

Newsletter #39: July-August 2021



SAVE THE DATE!

Our next MEMBERS ONLY workshop is on October 7th! Join CAMS today to participate in our next workshop featuring a keynote on data governance by MIT Professor and Turing Award winner Michael Stonebraker.

Cybersecurity Plans in the "New Normal"

CAMS Members and Partners gathered in August to discuss cybersecurity plans and preparations for the post-pandemic workplace. Concerns about securing the virtual space as well as work from home vulnerabilities led to a vigorous discussion on how to reconstruct remote security instruction to be more effective. When in-person security training is not an option, executives should still aim to make training a live, interactive experience to ensure attention and allow for difficult questions. Communicating to the board what resources need to be allocated and why can be a challenge; it can be effective to discuss cyber as a high-risk topic and explain what that means for your organization.

MIT Technology Review: Cyber Risk in a Changed-Threat Landscape



Dr. Michael Siegel presented at MIT Technology Review's annual future of work conference. Where people work and where data and hardware live have changed dramatically over time, introducing new threats and vulnerabilities that nefarious organizations are poised to exploit. Michael covered how to prepare for and manage a continuously changing cyber risk environment, one area of his expertise. He explored the evolving threat landscape and described how emerging technologies, changes and processes, and the management of the workforce can play a crucial role in an organization's cybersecurity strategy.

The Capital One Data Breach: What Went Wrong?

CAMS Members and C6 Bank Executives, Nelson Novaes Neto and Anchises Moraes, presented their paper, A Case Study of The Capital One Data Breach, at the RSA conference. Leadership is a crucial element for cybersecurity. A strong cybersecurity culture can help to avoid silos, finger pointing, and a toxic environment. Working on retaining employees can decrease the loss from internal actors and help build a crucial people-centric culture. Watch the presentation here: https://www.youtube.com/watch?v=DF7stQ7fRs0

NodeWare Cybersecurity Series: Building a Culture of Cybersecurity

Dr. Keri Pearlson presented her cybersecurity culture research for the SMB Cybersecurity Thought Leader Series. Small and medium sized businesses are just as vulnerable as larger organizations, in part because often they don't have the same level of resources or preparations for a cyber incident. She emphasized the importance of cultivating values, beliefs, and attitudes of security so employees don't



inadvertently open up company systems to malicious actors. If employees believe it's part of their job to keep the organization secure, and know it's a priority for management, they are more likely to engage in more cyber-secure behaviors. Watch it here: https://www.youtube.com/watch?v=PpkVvlvvTV0

Fighting the Cybersecurity Threat: New MIT xPRO Course

CAMS collaborated with MIT xPRO to launch a new professional cybersecurity certification course. The intensive 24-week course launched this summer and was designed to help fill the four million-plus unfilled cybersecurity jobs globally. The program director, Dr. Keri Pearlson, designed the program which involves faculty from across MIT and professionals in the field. This program is offered online in a bootcamp style approach for people wanting to transition into an entry level job in cyber. This new course is now open for applications: cams.mit.edu/events

MIT CDOIQ: Securing Data

CAMS worked with its sister MIT program Chief Data Officer – Information Quality (CDOIQ) to welcome over 2,000 registrants to its 15th CDOIQ Symposium this July. CAMS Founding Director, Stuart Madnick, gave the welcome with a bit of history before introducing MIT Sloan Deputy Dean Michael Cusuman and keynote speaker Archbishop Vincenzo Paglia, from the Pontifical Academy for Life, who spoke about AI and Ethics. In total there were over 80 sessions covering a diverse range of data-related topics. More information can be found at https://mitcdoiq.org/. We were able to offer CAMS members a discounted registration fee.

Did you know...

Our CAMS team, in partnership with MIT Sloan Exec Ed, offers two cybersecurity management programs for your business partners and nontechnical executives

For more information, visit

https://cams.mit.edu/events

About Cybersecurity at MIT Sloan: Formerly the

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:

Stuart Madnick, Director smadnick@mit.edu

Michael Siegel, Director msiegel@mit.edu

Keri Pearlson, Executive Director kerip@mit.edu

Madnick Speaks on Cyber Threats on Energy Systems

Dr. Stuart Madnick was invited to speak on cyber threats on energy systems to the Darcy Partners Executive Roundtable, a group hosting sessions to address top power and utilities threats such as the recent colonial pipeline attack. He discussed the



implications of cyber threats on the blockchain as a key component on future energy systems. Even the largest disasters can be caused by poor cyber hygiene on the lowest levels of an organization.

A Framework for Investigating GDPR Compliance Through Security



Dr. Stuart Madnick and Angelica Marotta presented their research on the security aspects of GDPR compliance at the 17th International Conference on Mobile Web and Intelligent Information Systems. GDPR Compliance poses challenges such as focusing on privacy to the detriment of cybersecurity aspects. This presentation identified positive and negative aspects of GDPR requirements and presented a framework for analyzing them from a security point of view. The framework featured a

way to determine the direct cybersecurity impact of key articles in the new requirements.

Upcoming CAMS Events – Please hold these dates

Member's Only Webinars: | October 7 | November 4 | December 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 Non-Technical Executives (Live online): Oct 25-27 Online Program: | Nov 4-Dec 23 | Feb 2-Mar 23, 2022

NEW: MIT xPro Professional Certificate in Cybersecurity: Starting Sep 9, 2021

CAMS In the News

August 13, 2021: Irving Wladawsky-Berger wrote a blog post: "The New Cyber Defense Collaborative" Link: https://bit.ly/3yxKorW

July 26, 2021: Rafi Yahalom was featured in a MarketWatch article: "Criminal commission to review academic research saying trader was wrongfully convicted for rigging Libor" Link: https://on.mktw.net/3BvfeTJ

July 15, 2021: Stuart Madnick was interviewed by CNBC: "Gas Station Owners Sue Colonial Pipeline after Ransomware Attack" Link: https://cnb.cx/3BtlfjW

July 8, 2021: Stuart Madnick was interviewed for a Newsweek article: "Launching a Ransomware attack Against a Nation is Far Easier than you Think" Link: https://bit.ly/3kLS8By

July 7, 2021: Michael Siegel presented at MIT Technology Review: "Cyber Risk in a Changed Threat Landscape" Link: https://bit.ly/3kOTxYm

A Few of the Most Recent CAMS Research Papers

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

"The Cybersecurity Skills Survey: Response to the 2020 SIM IT Trends Study" by Chris Maurer, Mary Sumner, Dan Mazzola, Tim Jacks, and Keri Pearlson. June 2021.

"A Systematic Framework to Understand Transnational Governance for Cybersecurity Risks from Digital Trade" by Huang, Madnick, Choucri, and Zhang. June 2021.

"Convergence and Divergence of Regulatory Compliance and Cybersecurity" by Angelica Marotta and Stuart Madnick June 2021.

"Applying the Lessons from the Equifax Cybersecurity Incident to Build a Better Defense" by Ilya Kabanov and Stuart Madnick. June 2021.

"Cybersecurity Management of AI Systems" by Keri Pearlson, Sanjana Shukla, and Ignacio Parada. May 2021. (White Paper)