

Newsletter #38:

May-June 2021



Newsletter

Workshops

SAVE THE DATE!

Registration is open for our CAMS **August 5th** MEMBERS ONLY workshop!

This meeting will consist of small discussion groups around priorities and preparedness plans for the post-pandemic workplace. You should soon receive an invite with link for registration. If you did not receive, contact one of the CAMS Directors.

Summer Members

Workshops:

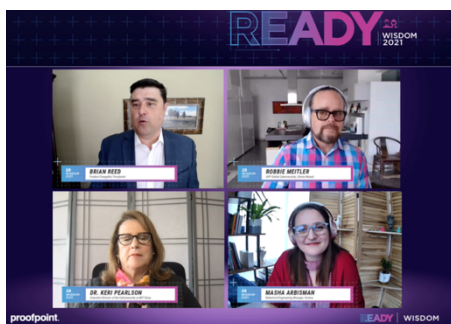
August 5, 2021

September 3, 2021

VC Funded Cybersecurity Innovations: Discussions with Start-Ups

For the May 2021 members meeting, CAMS invited venture capital firms Gilot Capital Partners, ForgePoint Capital, and Underscore.vc to each bring one portfolio company to present an innovative idea and then lead a discussion with attendees. One solution presented was a tool to quantify access risk across the board and achieve least-privileged access. Another VC firm presented a fully integrated, end-to-end privacy platform. Another solution was an open-source software designed to reduce the size of containers, reduce vulnerabilities, and decrease deploy and start time. Participants had the opportunity to reach out for further collaboration with the VC firms.

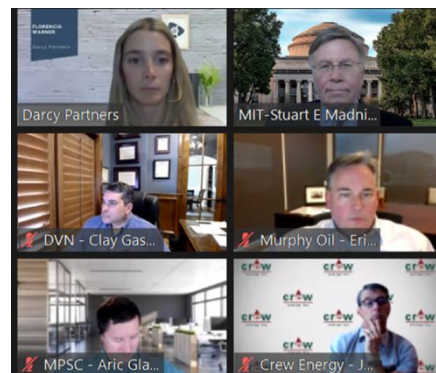
Culture and Behavior Change in the Spotlight: ProofPoint 2021



Dr. Keri Pearlson joined Proofpoint for a security awareness panel where she reinforced that security awareness should never be an island, and working with executives or creating advocacy programs improves how norms are established and enforced. When evaluating security awareness, the panelists suggested that speaking in positive terms that benefit your stakeholders is the most engaging way to address these issues. Working with other parts of the organization, changes the perception of IT Security from the department of “no” to the department of collaboration.

Cyber Threats on Energy Systems: Darcy's Executive Roundtable

Darcy Partners has been holding executive roundtables for top oil & gas and power & utilities executives. Dr. Stuart Madnick was invited to speak about cyber threats on energy systems to a roundtable of two dozen executives. First, he noted that they face the same threats as other companies and government agencies, such as ransomware attacks that disrupt their operations and what happened to Colonial Pipeline. There are unique threats to companies that rely on operational technology: they have equipment under computer control that can be hacked to break or even explode. He explained how the CAMS Cybersafety analysis method helps identify such vulnerabilities and how to prevent or mitigate serious damage.



Measuring your Cybersecurity Culture Goals: A Panel



Dr. Keri Pearlson led a panel at the Millennium Alliance on building a culture of cybersecurity. The panel included Chief Security, Privacy and Information Security officers from HCA Healthcare, Johnson Controls, Bank of America. and the Mayo Clinic. The discussion around how these executives build a culture of cybersecurity in their organizations concluded with 4 actionable items: find a

way to measure the goals of culture so leaders can invest properly to improve it, keep the people, process, and tools in balance so there are no unintended consequences, integrate the incident response team into the mix so the culture is also responsive to issues, and connect cybersecurity culture initiatives to the mission of the organization.

Did you know...
Our CAMS team, in partnership with MIT Sloan Exec Ed, offers two cybersecurity management programs for your business partners and non-technical executives

For more information, visit
<https://cams.mit.edu/events>

About Cybersecurity at MIT Sloan:
Formerly the Interdisciplinary Consortium for Improving Critical Infrastructure Cybersecurity, (IC)³

MIT is a natural place to study cybersecurity, given its rich history of technology innovation, and the MIT Sloan School of management is the home of the Cybersecurity at MIT Sloan (CAMS) research consortium. The Consortium is focused on the managerial, organizational, and strategic aspects of cybersecurity. More information can be found at <https://cams.mit.edu> or by contacting us:

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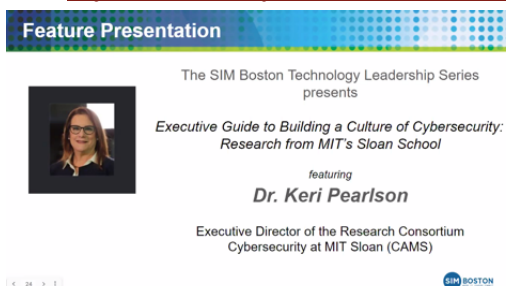
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Securing AI/ML Systems and New Lessons from the Capital One Case

The June 2021 CAMS Research update shared two current research topics with members: cyber concerns with AI/ML systems and a systems perspective on the Capital One Incident. There is no “one size fits all” solution for cybersecurity of AI/ML systems. Cybersecurity for AI/ML systems will not be successful if it’s just an extension of the approach used for traditional systems. This research found that the context and the use of the AI/ML system impacts the way cybersecurity must be managed. A systems approach to the disastrous Capital One data breach, uncovered new insights on the root cause by identifying controls and their possible flaws which led to failures.

Cybersecurity Culture Research Shared with Boston SIM Chapter



Cybersecurity culture continues to be a topic of great interest by CIOs and senior executives. Dr. Keri Pearlson presented the CAMS research to the Boston Society for Information Management (SIM) chapter meeting in May. The transition out of the COVID Pandemic might impact social engineering trends and what managers can do to prepare. After participants shared social engineering trends during the pandemic, they discussed adapting their culture of cybersecurity to these new trends. Adapting culture is one way managers can increase security and reduce vulnerabilities related to social engineering.

Upcoming CAMS Events – Please hold these dates

Member’s Only Webinars: | August 5 | September 3 | October 6-7 | Nov. 11 | Dec. 2

Friday Research Team Meetings: CAMS informal research team meetings are now virtual and open to anyone in the CAMS community who would like to attend. Held most Fridays from 11:30-12:30pm Eastern. The topic for each meeting is announced on Monday of the week. Interested in joining? Send a note to the CAMS directors to join the email list.

Cybersecurity Executive Education Programs Developed by CAMS
Cybersecurity Leadership for the Non-Technical Executives (Live online): Oct 25-27
Online Program: | Jun 24-Aug 11, 2021

CAMS In the News

- June 21, 2021: Stuart Madnick was interviewed for a Newsweek article: “**As Classes Resume at UMass Lowell after Cyberattack, MIT Cyber Expert Weighs in.**” Link: <https://bit.ly/2UbxAbX>
- June 14, 2021: Stuart Madnick was interviewed for The American Prospect: “The Power’s On, For Now.” Link: <https://bit.ly/35Z0Cyg>
- July 11, 2021: Keri Pearlson joined The Millennium Alliance CISO Innovator Award winner Patrick Milligan for a discussion on the importance of innovation: Video: <https://bit.ly/361GGLj>
- June 2, 2021: Stuart Madnick was interviewed by Yahoo! Finance: “The Worst is Yet to Come for Cyber Attacks” Link: <https://bit.ly/3A2WFqI>
- May 22, 2021: Angelica Marotta and Stuart Madnick won the “2021 Best Paper” award granted by the Award Committee for their paper submitted to the IACIS conference: “Convergence and Divergence of Regulatory Compliance and Cybersecurity”
- May 14, 2021: Stuart Madnick was interviewed about the Colonial Pipeline Cyber Attack for the Russian Language Broadcast voice of America : “How did the Ransomware Virus Stop a Key Pipeline?” Link to English Translation: <https://bit.ly/3h3QLgQ>
- May 13, 2021: Keman Huang, Keri Pearlson, and Stuart Madnick published a paper in the Harvard Business Review: “Is Third-Party Software Leaving you Vulnerable to Cyber Attacks?” Link: <https://bit.ly/3gXLqaZ>

A Few of the Most Recent CAMS Research Papers

(Available to CAMS Members at <https://cams.mit.edu/members-only/>)

- “Applying the Lessons from the Equifax Cybersecurity Incident to Build a Better Defense” by Ilya Kabanov and Stuart Madnick. June 2021.
- “Cybersafety Approach to Cybersecurity Analysis and Mitigation for Mobility-as-a-Service and Internet of Vehicles” by Chee Wei Lee and Stuart Madnick. May 2021.
- “Cybersecurity Management of AI Systems” by Keri Pearlson, Sanjana Shukla, and Ignacio Parada. May 2021. (White Paper)
- “Cyber Range for Industrial Control Systems (CR-ICS) for Simulating Attack Scenarios” by Shaharyar Khan, Alberto Volpato, Geet Kalra, Jonathan Esteban, Tommaso Pescanoce, Sabino Caporusso, and Michael Siegel. Presented at the ITASEC conference 2021.