So You Wanna Be A CISO?
Understanding the Skills, Pathways & Professional Development to Get You There

Cathy Bates • Tammy Clark • Sean Sweeney
Eden Dahlstrom
Today’s Speakers

Cathy Bates
Assoc VC and CIO, Appalachian State University

Tammy Clark
Chief Information Officer, The University of Tampa

Sean Sweeney
Chief Information Security Officer, University of Pittsburgh

Eden Dahlstrom
Chief Research Officer, EDUCAUSE

#EDU16
1. Set context for the CISO role in higher ed
2. Review ECAR working group model for CISO leadership
3. Share mentoring and professional development tips and thoughts
ECAR Workforce Research
Today’s CISO...

- U.S. workforce
- HE IT professionals
- CISOs
- CIOs

Age (median)    White    Male
Today’s CISO...
Today’s CISOs...

- U.S. workforce
- HE IT professionals
- CISOs
- CIOs

Age (median) vs. White:
- 42 years (U.S. workforce)
- 48 years (HE IT professionals)
- 49 years (CISOs)
- 53 years (CIOs)
- 66% (U.S. workforce)
- 85% (HE IT professionals)
- 84% (CISOs)
- 85% (CIOs)
Today’s CISO...

- **Age (median):**
  - U.S. workforce: 42 years
  - HE IT professionals: 48 years
  - CISOs: 49 years
  - CIOs: 53 years

- **Race:**
  - White: 85%
  - CISOs: 84%
  - CIOs: 85%

- **Gender:**
  - Male: 83%
  - CISOs: 67%
  - CIOs: 73%
The Making of a CISO

Median Years Worked

- In higher education: 18 (CISO), 16 (CIO)
- In current institution: 17 (CISO), 10 (CIO)
- In any leadership position: 8 (CISO), 4 (CIO)
- In your current leadership position: 3 (CISO), 4 (CIO)
Top CISO Responsibilities

1. Information security policies (including policy development and compliance)
2. Incident management
3. Awareness and training
4. Information security compliance
5. Risk assessment and management
6. Organization of information security

At least 90% of CISOs said they are currently responsible for these duties at their institution.
Top CISO Aspirational Responsibilities

1. Identification and authentication (47%)
2. Operations security (39%)
3. Communications security (33%)
4. Awareness and training* (33%)
5. Data privacy (32%)
6. Organization of information security* (30%)

*Appears on both responsible for- and aspirational responsibilities- lists (small n’s)

At least 30% of CISOs said they are ARE NOT currently responsible for these duties at their institution, but SHOULD BE.
The CISO’s Influence

Reporting Lines

- Current reporting line: 83% other, 15% President/chancellor, 2% highest-ranking central IT officer (CIO)
- Preferred reporting line: 45% other, 26% President/chancellor, 29% highest-ranking central IT officer (CIO)
The CISO's Influence

Nature of Board Meeting Responsibilities

- I give occasional/as-needed reports/updates at board meetings. 77%
- I brief the board on topical issues that relate to information security issues. 59%
- I give a board report/update at each board meeting. 5%
- I have a designated seat at the board table. 0%
The CISO’s Influence

How influential do you feel you are at your institution?

ECAR CISO Survey Research Report, Forthcoming 2016 Q4

Perceived Influence

<table>
<thead>
<tr>
<th></th>
<th>CISO</th>
<th>CIO</th>
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<tbody>
<tr>
<td>67</td>
<td></td>
<td>76</td>
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</table>

Highly influential
Not at all influential
Information Security Leadership
Model for InfoSec Leadership

- Overarching Role
- Core Roles
- Primary Roles
- Discrete Roles
Model for InfoSec Leadership

- Overarching Role
- **Core Roles**
  - Primary Roles
  - Discrete Roles

Technology in Higher Education: Information Security Leadership (March 2016)

Model for InfoSec Leadership

- Overarching Role
- Core Roles
- Primary Roles
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## Model for InfoSec Leadership

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<thead>
<tr>
<th>Category</th>
<th>Theme</th>
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<tr>
<td>Higher education trends impact information security</td>
<td>-Higher education is under a lot of scrutiny.</td>
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<td>-The mind-set toward risk management is shifting.</td>
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<td>-The CISO position is relatively new in academia.</td>
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<td>The CISO position is gaining prominence.</td>
<td>-The need for InfoSec leadership is growing.</td>
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<td>-The need for InfoSec policy and compliance is increasing.</td>
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<td>The CISO position is being defined</td>
<td>-Portfolios vary from campus to campus.</td>
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<td>-Reporting lines may differ depending on the institution’s culture.</td>
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<td>-A strong CISO/CIO partnership is crucial.</td>
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<td>Professional development for CISOs is critical.</td>
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Panel Discussion
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Passionate about IT Risk?

Opening Pandora's Box: Understanding and Implementing IT Governance and Risk Management Programs

Tomorrow! | 9:10am - 10:00am | Ballroom D, Level Three
Help Us Improve and Grow

Thank you for participating in today’s session.

We’re very interested in your feedback. Please take a minute to fill out the session evaluation found within the conference mobile app, or the online agenda.