NETWORKING IS RELATIVE

A CISO's Perspective In Higher Education

MIAMI UNIVERSITY

Imperative Value Of Critical Relationships

Perspective of an information security office in higher education

Recent University CISO Successes

From around a round table

Some Security World Prognostications

Idle noodling

What You Can Do

Imperative Value Of Critical Relationships

OHECC fosters communication between higher education IT professionals across the state:

"Communicate and share ideas, create state-wide problem solving, and **create ongoing relationships between IT professionals***"*
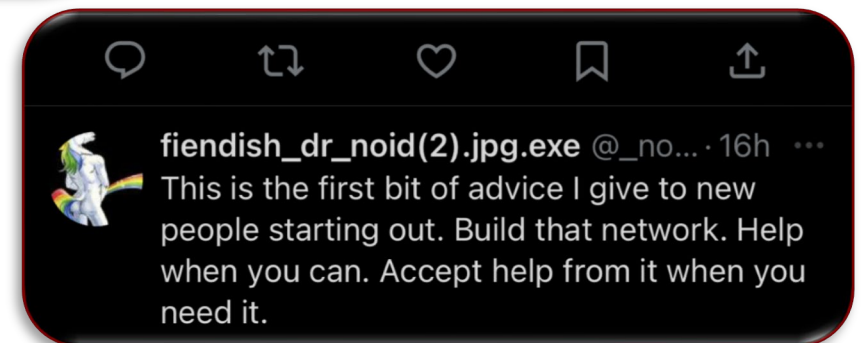
Some say that networking only occurs during the urgent need of a job or professional change

However, **continual networking is foundational to a successful modern career**

A solid and growing network is maybe the strongest multiplier available to mission success and transformation

And it is not hard, may only take up **as little as seconds a day**

Helen Patton
@CisoHelen

Absolutely this.

Ken Westin ✔ @kwestin · 20h

I believe having a good network in cybersecurity is important, there's no way you can know everything, and having peers you can reach out to for guidance with various specialties creates a sort of hive mind 🐝 🍯

Accidental CISO
@AccidentalCISO

This is huge!! I'd argue that your network is probably the most important thing in your career.

Ken Westin ✔ @kwestin · 1d

I believe having a good network in cybersecurity is important, there's no way you can know everything, and having peers you can reach out to for guidance with various specialties creates a sort of hive mind 🐝 🍯

FOLLOW ME

fiendish_dr_noid(2).jpg.exe @_no... · 16h

This is the first bit of advice I give to new people starting out. Build that network. Help when you can. Accept help from it when you need it.

3/9/2023

There is a LOT going on in cybersecurity these days!

InfoSec Professional's Responsibilities
- *Security operations resilience*
- *Budget*
- *Business enablement*
- *Project delivery lifecycle*
- *Security Architecture*
- *Compliance and Audit*
- *Legal and human resources*
- *Risk management*
- *Identity management*
- *Governance*
- *Selling InfoSec*
- *Work from home*
- *Automation*

Credit: Rafeeq Rehman
rafeeqrehman.com

CISO MindMap 2023
What do Security Professionals Really do?

Last update: March 25, 2023
Expiration date: June 30, 2024
Twitter: @rafeeq_rehman
Downloads: http://rafeeqrehman.com

InfoSec Professionals Responsibilities
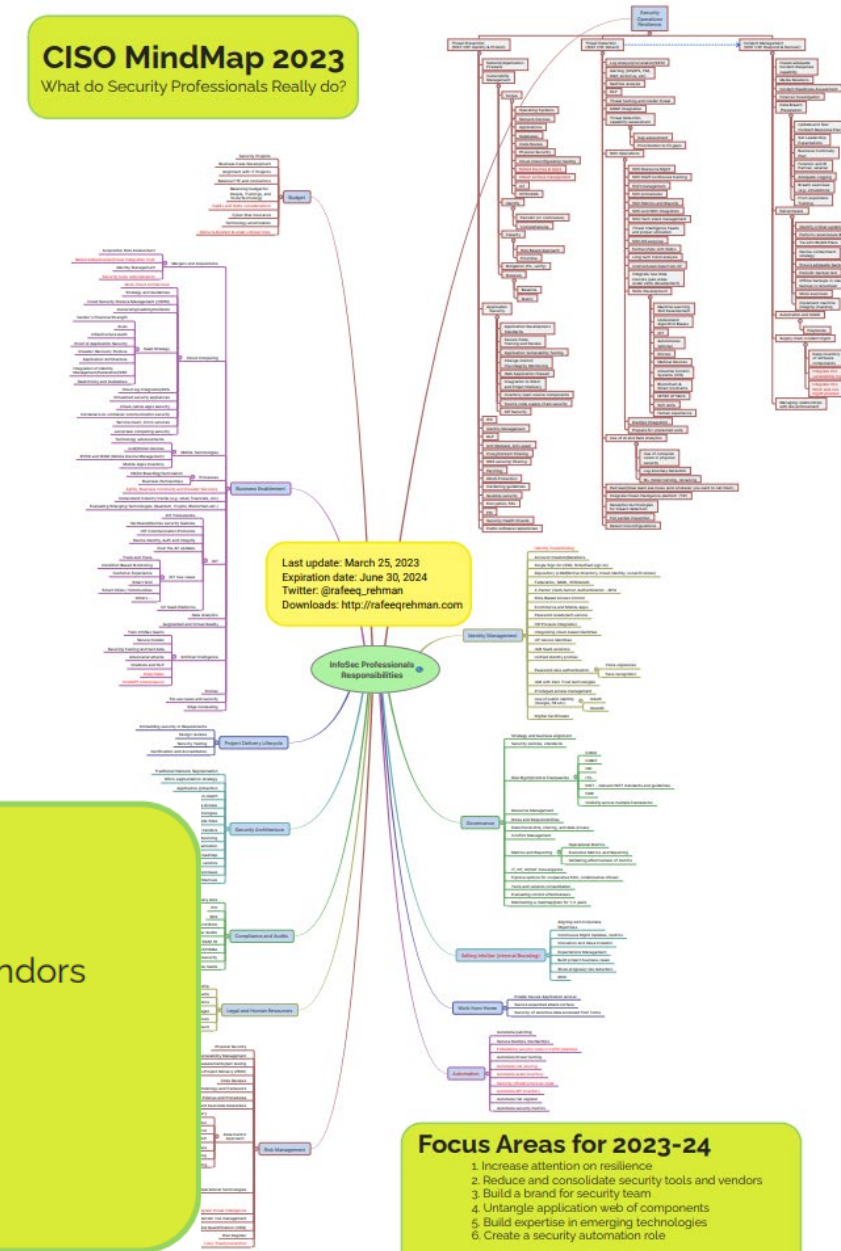
Focus Areas for 2023-24
1. Increase attention on resilience
2. Reduce and consolidate security tools and vendors
3. Build a brand for security team
4. Untangle application web of components
5. Build expertise in emerging technologies
6. Create a security automation role

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What does it mean to network or have a relationship?

Meet or get introduced to somebody, anybody

Listen and make a connection, however slight

Have an attitude of service. Offer without expectation of return

Make a conscious effort to get and keep their contact information

Follow up same day or soon after

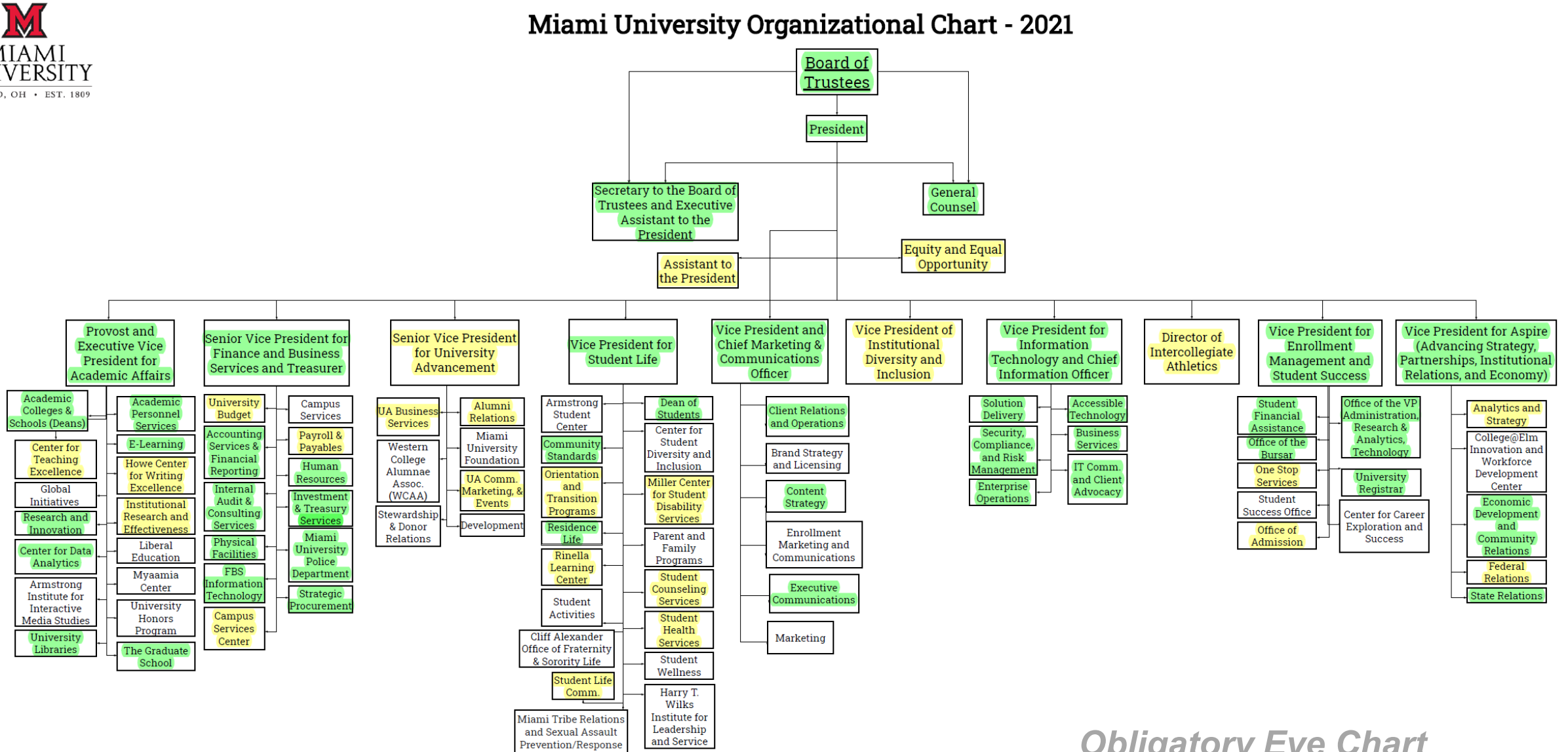Setup a periodic electronic calendar reminder
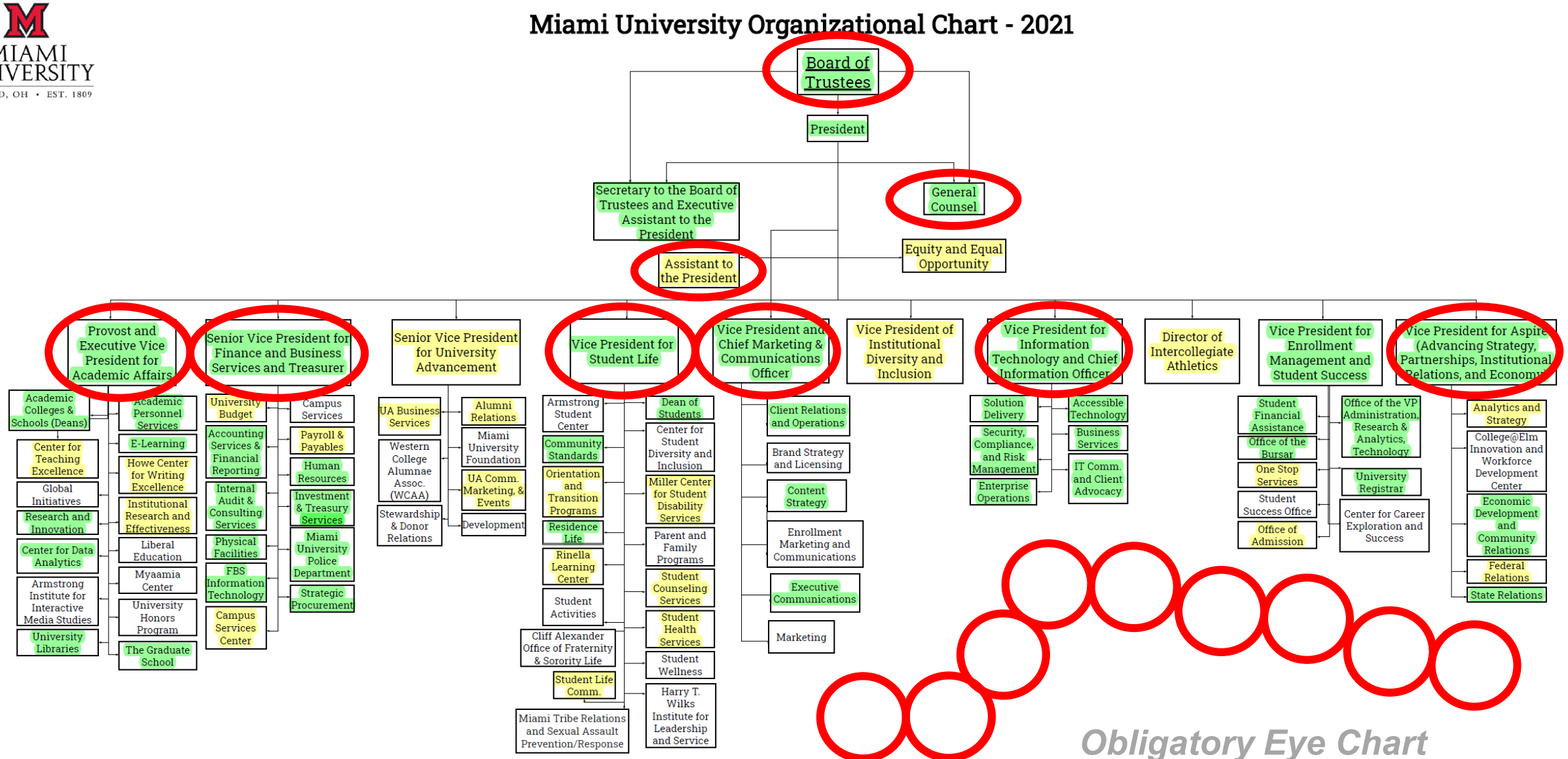
Keep it fresh

Stay in touch, catch up

No BS needed

Never underestimate the ability of a small group of committed individuals to change the world.

Margaret Mead

Miami University Organizational Chart - 2021

Board of Trustees

President

Secretary to the Board of Trustees and Executive Assistant to the President

General Counsel

Assistant to the President

Equity and Equal Opportunity

Provost and Executive Vice President for Academic Affairs

- Academic Colleges & Schools (Deans)
- Center for Teaching Excellence
- Global Initiatives
- Research and Innovation
- Center for Data Analytics
- Armstrong Institute for Interactive Media Studies
- University Libraries
- Academic Personnel Services
- E-Learning
- Howe Center for Writing Excellence
- Institutional Research and Effectiveness
- Liberal Education
- Myaamia Center
- University Honors Program
- The Graduate School

Senior Vice President for Finance and Business Services and Treasurer

- University Budget
- Accounting Services & Financial Reporting
- Internal Audit & Consulting Services
- Physical Facilities
- FBS Information Technology
- Campus Services Center
- Campus Services
- Payroll & Payables
- Human Resources
- Investment & Treasury Services
- Miami University Police Department
- Strategic Procurement

Senior Vice President for University Advancement

- UA Business Services
- Western College Alumnae Assoc. (WCAA)
- Stewardship & Donor Relations
- Alumni Relations
- Miami University Foundation
- UA Comm. Marketing, & Events
- Development

Vice President for Student Life

- Armstrong Student Center
- Community Standards
- Orientation and Transition Programs
- Residence Life
- Rinella Learning Center
- Student Activities
- Cliff Alexander Office of Fraternity & Sorority Life
- Student Life Comm.
- Miami Tribe Relations and Sexual Assault Prevention/Response
- Dean of Students
- Center for Student Diversity and Inclusion
- Miller Center for Student Disability Services
- Parent and Family Programs
- Student Counseling Services
- Student Health Services
- Student Wellness
- Harry T. Wilks Institute for Leadership and Service

Vice President and Chief Marketing & Communications Officer

- Client Relations and Operations
- Brand Strategy and Licensing
- Content Strategy
- Enrollment Marketing and Communications
- Executive Communications
- Marketing

Vice President of Institutional Diversity and Inclusion

Vice President for Information Technology and Chief Information Officer

- Solution Delivery
- Security, Compliance, and Risk Management
- Enterprise Operations
- Accessible Technology
- Business Services
- IT Comm. and Client Advocacy

Director of Intercollegiate Athletics

Vice President for Enrollment Management and Student Success

- Student Financial Assistance
- Office of the Bursar
- One Stop Services
- Student Success Office
- Office of Admission
- Office of the VP Administration, Research & Analytics, Technology
- University Registrar
- Center for Career Exploration and Success

Vice President for Aspire (Advancing Strategy, Partnerships, Institutional Relations, and Economy)

- Analytics and Strategy
- College@Elm Innovation and Workforce Development Center
- Economic Development and Community Relations
- Federal Relations
- State Relations

Obligatory Eye Chart

Critical Internal Relationships

Miami University Organizational Chart - 2021

Obligatory Eye Chart

Board of Trustees

Proceedings, cybersecurity strategy, big budget requests

President

Executive leadership support, sponsorship, escalation, awareness

Executive Assistant to the President

Secretary to Board of Trustees, link to President's cabinet

General Counsel

Compliance, records retention, contracts, investigations, FERPA+

Office of Equity and Equal Opportunity

Harassment and discrimination investigations, hiring flow

Provost and Academic Affairs

ADoTs, Deans, Research, Libraries, Academic Personnel, E-Learning

Finance and Business Services and Treasurer

Internal Audit, Physical Facilities, FBS IT, HR, Treasury, Police, Procurement

University Advancement

University Foundation, Development

Student Life

Community Standards, Academic Integrity, Residence Life, Student Health

University Communications and Marketing

Executive Communications

Institutional Diversity and Inclusion

DEI education and involvement

Intercollegiate Athletics

Compliance, name, image and likeness (NIL), student health data

CIO and Information Technology

Strategy, budget, personnel, business services, development, infrastructure

Enrollment Management and Student Success

Registrar, One stop services

Institutional and Governmental Relations

Federal relations, State relations, legislation advocacy

Information Security Team

    Grew from nine to over 70 members

Campus Compliance Committee

    Oversight of effectiveness of compliance program activities

University Senate Information Technology Policy Committee

    Monitor and review information technology policies and procedures

Safe Return To Campus Committee

    Broadly representative committee advising the president and cabinet

Institutional Response Team (IRT)

    A task force representing a broad range of offices and expertise on campus

My Definition

Characteristics

A relation is a set of pairs of input and output values.

There are multiple ways to represent a relation:
- ordered pairs
- input/output table
- points on a coordinate plane
- mapping diagram
- equation
- words (sentence)

Vocabulary word:

Relation

Example

Non-Example

$\{(4,7), (3,2), (0,0), (-1,-4)\}$

Input x	Output y
0	1
-2	4
3	7

4 ← (constant)

x ← variable

$7x$ ← (expression)

We can improve our relationships with others by leaps and bounds if we become encouragers instead of critics.

Joyce Meyer

Critical External Relationships

Law Enforcement

Local police departments, FBI, CISA

Statewide CISOs

Fourteen public higher education institutions

Collegial ISOs and IT

U Toronto, Harvard, UW-M, Northwestern, the other UCs (UCB, UCSD, UCR, etc.)

HEISC community group, CMMC Toolkit workshop, CPPC program

CISO connectors, consortiums, reports, articles, C100 (NFL, Microsoft, Pepsi)

Former Colleagues and Mentorships

Inside and outside the cybersecurity world, accountability meetings

Threat Hunters of the World

Experts with the mind of the attacker

Vendors Are Major Players, Can Be Partners

Cisco, Palo Alto, Acunetix, Crowdstrike, Optiv, Moran Technology

Banks

Keep the banks happy,

Training Consultants

Phishing simulation, OWASP Top Ten developer training

The 'So What' of Networking and Relationships

Why did I share all of this?

Knowing people allows you to help them

Knowing people allows them to help you

When we help each other that is a win for the mission

Mission success is a win for the organization

And job satisfaction is job one!

Around a Round Table of Ohio Higher Ed CISOs

- Improved **Board of Trustees relationship** and support, **Duo to Azure MFA migration**, performed **multiple tabletop exercises**, created five additional standards

- Completed **2FA for students**, security training via LMS project

- Partnership and relationship with **Research department**, and **President's support** of IT and information security

- **EDR buy in and support**. ~70K devices using Crowdstrike. **Awareness and training program**. For example, gain points and get sweatshirts or contribute to charities

- Very successful **transition to remote work** with VPN and other processes, and now **using HECVAT** for assessments

- Getting the **information security team up and running**, MFA, ransomware playbooks

- Went from eight modes of **authentication** down to two, **EDR out** to 8K endpoints

- Implemented **phishing simulation training**, an **IAM program**, and **EDR installed**

Some Information Security World Prognostications

Idle Noodling Question: What do you think the security world will look like in the next 3-5 years? –Helen Patton, LinkedIn Thread

- *Security will be taken more seriously by the business and end users.*

- *I think we are stuck in a rut of misconfigurations and ransomware for a bit.*

- *My hope is business leaders accept that the risk is theirs, not their security or IT department's.*

- *Cybersecurity insurance to have a greater influence on checkbox security efforts.*

- *More failures due to complexities and more attacks that bypass controls due to complexities.*

- *Cloud-specific problems will arise where cloud vendors might start to be a part of the problem.*

- *We will eventually need less awareness and intervention by our users or customers. For example, we demand our users to be experts in spotting phishing emails, remembering hard passwords, and vulnerability management. My cloudy crystal balls presents a world where technology and process takes that out of our user's hands. Things like DMARC, EDR/EDX, next generation integrations, and who knows what else.*

What can a CISO do?

- Maintain emphasis on governance, risk and compliance

- **Partner with faculty, staff and students**

- Demystify the threats, assess the attack surface, draw attention to the risk posture

- Be an advocate for CIO, educators and staff

- **Balance between risk management and IT enterprise**

Ensure:

- **Collaboration and stakeholder involvement**

- Involvement in university strategic planning

- Compliance becomes the habit, not the emergency

More on Building a Human Connection

It is important to get to know your connections

Be intentional

Be authentic

Be vulnerable

Be mindful

Be curious

Be nonjudgmental

Huge thanks to President Troy Paino, University of Mary Washington, April 2023

Questions?

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