |
| | Application Access Control | Monitoring | | |
| | | 12.6 Technical Vulnerability Management | | |
| | | | | |
| | Access Control | Operations Security | Communications Security | |
| | 9.1.2 Access to Networks | 12.1 Operational | 13.1 Network Security | |
| Technology | and Network Services | Procedures and | Management | |
| | | Responsibilities | | |
| | 9.4 System and Application Access Control | 12.4 Logging and Monitoring | | |
| | Collifor | 12.6 Technical | | |
| | | Vulnerability Management | | |

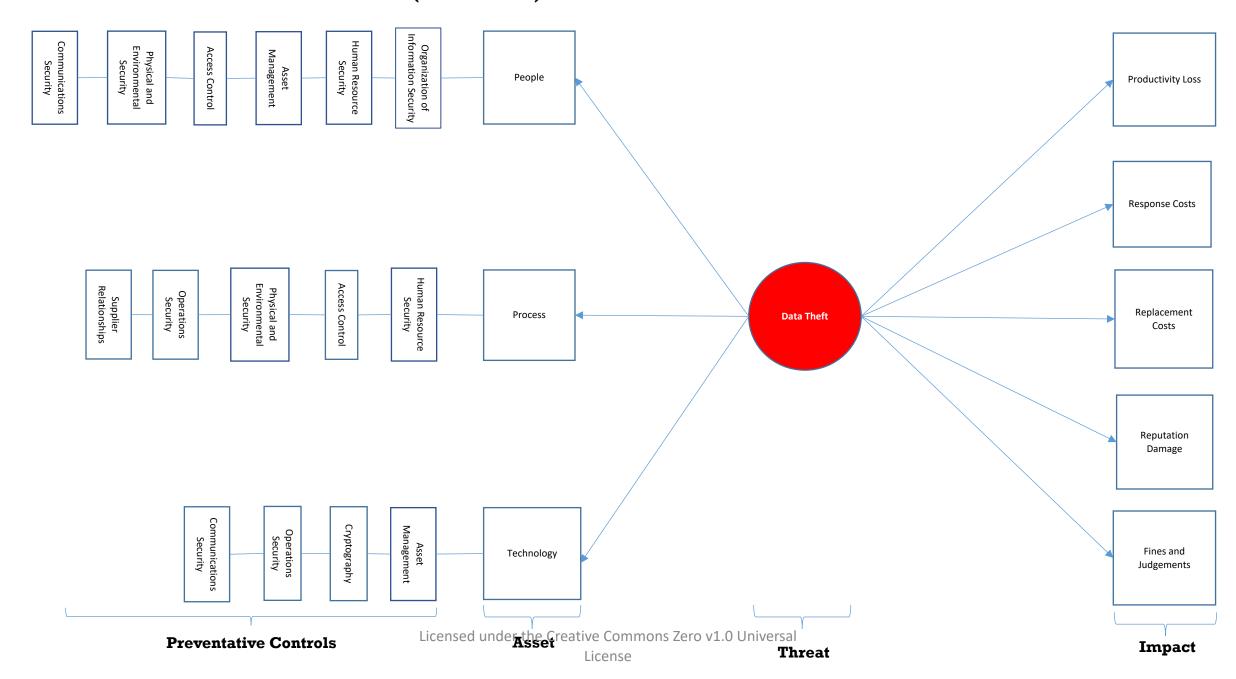
System Breach – External Threat Actor (Mitigating)



System Breach – External Threat Actor (Mitigating)

| Impact | Operations Security | Communications Security | Supplier Relationships |
|---------------------|--|--|---|
| Productivity Loss | 12.3.1 Information Backup | 13.1 Network Security Management | 15.1 Information Security in Supplier Relationships |
| • | 12.4 Logging and Monitoring | | |
| | | | |
| | Information Security Incident Response | Information Security Aspects of Business Continuity Management | |
| Response Costs | 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity | |
| | | 17.2 Redundancies | |
| | Operations Security | Supplier Relationships | |
| Replacement Costs | 12.5 Control of Operational Software | 15.3 Information and Communication Technology Supply Chain | |
| | | 15.2.1 Monitoring and review of supplier services. | |
| | | | |
| | Information Security Incident | Information Security Aspects of | |
| | Response | Business Continuity Management | |
| Reputation Damage | 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity | |
| | | 17.2 Redundancies | |
| | | | |
| | Compliance | | |
| Fines and Judgement | 18.1 Compliance with Legal and Contractual Requirements | | |
| | 18.2 Information Security Review | | |

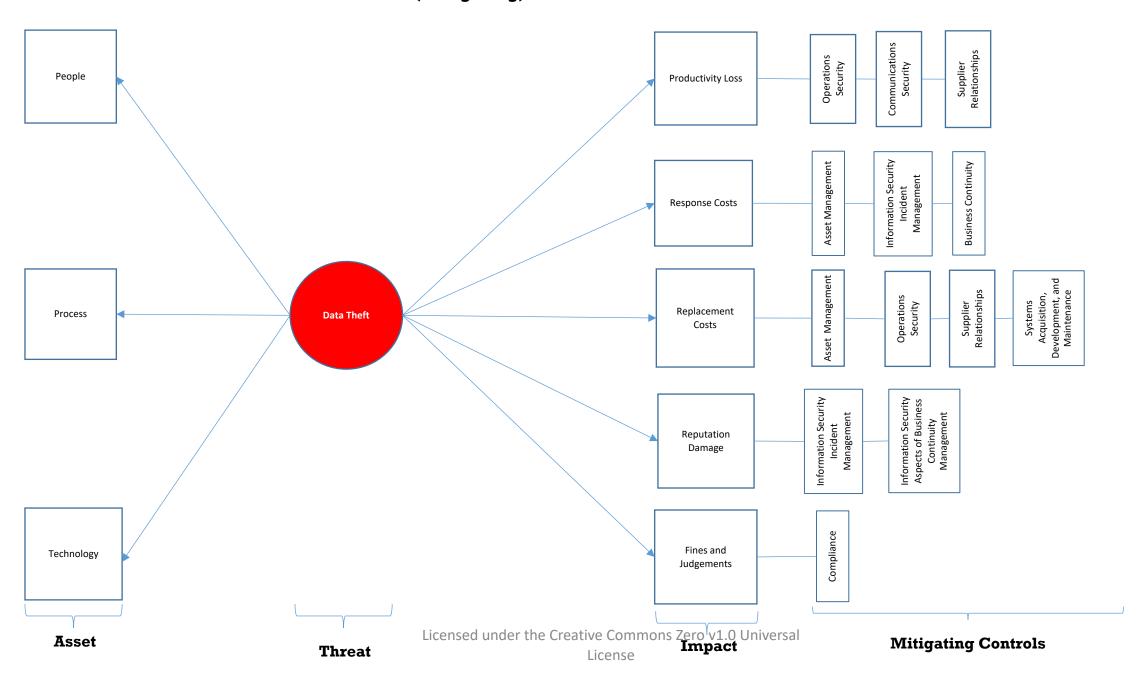
Information Breach – Insider Threat Actor (Preventative)



Information Breach – Insider Threat Actor (Preventative)

| Asset | Organization of Information Security | Human Resource Security | Asset Management | Access Control | Physical and Environmental Security | Communication Security |
|------------|--|---|--|---|--|--|
| | 6.1 Internal Organization | 7.1 Prior to Employment | 8.1 Responsibility for | 9.1 Business | 11.1 Secure Area | 13.2 Information |
| | | | Assets | Requirements of Access Control | | Transfer |
| People | 6.2 Mobile Devices and Teleworking | 7.2 During Employment | 8.2 Information Classification | 9.2 User Access Management | | |
| | Ü | 7.3 Termination and Change of Employment | 8.3 Media Handling | 9.4 System and Application Access Control | | |
| | Human Resource Security | Asset Management | Access Control | Physical and Environmental Security | Operations Security | Supplier Relationships |
| Processes | 7.1 Prior to Employment | 8.1 Responsibility for Assets | 9.1 Business Requirements of Access Control | 11.1 Secure Area | 12.1 Operational Procedures and Responsibilities | 15.1 Information Security in Supplie Relationships |
| | 7.2 During Employment | 8.2 Information Classification | 9.2 User Access Management | | · | - |
| | 7.3 Termination and Change of Employment | 8.3 Media Handling | 9.4 System and Application Access Control | | | |
| | | | | | | |
| | Asset Management | Cryptography | Operations Security | Communications Security | | |
| | 8.3 Media Handling | 10.1 Cryptographic Controls | 12.3 Backup | 13.1 Network Security Management | | |
| Technology | | | 12.4 Logging and Monitoring | 13.2 Information Transfer | | |
| - | | | 12.6 Technical Vulnerability Management | | | |
| | | | 12.7 Information Systems Audit Considerations | | | |

Information Breach – Insider Threat Actor (Mitigating)

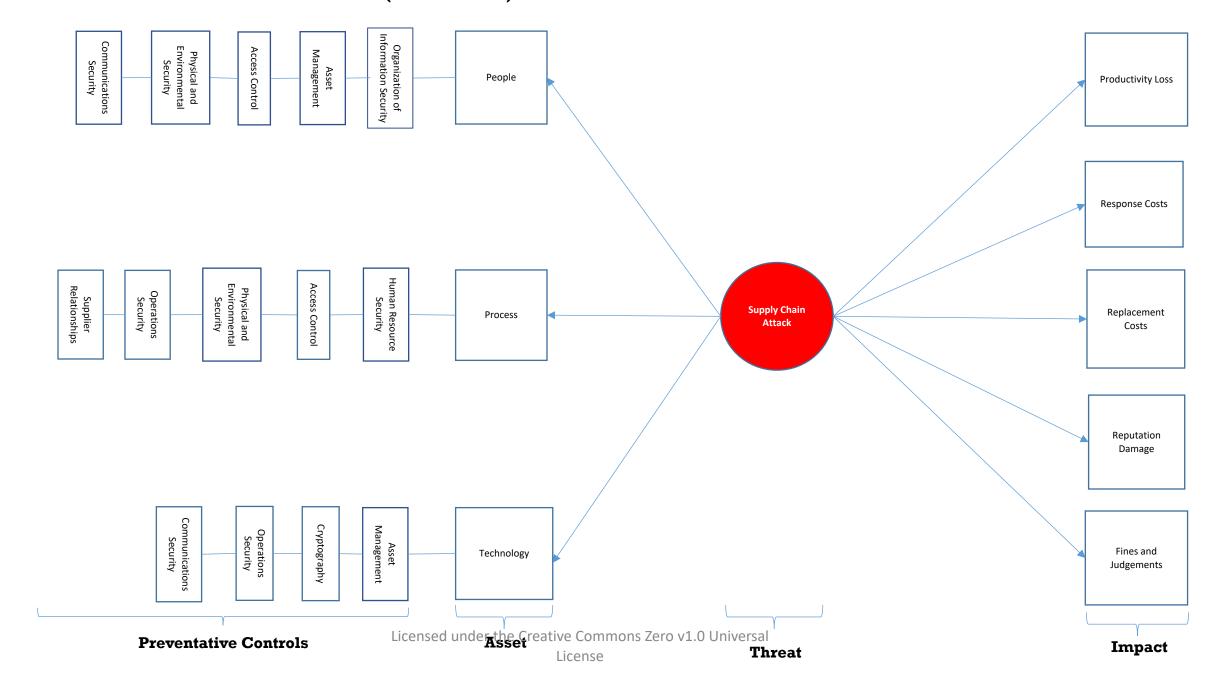


Information Breach – Insider Threat Actor (Mitigating)

| Impact | Operations Security | Communications Security | Supplier Relationships |
|---------------------|--|--|--|
| Productivity Loss | 12.3.1 Information Backup | 13.1 Network Security Management | 15.1 Information Security in Supplier Relationships |
| · | 12.4 Logging and Monitoring | | |
| | | | |
| | Information Security Incident Response | Information Security Aspects of Business Continuity Management | |
| Response Costs | 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity | |
| | | 17.2 Redundancies | |
| | | | |
| | Operations Security | Supplier Relationships | Systems Acquisition, Development, and Maintenance |
| | 12.5 Control of Operational Software | 15.1.2 Addressing Security within Supplier Agreements | 14.1 Security Requirements of Information Systems |
| Replacement Costs | | 15.3 Information and Communication Technology Supply Chain | 14.2 Security in Development and Support Processes |
| | | 15.2.1 Monitoring and review of supplier services. | |
| | | 15.2.2 Managing Changes to Supplier Services | |
| | | | |
| | Information Security Incident | Information Security Aspects of | |
| | Response | Business Continuity Management | |
| Reputation Damage | 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity | |
| | | 17.2 Redundancies | |
| | Compliance | | |
| Fines and Judgement | 18.1 Compliance with Legal and Contractual Requirements | | |
| | 18.2 Information Security Review | ative Commons Zero v1.0 Universal | |

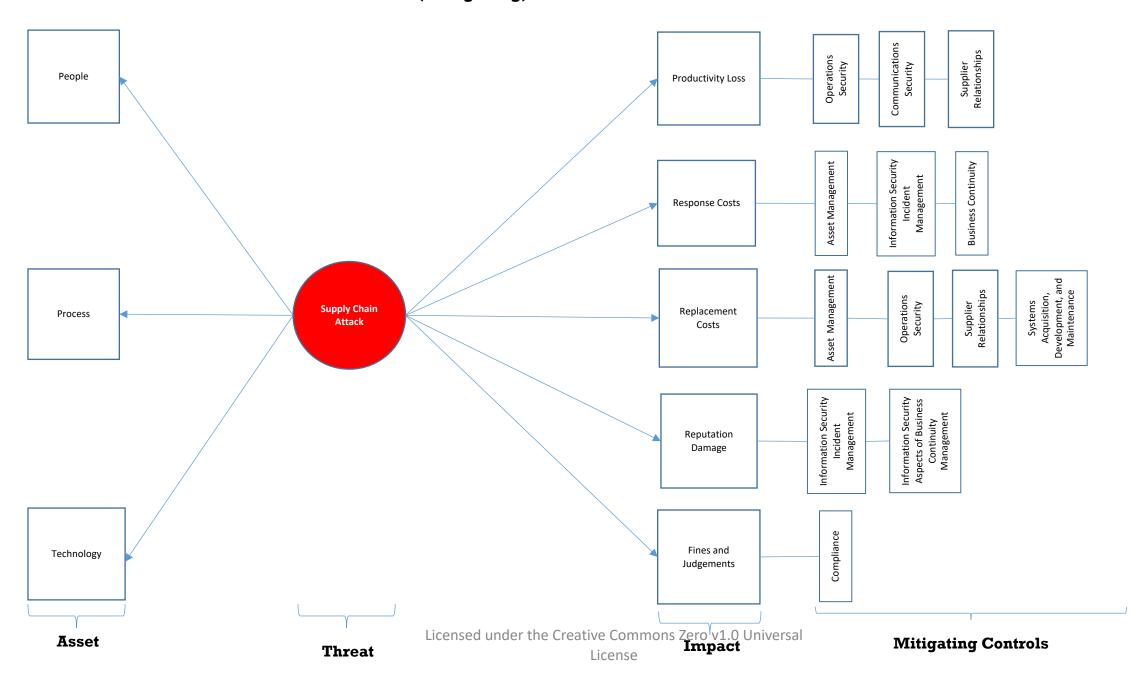
License

Information Breach – Insider Threat Actor (Preventative)



Information Breach – Insider Threat Actor (Preventative)

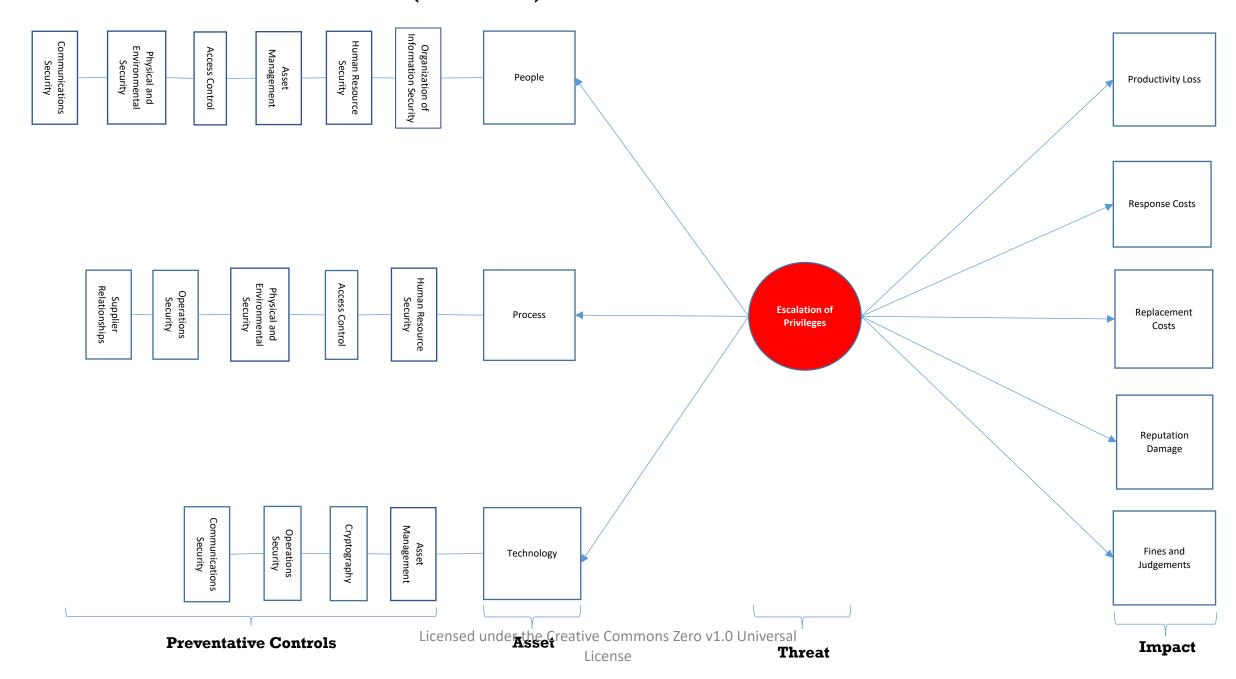
| Asset | Organization of Information Security | Asset Management | Access Control | Physical and Environmental | Communications Security |
|------------|---|---|---|--|---|
| People | 6.1 Internal Organization | 8.1 Responsibility for Assets | 9.1 Business Requirements of Access Control | 11.1 Secure Area | 13.2 Information Transfer |
| | 6.2 Mobile Devices and Teleworking | 8.2 Information Classification 8.3 Media Handling | 9.2 User Access Management 9.4 System and Application Access Control | | |
| | Asset Management | Access Control | Physical and Environmental Security | Operations Security | Supplier Relationships |
| Processes | 8.1 Responsibility for Assets | 9.1 Business Requirements of Access Control | 11.1 Secure Area | 12.1 Operational Procedures and Responsibilities | 15.1 Information Security in Supplier Relationships |
| | 8.2 Information Classification 8.3 Media Handling | 9.2 User Access Management 9.4 System and | | | |
| | 8.5 Media Frandling | Application Access Control | | | |
| | Asset Management | Cryptography | Operations Security | Communications | |
| | risset Wallagement | Gryptogrupny | operations seeding | Security | |
| | 8.3 Media Handling | 10.1 Cryptographic Controls | 12.3 Backup | 13.1 Network Security Management | |
| | | | 12.4 Logging and | 13.2 Information | |
| Technology | | | Monitoring | Transfer | |
| | | | 12.6 Technical Vulnerability Management | | |
| | | | 12.7 Information Systems Audit Considerations | | |



| Impact | Operations Security | Communications Security | Supplier Relations |
|---------------------|--|--|--|
| Productivity Loss | 12.3.1 Information Backup | 13.1 Network Security Management | 15.1 Information Security in Supplier Relationships |
| | 12.4 Logging and Monitoring | | |
| | | | |
| | Information Security Incident Response | Information Security Aspects of Business Continuity Management | |
| Response Costs | 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity | |
| | | 17.2 Redundancies | |
| | | | |
| | Operations Security | Supplier Relations | Systems Acquisition, Development, and Maintenance |
| | 12.5 Control of Operational Software | 15.1.2 Addressing Security within Supplier Agreements | 14.1 Security Requirements of Information Systems |
| Replacement Costs | | 15.3 Information and Communication Technology Supply Chain | 14.2 Security in Development and Support Processes |
| | | 15.2.1 Monitoring and review of supplier services. | |
| | | 15.2.2 Managing Changes to Supplier Services | |
| | | | |
| | Information Security Incident Response | Information Security Aspects of Business Continuity Management | |
| Reputation Damage | 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity | |
| | | 17.2 Redundancies | |
| | | | |
| | Compliance | | |
| Fines and Judgement | 18.1 Compliance with Legal and Contractual Requirements | | |
| | 18.2 Information Security Review | ative Commons Zero v1.0 Universal | |

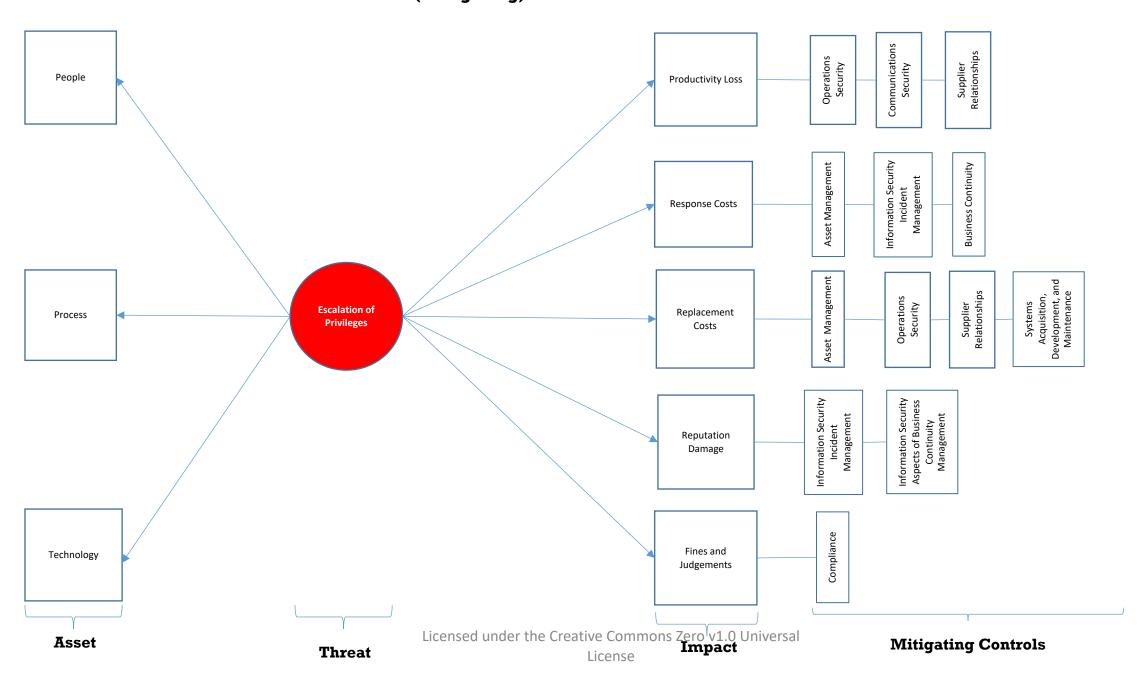
License

Information Breach – Insider Threat Actor (Preventative)



Information Breach – Insider Threat Actor (Preventative)

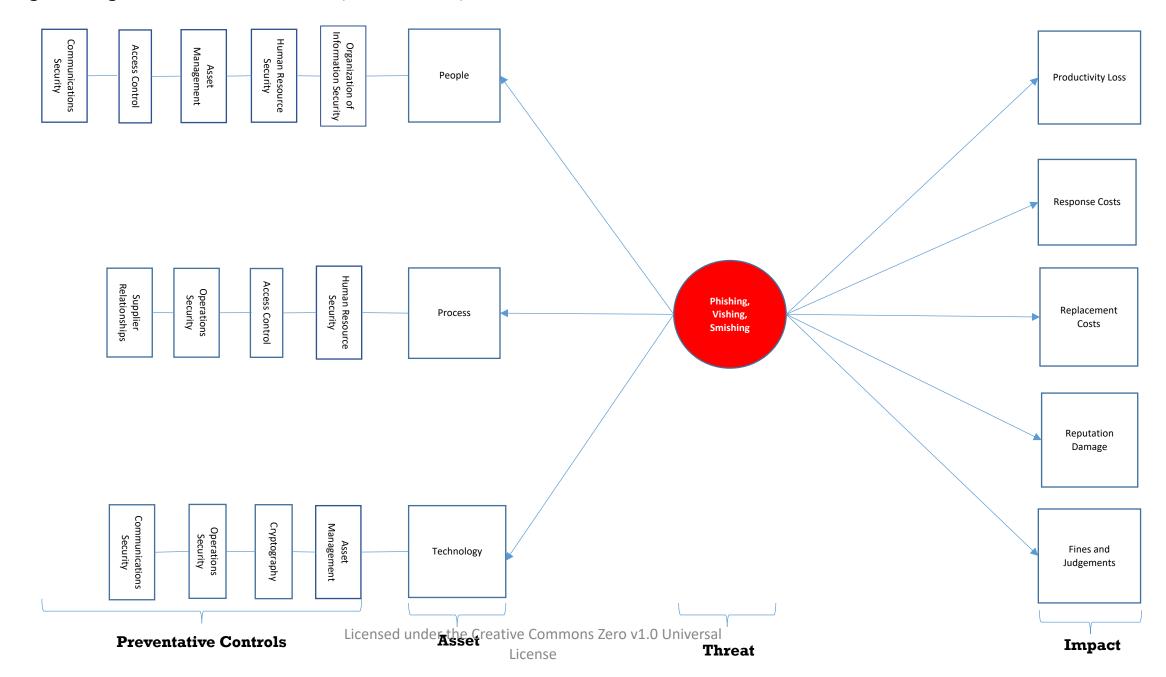
| Asset | Organization of Information Security | Human Resources | Asset Management | Access Control | Physical and Environmental Security | Communication Security |
|------------|--|---|--|---|--|--|
| | 6.1 Internal Organization | 7.1 Prior to Employment | 8.1 Responsibility for Assets | 9.1 Business Requirements of | 11.1 Secure Area | 13.2 Information Transfer |
| People | 6.2 Mobile Devices and Teleworking | 7.2 During Employment | 8.2 Information Classification | 9.2 User Access Management | | |
| | | 7.3 Termination and Change of Employment | 8.3 Media Handling | 9.4 System and Application Access Control | | |
| | Human Resources | Asset Management | Access Control | Physical and Environmental Security | Operations Security | Supplier Relationships |
| Processes | 7.1 Prior to Employment | 8.1 Responsibility for Assets | 9.1 Business Requirements of Access Control | 11.1 Secure Area | 12.1 Operational Procedures and Responsibilities | 15.1 Information Security in Supplie Relationships |
| | 7.2 During Employment | 8.2 Information Classification | 9.2 User Access Management | | | 1 |
| | 7.3 Termination and Change of Employment | 8.3 Media Handling | 9.4 System and Application Access Control | | | |
| | Asset Management | Cryptography | Operations Security | Communications Security | | |
| Technology | 8.3 Media Handling | 10.1 Cryptographic Controls | 12.3 Backup | 13.1 Network Security Management | | |
| | | | 12.4 Logging and Monitoring | 13.2 Information Transfer | | |
| | | | 12.6 Technical Vulnerability Management | | | |
| | | | 12.7 Information Systems Audit Considerations | | | |



| Impact | Operations Security | Communications Security | Supplier Relationships |
|---------------------|--|--|--|
| Productivity Loss | 12.3.1 Information Backup | 13.1 Network Security Management | 15.1 Information Security in Supplier Relationships |
| • | 12.4 Logging and Monitoring | | |
| | | | |
| | Information Security Incident Response | Information Security Aspects of Business Continuity Management | |
| Response Costs | 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity | |
| | · | 17.2 Redundancies | |
| | | | |
| | Operations Security | Supplier Relationships | Systems Acquisition, Development, and Maintenance |
| | 12.5 Control of Operational Software | 15.1.2 Addressing Security within Supplier Agreements | 14.1 Security Requirements of Information Systems |
| Replacement Costs | | 15.3 Information and Communication Technology Supply Chain | 14.2 Security in Development and Support Processes |
| | | 15.2.1 Monitoring and review of supplier services. | |
| | | 15.2.2 Managing Changes to Supplier Services | |
| | | | |
| | Information security Incident | Information Security Aspects of | |
| | Response | Business Continuity Management | |
| Reputation Damage | 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity | |
| | | 17.2 Redundancies | |
| | | | |
| | Compliance | | |
| Eines and Indoors | 18.1 Compliance with Legal and | | |
| Fines and Judgement | Contractual Requirements | | |
| | 18.2 Information Security Reviews | | |

Licensed under the Creative Commons Zero v1.0 Universal

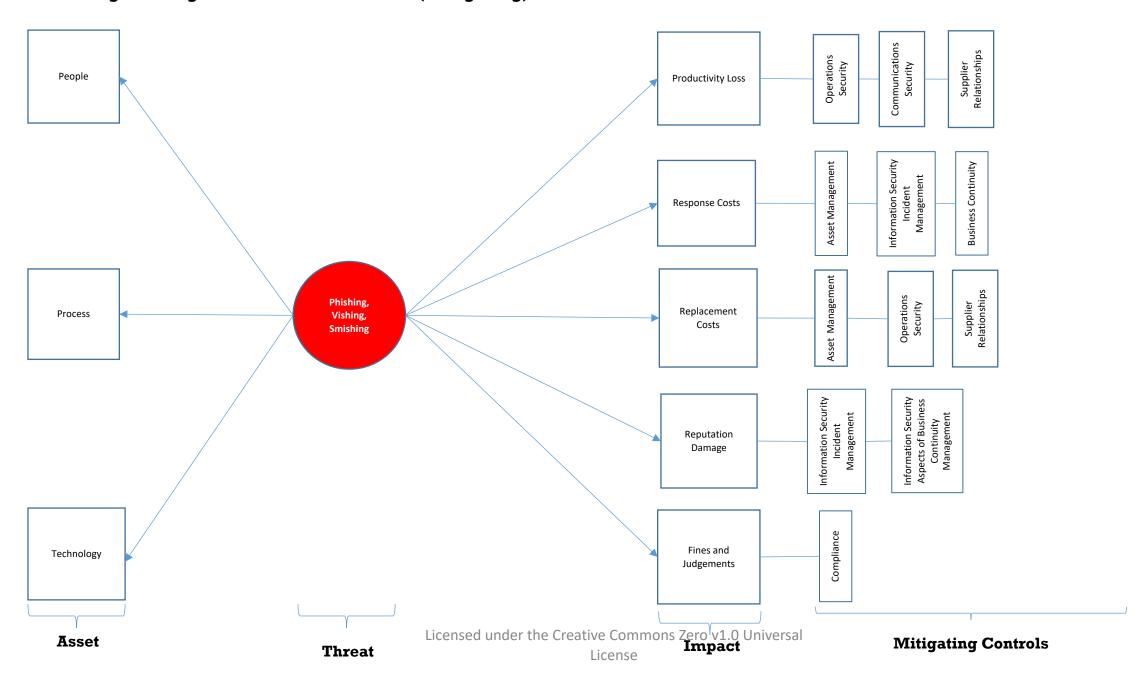
Social Engineering-External Threat Actor (Preventative)



Social Engineering-External Threat Actor (Preventative)

| Asset | Organization of Information Security | Human Resource Security | Asset Management | Access Control | Physical and Environmental Security | Communicatio Security |
|------------|---|--|--|--|---|------------------------------|
| People | 6.1 Internal Organization | 7.2.2 Information Security Awareness, Education and Training | 8.2 Information Classification | 9.1.2 Access to Networks and Network Services | 11.2.8 Unattended User Equipment | 13.2 Information Transfer |
| | 6.2 Mobile Devices and Teleworking | Training | 8.3 Media Handling | 9.4.1 Information Access Restriction | | |
| | Human Resource Security | Asset Management | Access Control | Operations Security | Supplier Relationships | |
| Processes | 7.2 During Employment | 8.1 Responsibility for Assets | 9.1.2 Access to Networks and Network Services | 12.1 Operational Procedures and Responsibilities | 15.1 Information Security in Supplier Relationships | |
| | | 8.2 Information Classification 8.3 Media Handling | 9.4.1 Information Access Restriction | - | | |
| | | 6.3 Media Franding | | | | |
| | Asset Management | Cryptography | Operations Security | Communications Security | | |
| | 8.3 Media Handling | 10.1 Cryptographic Controls | 12.3 Backup | 13.1 Network Security Management | | |
| Technology | | | 12.4 Logging and Monitoring | 13.2 Information Transfer | | |
| | | | 12.6 Technical Vulnerability Management | | | |
| | | | 12.7 Information Systems Audit Considerations | | | |

Social Engineering-External Threat Actor (Mitigating)

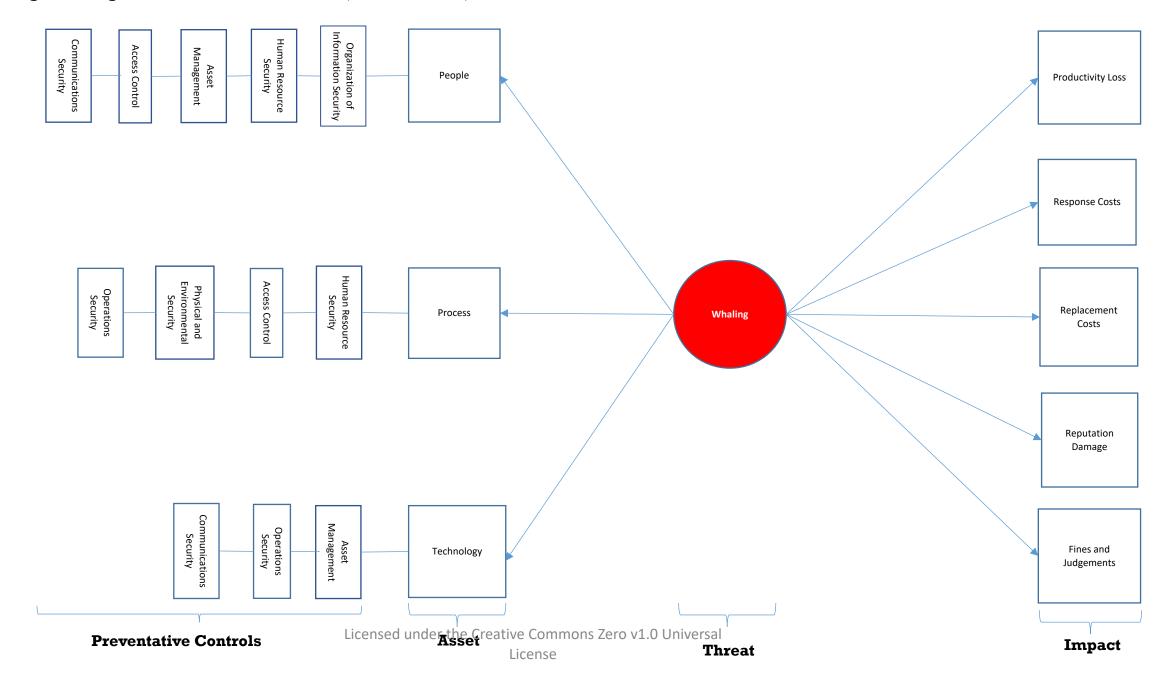


Social Engineering-External Threat Actor (Mitigating)

| Operations Security | Communications Security | Supplier Relationships |
|--|--|--|
| 12.3.1 Information Backup | 13.1 Network Security Management | 15.1 Information Security in Supplier Relationships |
| 12.4 Logging and Monitoring | | |
| | | |
| Response | Business Continuity Management | |
| 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity | |
| | 17.2 Redundancies | |
| Operations Security | Supplier Relationships | |
| 12.5 Control of Operational Software | 15.1.2 Addressing Security within Supplier Agreements | |
| | 15.3 Information and Communication Technology Supply Chain | |
| | 15.2.1 Monitoring and review of supplier services. | |
| | 15.2.2 Managing Changes to Supplier Services | |
| | | |
| Information Security Incident Response | Information Security Aspects of Business Continuity Management | |
| 16.1 Management of Information Security Incidents and Improvements | 17.1 Information Security Continuity | |
| | 17.2 Redundancies | |
| Compliance | | |
| - | | |
| Contractual Requirements | | |
| 18.2 Information Security Reviews | | |
| | 12.3.1 Information Backup 12.4 Logging and Monitoring Information Security Incident Response 16.1 Management of Information Security Incidents and Improvements Operations Security 12.5 Control of Operational Software Information Security Incident Response 16.1 Management of Information Security Incidents and Improvements Compliance 18.1 Compliance with Legal and Contractual Requirements | 12.3.1 Information Backup 12.4 Logging and Monitoring Information Security Incident Response 16.1 Management of Information Security Incidents and Improvements Operations Security 17.2 Redundancies Operations Security 15.1.2 Addressing Security within Supplier Agreements 15.3.1 Information and Communication Technology Supply Chain 15.2.1 Monitoring and review of supplier services. Information Security Incident Response 16.1 Management of Information Security Incidents and Improvements Information Security Aspects of Business Continuity Management 17.1 Information Security Aspects of Business Continuity Management 17.1 Information Security Continuity 17.2 Redundancies Compliance 18.1 Compliance 18.1 Compliance with Legal and Contractual Requirements |

Licensed under the Creative Commons Zero v1.0 Universal

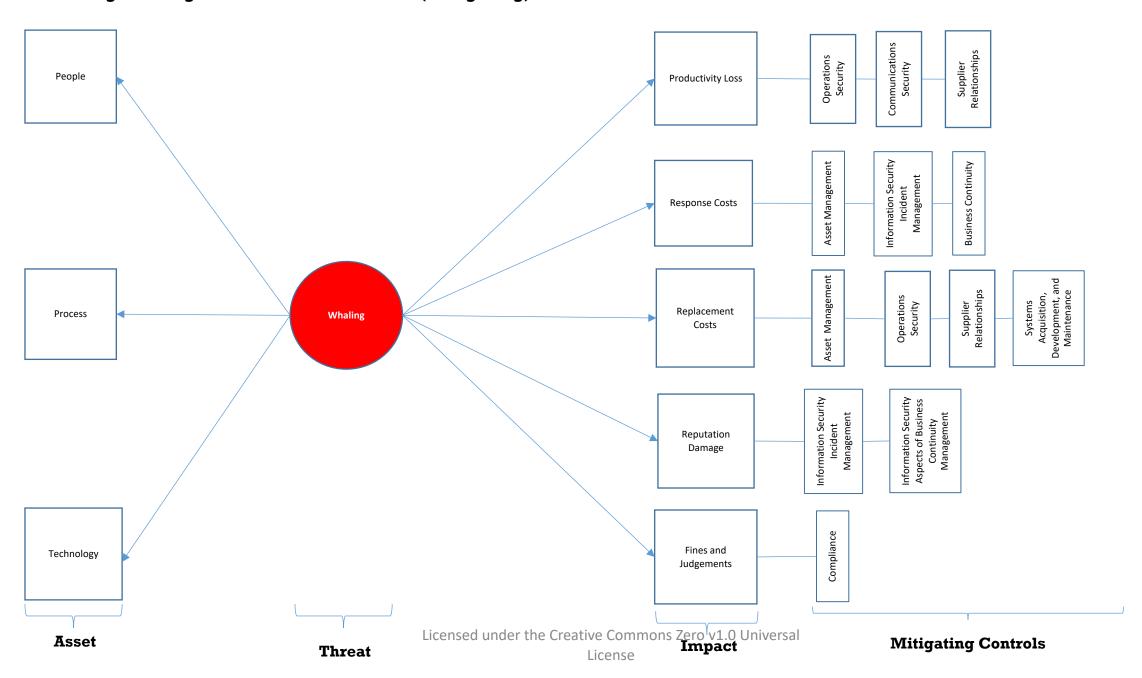
Social Engineering – External Threat Actor (Preventative)



Social Engineering – External Threat Actor (Preventative)

| Asset | Organization of Information Security | Human Resource Security | Asset Management | Access Control | Communications Security |
|------------|---------------------------------------|--|---|--|----------------------------|
| People | 6.1 Internal Organization | 7.2.2 Information Security Awareness, Education and Training | 8.2 Information Classification | 9.1.2 Access to Networks and Network Services | 13.2 Information Transfer |
| _ | 6.2 Mobile Devices and Teleworking | U | 8.3 Media Handling | 9.4.1 Information Access Restriction | |
| | - II - D | | | | |
| | Human Resource Security | Asset Management | Access Control | Operations Security | |
| Processes | 7.2 During Employment | 8.1 Responsibility for Assets | 9.1.2 Access to Networks and Network Services | 12.1 Operational Procedures and Responsibilities | |
| | | 8.2 Information Classification | 9.4.1 Information Access Restriction | | |
| | | 8.3 Media Handling | | | |
| | Asset Management | Operations Security | Communications Security | | |
| | 8.3 Media Handling | 12.3 Backup | 13.1 Network Security Management | | |
| Technology | | 12.4 Logging and Monitoring | 13.2 Information Transfer | | |
| | | 12.6 Technical Vulnerability Management | | | |
| | | 12.7 Information Systems Audit Considerations | | | |

Social Engineering – External Threat Actor (Mitigating)



Social Engineering – External Threat Actor (Mitigating)

| Impact | Operations Security | Communications Security |
|---------------------|---|--|
| D 1 I | 12.3.1 Information Backup | 13.1 Network Security Management |
| Productivity Loss | 12.4 Logging and Monitoring | |
| | | |
| | Information Security Incident | Information Security Aspects of |
| | Response | Business Continuity Management |
| Response Costs | 16.1 Management of Information Security | 17.1 Information Security Continuity |
| | Incidents and Improvements | |
| | | 17.2 Redundancies |
| | | |
| | Operations Security | Supplier Relations |
| | 12.5 Control of Operational Software | 15.1.2 Addressing Security within Supplier |
| | | Agreements |
| Replacement Costs | | 15.3 Information and Communication |
| 1 | | Technology Supply Chain |
| | | 15.2.1 Monitoring and review of supplier |
| | | services |
| | | 15.2.2 Managing Changes to Supplier |
| | | Services |
| | | |
| | Information security Incident | Information Security Aspects of |
| | Response | Business Continuity Management |
| Reputation Damage | 16.1 Management of Information Security | 17.1 Information Security Continuity |
| | Incidents and Improvements | |
| | | 17.2 Redundancies |
| | | |
| | Compliance | |
| Fines and Judgement | 18.1 Compliance with Legal and Licensed under the Creative Commons 2 Contractual Requirements | Zero v1.0 Universal |
| 1 | License | |