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Gordon founded Stone Creek Coaching after coaching CISOs, CTOs, & CIOs for the last 15 years.

He loves to give back to the technical community, he's been so fortunate to be a part of for over 40 years, by helping technical people discover their potential to become technical leaders.

Gordon's career includes programming, systems engineering, network engineering, enterprise information architecture, project management, information security, vendor management, risk management, and process improvement.

Specializing in cybersecurity, high-performance teaming, and coaching C-Level personnel and the organizations they serve.

He is frequently asked to speak at industry events on cybersecurity, IT operations management and organizational behavior. Gordon has a BBA in Finance from the University of Oklahoma and an MBA from West Texas A&M University.



Every CISO's First 90 days

Achieving Lasting Success as CISO



Agenda

You wanted to be a CISO?

30-60-90 Day Plans

You're a CISO now; what should you be doing?

Creating your MAP

Get your head in the game

Where to next?







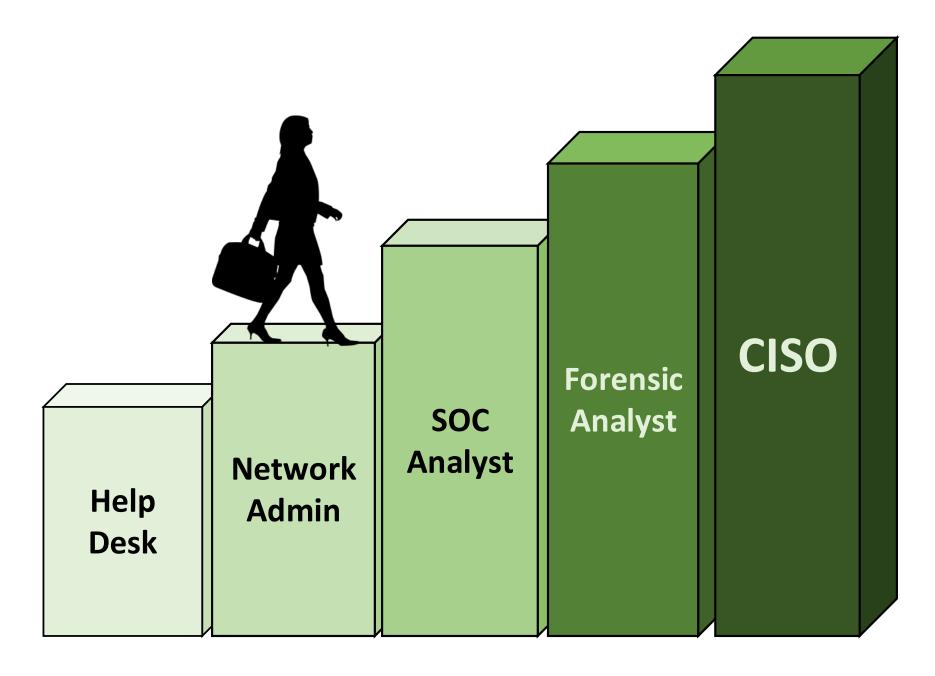
This is a Rockstar



This is a CISO June 2021 | Conf: 42 Golang Stone Creek Coaching Credit: gettyimages



- Measure what's in place
- Assess the gap what's needed
- Plan the work work the plan



Nirvana for a CISO hinges on 9 skills

- The tone from the top
- 2. Governance | Risk | Compliance
- 3. The KISS principle
- 4. Employee ownership
- 5. Solving problems not buying new tech
- 6. Finding your company rhythm
- 7. Due diligence
- 8. Collaboration
- 9. Automating everything (as possible)

What type of CISO are you?

Technical vs. Managerial | Hands-On vs. Executive

- ♦ Technical-oriented CISO (aka TISO)
- Policy-oriented CISO (aka BISO)
- ♦ Strategically-oriented CISO (aka SISO)



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Yourself

- Agonizing self appraisal
- What are you?

Who are you?

Carry out a selfassessment to know your personality makeup, temperament type, interests, skills, abilities, core competence, values, likes, dislikes, strengths and weaknesses.

Where are you going?

Based on the understanding of yourself, identify career areas that fit who you are.

How do you get there?

Having identified what may interest you, develop a plan that will help you start and ascend on your career ladder

Take Action

Set career goals with timelines and milestones. To know what specific career field fits you most, you may test the waters by volunteering, job shadowing, internship or starting a business.

Evaluate & Review

Evaluate your actions and progress. Are you on track? Have you veered off? Review your actions so you can get back on track or do you need a total change your earlier career path?



Every pro was once an amateur.

Every expert was once a beginner.

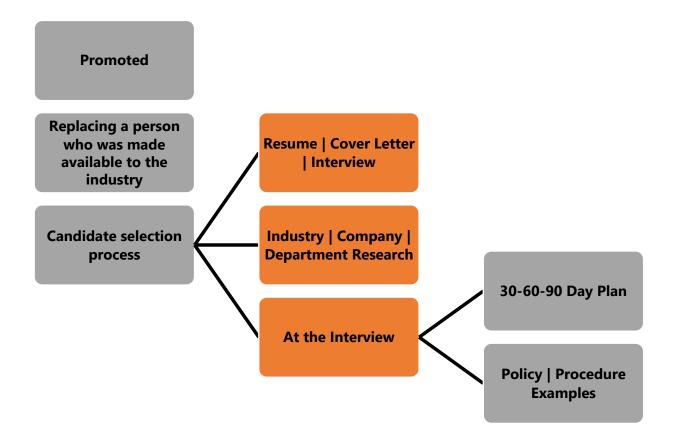


Are you ready for the race?

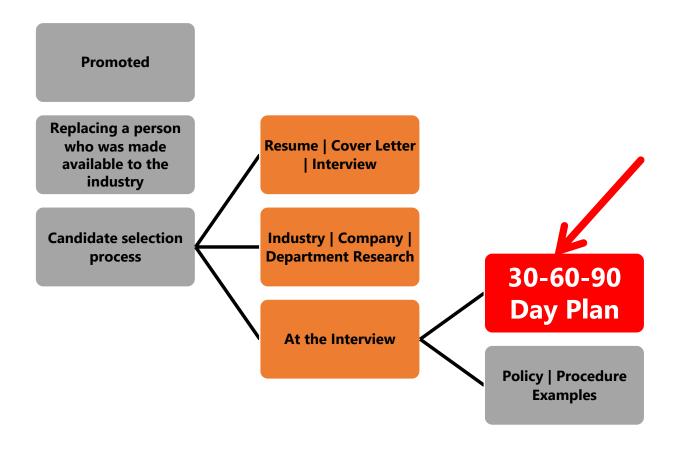


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How did you get the job?

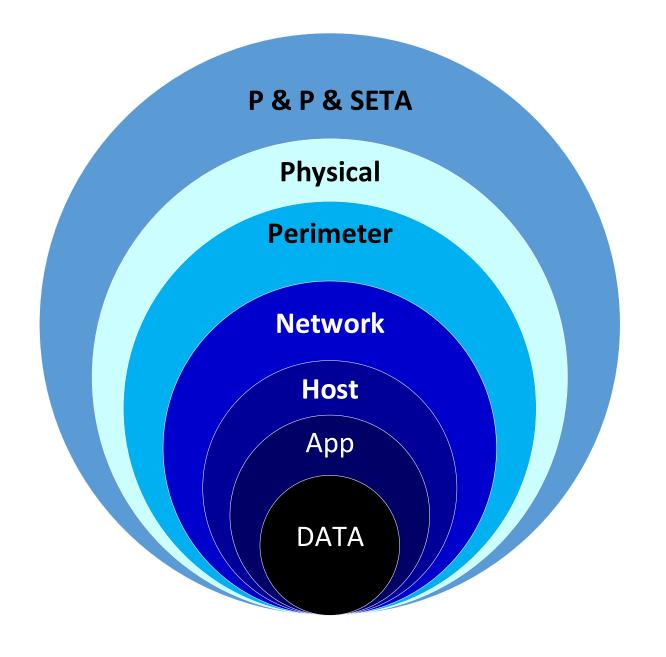


How did you get the job?



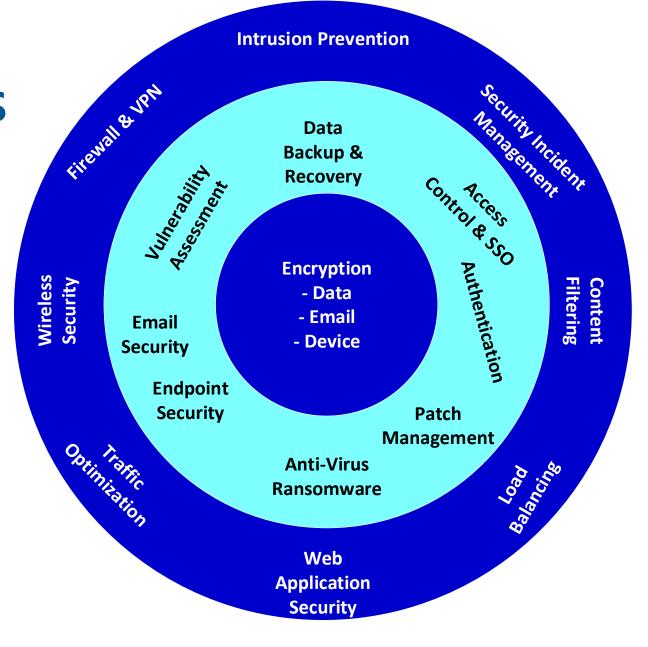
Strategic & tactical plans (Policies & Procedures) Budget GRC (P&P Analysis) Enterprise Information Architecture Assets being managed Assets unmanaged	 Enterprise cybersecurity architecture vs. baseline Current training plan(s) Software development team(s) DevOps Team(s) How the organization is meeting PCI, HIPAA, CCPA, NTDFS 	 Create Corporate Information Protection Plan Create Information Security Strategic Plan for the coming year Build you Social your roadmap Plan test of RTO, RPO, and MAD
GRC (P&P Analysis) Enterprise Information Architecture Assets being managed	 Software development team(s) DevOps Team(s) How the organization is meeting PCI, HIPAA, CCPA, NTDFS 	Strategic Plan for the coming year - Build you - Social your roadmap - Plan test of RTO, RPO, and
Enterprise Information Architecture Assets being managed	DevOps Team(s)How the organization is meeting PCI, HIPAA, CCPA, NTDFS	Build youSocial your roadmapPlan test of RTO, RPO, and
Architecture Assets being managed	- How the organization is meeting PCI, HIPAA, CCPA, NTDFS	- Plan test of RTO, RPO, and
	meeting PCI, HIPAA, CCPA, NTDFS	
Assets unmanaged		
	- Network security audit results	- Define the recovery of your
Vulnerability Assessment Processes	- Any outstanding findings from prior cybersecurity	people, facilities and systems for every LOB
Personnel skill set	audits/exams	- Energize the SETA program
Access Controls	- Physical security	 Perform a gap assessment on all aspects of information
Interview key stakeholders	 Assess the Business Continuity Management Plan 	security
Interview Internal Audit, external audit & Compliance	- Assess corporate backup management strategy	- Draft ransomware vulnerability report
	Processes Personnel skill set Access Controls Interview key stakeholders Interview Internal Audit,	Processes Personnel skill set Access Controls Interview key stakeholders Interview Internal Audit, external audit & Compliance - Any outstanding findings from prior cybersecurity audits/exams - Physical security - Assess the Business Continuity Management Plan - Assess corporate backup management strategy

We all start at the same place, with the same plan.



Overlapping Layers

- A standard approach circa 2000 2017
- Today we want to see the Al inside!

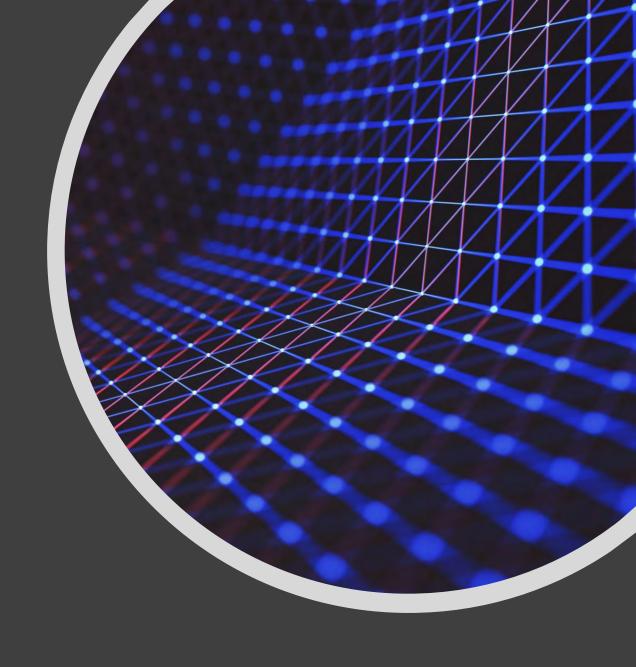


Cybersecurity is complex today



Websites are

our busiest locations



CISO Skillset

- Security Program Creation, Management, and Operations
- Information Security Core Concepts (our domains)
- Planning, Finance, Risk Management & Vendor Management
- 4. Governance, Risk & Compliance (GRC)

 Mind your 5 Ps
- 5. IT & IS Management Controls and Auditing
- 6. Technical Acumen

Assessing the Organization

- Organizational Maturity
- Operational Readiness

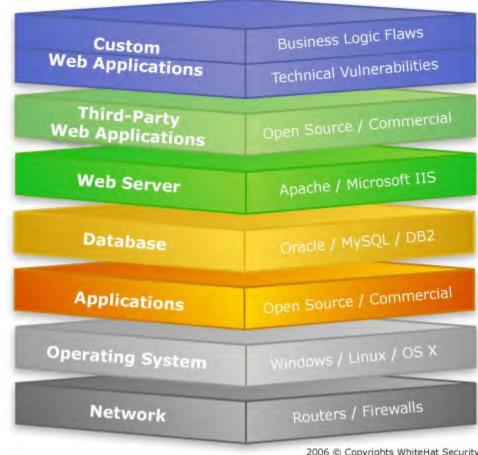
	Level	Focus	Process Area	Result
5	Continually optimizing organizational competency	Continuous process improvement is fully operationalized at the enterprise level	 Organizational Innovation and deployment Causal Analysis and Resolution Change management competency is evident in all levels of the organization and is part of the organization's intellectual property and competitive edge. 	Highest Level of: • cyber assurance • productivity • Quality • Responsiveness & • Profitability
4	Quantitatively managed organizational standards	Selection of a common approach & quantitative management in place	 Organizational process performance Quantitative project management Organization-wide standards and methods are broadly deployed for managing and leading change 	ie ie
3	Defined processes & multiple project capability	Process standardization on best practices is evident	 Requirements Development Technical solutions Product integration Verification Validation Organizational process focus & definition Organizational Training Integrated Project Management Risk Management Decision Analysis and Resolution Comprehensive approach for managing change is being applied in multiple projects 	Information Assurance
2	Managed but isolated projects	Basic project management using many different tactics used inconsistently	 Requirements management Project planning, monitoring & control Supplier agreement management Quantitative measurement and analysis Process & product quality assurance Configuration and change management are applied in isolated projects 	Inform
1	Initial stage ad hoc or absent • planning • organization • control	Competent People and Heroics People dependent without any formal practices or plans	 Competent People and Heroics Little or no change management applied 	Highest rate of: • project failure • turnover • loss Lowest Level of: • productivity • quality

Scalability = Economic Flexibility

Scalability is the ability to adapt the size of the infrastructure to the ever-changing needs of the business.

Technology must be able to be expanded without the need for a forklift upgrade and should be able to scale back as needed.

Cybersecurity must maintain the CIA triad during the waxing or waning of the business.



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One size does not fit all....





CREDIT: DFWHC Foundation

4 Points of Alignment



Cybersecurity Road Map Artifacts

- Threat Hunting
- Log Aggregation
- Firewall Clustering
- Artificial Intelligence
- User Behavior Analytics
- Vulnerability Management
- Security Research
- Incident Response
- Forensics
- Training & Cross-training

Network & Endpoint Defenses

Are we monitoring multiple layers of security?

- Firewalls
- Data Loss Protection
- Spam Filtering
- Antivirus
- Threat Emulation
- HTTPS Inspection
- Bot Protection
- Application Control
- URL Filtering

Is it enough?

- Nothing is Foolproof
- There is no magic bullet
- With time and money, anything can be breached
- Users make mistakes
- Vendors make mistakes

What we don't see can kill us

- Brute force attacks on all assets
- Brute force on local accounts
- Detection evasion local event log deletion
- Privilege escalation
- Lateral movement
- New local user accounts created
- Protocol poisoning

How do we gain insight?

- Artificial Intelligence?
- Machine Learning?
- Cluster Algorithms?
- Additional Staff?
- Specialized Applications?

Al and Behavioral Analytics

- Learns what your network traffic looks like
- Connects the dots from all the, many, many logs
- Detects the anomalies that look like legitimate traffic
- Exposes intruders
- We see all the water molecules in the flowing river

Use the Al Inside

- Scans our network for all devices
- Detects new devices
- Performs vulnerability
 assessments on those devices
- Advises us of those vulnerabilities, and the context in which they are a threat to our organization
- Creates remediation workflows and tracking

Benefits?

- Keeps vulnerable systems on our radar
- Vulnerability notifications
- Remediation tasks are assigned to system owners
- Track remediation progress
- Makes vulnerability management workable
- Decreases attack surface



A CISO's success hinges on the success of the cybersecurity *team* monitoring the central nervous system of the organization and reporting its findings to senior management and the board.



Communication vs. Speculation

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IT Governance

IT Executive Board - President's Cabinet

IT Strategic Advisory Committee

Enterprise Applications

IT Infrastructure
Procurement & Contracts
Instructional Technology
Research Computing
Security & Compliance
Security & Compliance
Task Force
Task Force
Task Force

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Accessibility & Compliance

Area Technology Officers

TAssessment

Business Intelligence

IT Communications

The Board of Directors (the "Board")is 100% responsible for the organization and every action or inaction of the organization.

Regulatory guidance in many industries suggests that the Board must be actively engaged in the oversight of the information security program.

It is critical to the success of any cybersecurity program that the board to set the "tone-from-the-top".

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Regulatory guidance stresses the need for both senior management and the board to be actively involved.

Clear and descriptive reporting is extremely important

Every organization must document their reporting expectations

- Frequency of reporting,
- GRC (governance risk compliance) meetings
- Any expectations for stakeholder participation

BEST PRACRTICE

The best methodologies for creating a framework for active involvement by the board, senior management and key stakeholders is to create a reporting framework that engages all parties.

Cybersecurity Board reports should include:

- Total inventory of actively managed assets
- Status of threat | vulnerability | patch management triad
- Status of the organization's cybersecurity risk assessments
- Ongoing monitoring activities
- Any material upcoming, contract renewals, terminations or notable problems with vendors.

I always recommend board reports contain two fundamental components.

A PowerPoint slide deck one slide devoted to each pillar of information security risk management

- Asset Security
- 2. Security Architecture and Engineering
- 3. Communication and Network Security
- 4. Identity and Access Management (IAM)
- 5. Security Assessment and Testing
- 6. Security Operations
- 7. Software Development Security
- 8. Business Continuity Management

The other component I recommend is a document containing a narrative on each of the cybersecurity pillars as well as

- Important industry information
- New regulatory guidance
- Updates on investments in staff, staff training, key additions or departures from the team
- An overall inventory of actively managed third party network connections, any upcoming connections
- Any material cybersecurity program changes particularly focusing on any changes in high risk or critical areas of operation.

Frameworks are your friends

- Use a framework!
- There are many to choose from.
- COSO Framework
- NIST
- ISO

ASSESS

- 1. Risks (Inherent & Residual)
- 2. People | Processes | Technology
- 3. Talent level
- 4. Project management capability
- 5. Standardization
- 6. Quantitative management capability (Golden Circle)



Jane	Current Role	Skill 1	3	3	None
Alice	Current Role	Skill 2	2	3	Training
Kim	Current Role	Skill 3	1	3	Training
Johnny	Current Role	Skill 4	4	3	Mentor
Carl	Current Role	Skill 5	5	4	Mentor
Ralph	Current Role	Skill 6	2	4	Training
Sara	Current Role	Skill 7	3	4	Training
None		Skill 8	0	5	Partner
None		Skill 9	0	5	Hire
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Current

Capability

(5 scale)

Skill

Role

Person

Ideal

Capability

Developmental

Action

(ISC) ²	Cisco	SANS
- CISSP	- CCENT	Et al
- SSCP	- CCT	
- CCSP	- CCDA	
- CAP	- CCNA	
- CSSLP	- CCNP	
- HCISPP	- CCDE	
- CISSP -	- CCIE	
ISSAP/ISSE		
P/ISSMP		

Certifications



Frameworks

Framework

NIST CSF

CMM

COSO

COBIT

ITIL/ITSM

ISO/IEC 27001

TOGAF

Zachman

Best Utilization

Cybersecurity

Software Development

Enterprise Risk Management

IT Governance/Controls

IT Service Management

Cybersecurity

Enterprise Architecture

Enterprise IT

The clock in your head

What

- Justify your technology
- 2. Train, train, train
- 3. Calendar up
- 4. GRC
- 5. Framework adjustments
- 6. GA release
- 7. Vulnerability Assessments

Time

- 1. 18 months
- 2. 3 months
- 3. Monday mornings
- 4. Monthly
- 5. 12-18 months NMW or PRN
- 6. 12-18 months NMW or PRN
- 7. Daily

Keeps on ticking...

What

- 8. Risk Assessments
- 9. Code reviews
- 10. Patches
- 11. System Configuration

Time

- 8. Annually and PRN
- 9. DevOps is a team sport
- 10. Weekly and PRN
- 11. PRE-production

Cybersecurity Road Map for any size corporation

- 1. SETA
- 2. Who are your stakeholders
- 3. Watch your numbers
 - a. Budget, Number of Employees, Burn Rate
- 4. Know your 4 P's (policy, procedure, process, project)
- 5. Security architecture
- 6. Asset ID
- 7. BCP/DRP
- 8. Risk Management
- Training & Cross-training

5 Areas where successful CISOs accel!

- 1. IQ and EIQ
- 2. Communication
- 3. Technical Kung Fu vs. Krav Maga
- 4. High performance team building
- 5. Third Party Risk
 Management



gic & tactical plans es & Procedures) t &P Analysis) rise Information	 Enterprise cybersecurity architecture vs. baseline Current training plan(s) Software development team(s) 	 Create Corporate Information Protection Plan Create Information Security Strategic Plan for the coming year
&P Analysis) rise Information	- Software development team(s)	Strategic Plan for the coming
rise Information		yeai
	D. O. T (a)	- Build you
ecture	- DevOps Team(s)	- Social your roadmap
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Controls	- Physical security	 Perform a gap assessment on all aspects of information
ew key stakeholders	 Assess the Business Continuity Management Plan 	security
ew Internal Audit, al audit & Compliance	- Assess corporate backup management strategy	 Draft ransomware vulnerability report
•		Management Plan ew Internal Audit, al audit & Compliance - Assess corporate backup

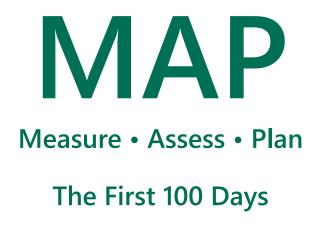


- Assess the information security department, the people in it and the organization it serves.
- Develop organization specific tools to accurately determine the capabilities and operational readiness of the department.
- Create the people, processes and technology road map for the information security department



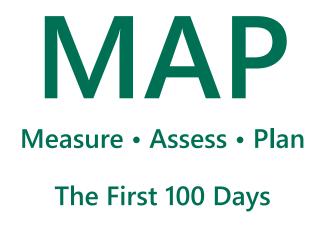
MEASURE

- Cybersecurity department
- The people
- The organization it serves.



ASSESS

- Cybersecurity department
- The people
- The organization it serves.



Plan

- Cybersecurity department
- The people
- The organization it serves.

Assessment

- Organization
- Cybersecurity Team
- Information Technology Team
- Third Parties [Vendors]

Plan the work.

Strategic

Work the plan.

Tactical

Plan the work.

Work the plan.

Measure progress

Demonstrate

Program effectiveness

Process effectiveness

Level of security



- Industry
- Organization's life cycle position
- Industry expanding or contracting
- Disruption potential
- Critical infrastructure designation
- Your level of culture shock...

Operational Readiness

Business Continuity & Disaster Recovery

- BIA
- RPO
- RTO
- MAD

Business Impact Analysis

- Everyone can't be #1
- Define criticality 1st
- The "tone-from-the-top"

Business Continuity Management

Business Continuity

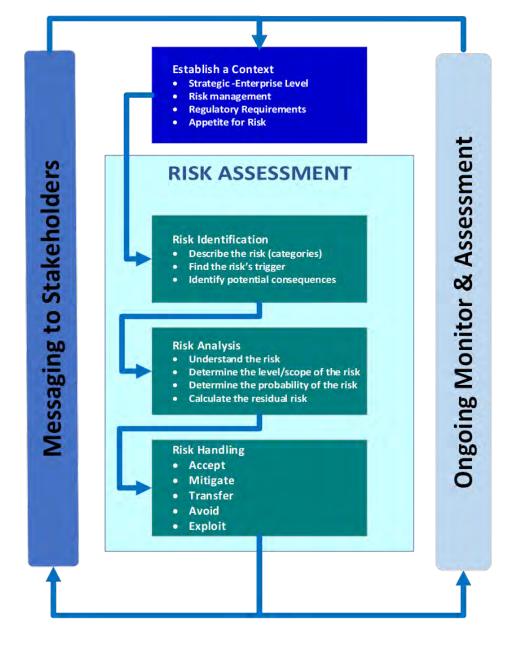
- Disaster Recovery
- Pandemic Planning
- Incident Response

Disaster Recovery's Three Steps

Recover

- 1. People
- 2. Facilities
- 3. **Systems**

Cybersecurity Risk Assessment Process



Risk Analysis

Risk Appetite | Risk Appetite Statement

Threat X Vulnerability X Consequences = Inherent Risk

Inherent Risk – Risk Mitigation(s) = Residual Risk

Risk Analysis

Threat X Vulnerability X Consequences = Inherent Risk

Inherent Risk – Risk Mitigation(s) = Residual Risk

Simple Risk Modeling

Inherent Risk - Impact of Risk Controls = Residual Risk

A Risk (Any Risk) - Risk Controls = Residual Risk

Example #1

Environmental Risk

Natural Disaster

Earthquake in Oklahoma (circa 2014)

- Disaster Recovery Site more than 100 miles away

Probability of downtime before recovery site comes online

100%

-

80%

20%

Example #2

Natural Disaster

Earthquake in Oklahoma (circa 2019)

Disaster Recovery Site more than 100 miles away

= Probability of downtime before recovery site comes online

10%

_

9%

=

1%

	A Risk Loss of Any (Any Risk) Single Risk (1 to 10)		X	of the Risk's Occurrence (1 to 10)		Inherent = Risk Score		Applied Risk Controls (Risk Mitigation)	Risk Controls Value	=	Residual Risk	Final Risk Rating
Eı	nvironmental Risks	s Assessed	ı									
1	Natural Disaster Earthquake in Oklahoma	5	x	8	=	40	-	Disaster Recovery Site more than 100 miles away	20	=	20	Low Risk
2	Man-made Disaster (Arson)	9	x	9	=	81	-	Advanced dry pipe sprinkler system installed and operational.	45	=	36	Below Average Risk
R	egulatory Guidelin	es for Risk	۲ C	ategories								
3	Strategic Risk (of any vendor)	9	x	9	=	81	-	Nothing can be done to reduce this risk	0	=	81	High Risk
4	Reputational Risk (of any vendor)	8	X	10	=	80	-	Hire a social media consultant	5	=	75	Above Average Risk
5	Financial Risk (of any vendor)	8	X	8	=	64	-	Ongoing monitoring of Edgar and D&B	5	=	59	Average Risk
6	Operational Risk (of any vendor)	10	X	10	=	100	-	Backup item processing system in place	35	=	65	Above Average Risk
7	Compliance Risk (of any vendor)	5	X	10	=	50	-	Complaisance department will audit all Bus	15	=	35	Below Average Risk
:											0	
n th	Category	10	X	10	=	100	-	Control that works	80	=	20	Low Risk

Inherent

Risk

Vendor Risk Assessment								Risk Score	Risk Categories
All Vendors								0 – 20	Low Risk
As of: January 1, 2019								21 - 40	Below Average Risk
								41 - 60	Average Risk
								61 - 80	Above Average Risk
								81 - 100	High Risk
Vendor Name	Potential Risk to Your Organization	Risk of Harm or Loss 1 to 10 Low to High	Probability of Risk's Occurrence 1 to 10 Low to High	Inherent Risk Score	Raw Risk Rating	Risk Control Action(s)	Mitigation Value	Mitigated Risk Score	Mitigated Risl Category
AT&T	Internet Service Provider	9	10	90	High Risk	Two ISPs ATT&T and Cox	50	40	Below Average Risk
ATM & FI Equipment Service Provider	Installation & repair of ATMs & FI's equipment	7	8	56	Average Risk	ANY has two vendors that produce cards	10	46	Average Risk
Braintree	Mobile and web payment systems	10	7	70	Above Average Risk	Backup system in place	50	20	Low Risk
Ceridian	Dayforce - employee self-service functions	8	6	48	Average Risk	Ceridian utilizes Tier 4 datacenters	25	23	Below Average Risk
Dell	Computer hardware	5	5	25	Below Average Risk	This application resides on ANY's network and source code is escrowed	1	24	Below Average Risk
Harland/Clarke	Check programs	2	2	4	Low Risk	Alternate check provider available with one call	1	3	Low Risk
Jack Henry & Associates	Xperience core banking system software	10	4	40	Below Average Risk	JHA utilizes multiple datacenters	20	20	Low Risk
Janitorial/Cleaning	Exposure to nonpublic personal information inside the FI	3	3	9	Low Risk	Alternate cleaning crew available	1	8	Low Risk
Microsoft	Computer software	10	2	20	Low Risk	No immediate substitute available	0	20	Low Risk
Q2	Digital & mobile banking	6	9	54	Average Risk	Alternate service provider available	10	44	Average Risk
Salesforce	CRM platform (cloud based)	5	5	25	Below Average Risk	Ongoing monitoring program in place	10	15	Low Risk
SAS Institute	Customer analytics	8	8	64	Above Average Risk	Ongoing auditing of vendor in place	10	54	Average Risk
Stripe	Credit card issuing technology, point-of-sale software and a billing platform	8	8	64	Above Average Risk	Alternate vendor in place	25	39	Below Average Risk
Upstream Correspondent Bank	Treasury services and foreign exchange	5	5	25	Below Average Risk	Alternate correspondent bank agreement in place	15	10	Low Risk
YapStone	End-to-end payment solutions	9	8	72	Above Average Risk	Alternate solution provider agreement in place	25	47	Average Risk
А	7	6	44	Average Risk	Averages	17	28	Below Average Risk	

Change Management

- SDLC
- Data warehouse and data marts

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- Information factory
- Agile
- Digital transformation
- DevOps
- -AI
- IoT

How do we adapt since we really have no logical alternative?

- Skills Hard & Soft
- Your comfort zone (technology and people)
- Surround yourself with smarter people

Measure

What With

Skills Skill matrix

EIQ Any

Risk appetite COSO framework

Obsolescence Asset management

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Assess Team Composition

-Hard skills [skill matrix]

-Soft skills [Myers-Briggs or True Colors]

Be willing to invest in the team

- Training & Education
- Get them certifications
- Get more than one!
- (ISC)² has a few...

(ISC) ²	Cisco	SANS
- CISSP	- CCENT	Et al
- SSCP	- CCT	
- CCSP	- CCDA	
- CAP	- CCNA	
- CSSLP	- CCNP	
- HCISPP	- CCDE	
- CISSP -	- CCIE	
ISSAP/ISSE		
P/ISSMP		

Certifications

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Final Thoughts

- 1. Wire
- 2. Memory
- 3. SSD
- 4. Asset Management

5. Personnel

- 1. Get it right up front
- 2. You can't have too much
- 3. Spinning disks? Why?
- 4. You MUST know what's attached to your network and what you're tasked with protecting!
- People are your best assets. Care for them like they are family.

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CISA Releases Best **Practices for** Preventing **Business** Disruption from Ransomware **Attacks**

Filtering network traffic to prohibit ingress and egress communications with known malicious IP addresses;

Enabling strong spam filters to prevent phishing emails from reaching end users;

Implementing robust network segmentation between information technology and operational technology networks; and

Regularly testing manual controls; and ensuring that backups are implemented, regularly tested, and isolated from network connections.



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Stone Creek Coaching provides career designs for CISOs, CIOs & CTOs and technical career coaching through individual one-on-one sessions | Masterminds | Hugh Performance Team Building

