Powering Secure Growth through Compliance, Automation, and Awareness with Mobius Consulting

A Professional Readiness Experiential Program (PREP) Project Effort

----- ***Authors / Student Project Team Members*** -----

Taylor Le is a student at George Mason University graduating with a bachelor's degree in information technology with a concentration in Cybersecurity.

----- ***Industry Participant / Mentor*** -----

Lashdeep Singh
Director of Operations
Mobius

William Ogus
Technology Solutions Architect
Mobius

----- ***Faculty Member*** -----

Brian K. Ngac, PhD
Instructional Faculty, Dean's Teaching Fellow, & FWI Corporate Partner Faculty Fellow
George Mason University's Costello College of Business
bngac@gmu.edu

Interested in being an Industry Participant and or PREP Sponsor? Please reach out to bngac@gmu.edu, Thanks!

Introduction

Mobius is an award-winning, SBA HUBZone-certified, Woman-Owned Small Business specializing in government contracting and commercial work. We provide solutions in cybersecurity, systems engineering, modeling and simulation, and intelligence analysis. I joined Mobius back in Fall 2024, where I learned the ropes of the organization's infrastructure and security initiatives. I came back in Spring 2025, where I was given more autonomy over my work, as well as trust, which enabled me to make meaningful contributions and strengthen my technical and problem-solving skills. The program provided me with a unique opportunity to tackle real-world security challenges while contributing to the organization's efforts to improve its contract management processes and security awareness.

Business Challenge

Mobius is committed to achieving and maintaining a strong security posture across its operations. As a growing organization working with sensitive government contracts, it must continuously align with evolving cybersecurity standards, including CMMC Level 1 certification. CMMC is a recently mandated framework that aims to protect government contract information processed through information systems. It is a core requirement to bid on government contracts. At the start of my internship, several processes such as NDA/TA document generation and contract funding changes lacked automation and efficiency. Additionally, raising employee awareness about social engineering threats was critical for organizational security.

Activities Done to Address the Business Challenge

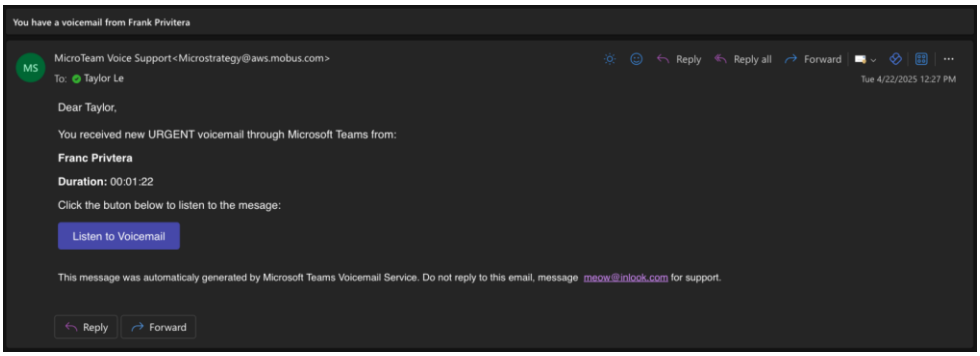
CMMC Level 1 Readiness

As Mobius prepares for CMMC Level 1 certification, I contributed to foundational readiness activities aimed at improving compliance with federal cybersecurity standards. This certification is an essential step in being able to bid on future government contracts. These activities involved scoping our information systems, evaluating current processes, and ensuring alignment with the FAR 52.204-21 guidelines. I lead efforts to document and track remediative actions to ensure compliance, which included categories such as access control, identity/authentication, system/information integrity, physical facility protection, and system/communication protection. These contributions helped strengthen Mobius' security baseline and brought the organization closer to certification readiness.

Caption: This is the document used to track our actions taken in the pursuit of CMMC Level 1 compliance.

Phishing Simulation

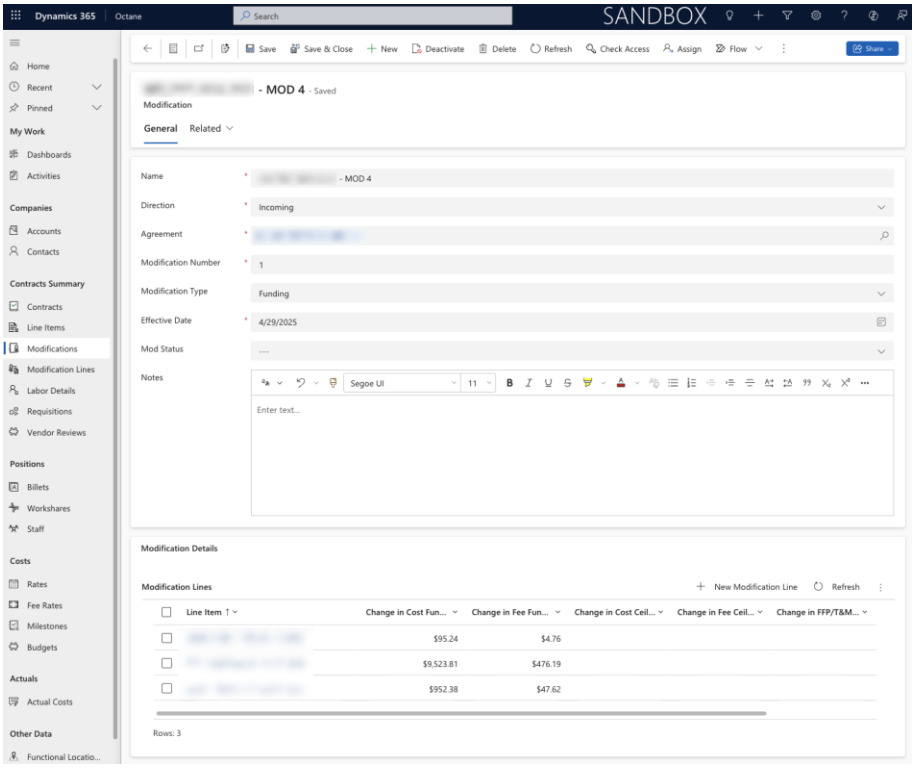
Each quarter, our security department at Mobius conducts a phishing simulation to test employee awareness and the organization's ability to respond to social engineering threats. In the previous round, we crafted a convincing email impersonating Microsoft's Security Team, warning users of a data leak. The urgent and credible nature of that message prompted users to pause and assess the situation carefully, resulting in fewer compromises. This time, we shifted our approach to test a more casual, less thought-provoking phishing attempt: a generic "Microsoft Teams Voicemail" notification. Despite featuring more obvious red flags, the simplicity and familiarity of the content led to more users clicking without thinking—demonstrating that people are often more vulnerable to routine, low-effort phishing emails than highly sophisticated ones that trigger critical thinking.



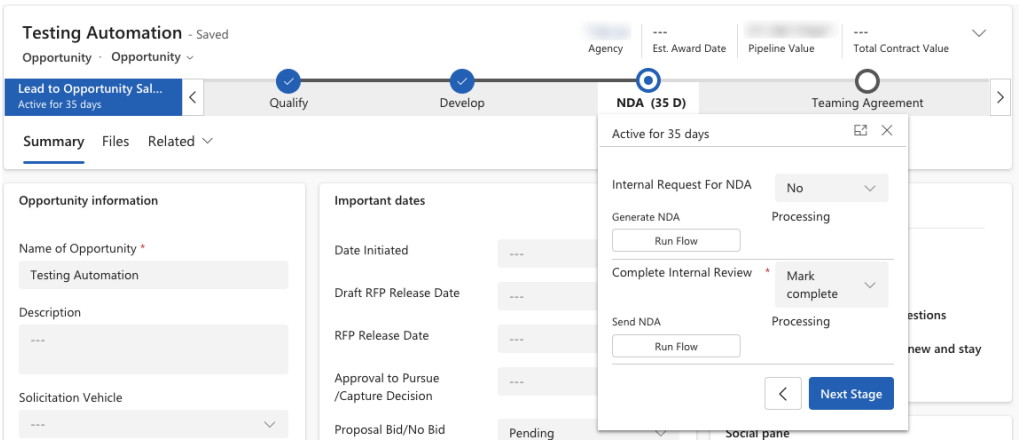
Caption: This is the attack simulation phishing email that was sent out to all users in our organization.

Workflow Automation for NDA/TAs and Contract Funding Changes

In efforts of streamlining administrative workflows, reducing human-error, and improving tracking capabilities, I led the automation of Mobius' Non-Disclosure Agreement (NDA) and Teaming Agreement (TA) workflows, along with building a process for managing funding changes on our contract management tool. Using Power Automate, Power Apps, Dataverse, Adobe Sign, and Dynamics 365, I developed a unified system that allows the business development department to initiate, track, generate, and process NDAs and TAs through a centralized dashboard. Each agreement type is clearly flagged to enable the department's visibility of status through the process' lifecycle. An automation I developed allowed the NDAs and TAs to be automatically populated and generated through the associated data stored in our database. I also built out a workflow that automatically processes funding changes. This workflow automatically calculates change in cost/fee funding and maintains a log of changes for auditing purposes. These systems have reduced the processing time, improved data accuracy, and enhanced transparency of our processes.



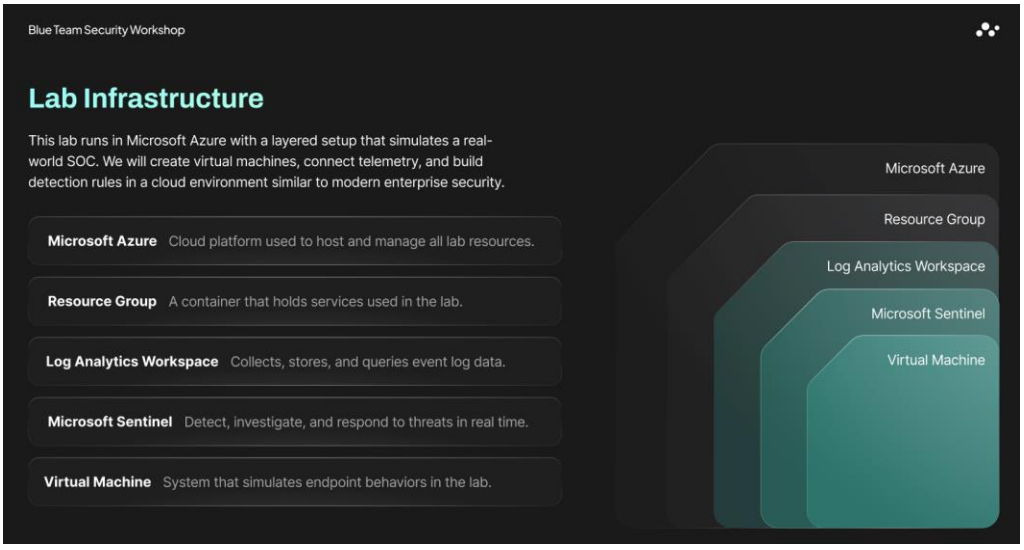
Caption: This is a modification record, along with a subgrid of related modification line records, which were automatically created when a requisition was approved and completed.



Caption: This is an opportunity record, where the Business Development Department can populate the data into our user-friendly dashboard, and automatically generate NDA/TA documents.

Cloud Security Workshop Development

I helped develop and organize a hands-on cybersecurity workshop in collaboration with Mobius and the PREP program, called *Blue Team Security Workshop: Deploy Your Own Security Operations Center (SOC) Lab in the Cloud*, which will be delivered to university students in the upcoming fall semester. The workshop aims to give students real-world experience in the defensive side of cybersecurity by guiding them through the creation of a cloud-based SOC lab using Azure and Sentinel. The students will learn the whole setup and incident remediation process from provisioning virtual machines, setting up analytics workspaces, enabling telemetry collection, writing customer detection rules, and responding to the simulated incidents. Students will walk away with a fully functional SOC lab that can be expanded upon and added to resumes.



Caption: This is one of the workshop's slides that goes over the lab infrastructure.

Results & The Positive Impact

- The automated NDA and TA workflows cut down processing time and allowed for greater visibility across departments.
- Our phishing simulation helped measure user awareness, and the training component reinforced secure behavior.
- The improved contract funding workflow process increased data consistency, reduced inefficiency, and supported contract compliance requirements.
- Security action improvements contributed directly to Mobius' ongoing readiness for CMMC Level 1 compliance, allowing them to bid on federal contracts.
- The cloud security workshop is positioned to be a powerful community outreach and hands-on lab to get students excited about the cybersecurity field.

Conclusion

My time at Mobius provided hands-on experience in solving real-world cybersecurity and business process challenges. By leveraging Power Platform technologies and applying cybersecurity principles, I was able to deliver solutions that will scale with the company as it grows. The collaborative environment, combined with the trust and autonomy given to me, enabled meaningful contributions and strengthened my technical and problem-solving skills.

PREP Student Reflection

The PREP experience at Mobius exceeded my expectations. It gave me the opportunity to build and deliver production-grade solutions that directly supported a real business. I grew both technically and professionally – from learning how to automate contract processes using the Power Platform, to working cross-functionally with security, operations, and finance teams. I also gained valuable insight into federal cybersecurity standards like CMMC. This experience not only prepared me for a future in cybersecurity and cloud solutions but also gave me a deeper appreciation for the intersection of technology, compliance, and business efficiency.