THE COMPANY

As one of the top schools in the world, Michigan State University (MSU) is like its own city. It operates 26 healthcare centers. It has its own power plant, water treatment, police, and fire departments. Two major sports venues and a golf course share the 5,200-acre campus with a performing arts center. An underground subatomic-particle accelerator supports advanced physics research.

MSU is home to 50,000 students, 5,700 faculty and staff, and 7,200 support workers. Defending everyone against cyber attacks is a complex, ever-changing challenge.

THE CHALLENGE

• Defend users across a complex environment while balancing security, access and privacy concerns
• Increase protection against targeted phishing attacks
• Protect a growing amount of infrastructure and data in the cloud

THE SOLUTION

• Proofpoint Email Protection
• Proofpoint Targeted Attack Protection
• Proofpoint Internal Mail Defense
• Proofpoint Cloud App Security Broker
• Proofpoint Threat Response Auto-Pull

THE RESULTS

• Sharply reduced volume of security incidents that required security team intervention
• Gained risk-aware, people-centered control over cloud apps
• Gained deep forensic intelligence and analysis capabilities

Michigan State University Adopts a People-Focused Cyber-Defense Strategy

Proofpoint delivers protection with privacy against cyber attackers targeting users through email.

The Company

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The Challenge

“We need to provide broad and deep cybersecurity, tailored to the needs of each area,” said MSU Chief Information Security Officer Seth Edgar. “It’s equal to securing municipal government, retail, financial services, entertainment, technology, energy, sanitation, food processing, agriculture, real estate, hospitality, and logistics organizations—all at the same time.”

MSU is an appealing target for attackers. Potential targets include everything from intellectual property and research to credit card data.

At the same time, many attacks focus on students because they are the most vulnerable. For many, security is an afterthought. That’s why balancing security, accessibility, and privacy is so critical. Students expect an open network. They want easy digital collaboration. They need access to digital resources. And they demand privacy.

Email security is especially important. In the past few years, MSU has seen threats skyrocket. Attackers have changed tactics. Today’s campaigns are more frequent, better planned and unfold across many different attack vectors. Sophisticated email phishing attacks, once a rare occurrence, are now commonplace.

“Attackers used to focus on exploiting infrastructure,” Edgar said. “Now they target people. Our focus has shifted to protecting people, which illustrates the changing boundary of security. That boundary has gotten very personal, very quickly.”
“Proofpoint offers secure ways to integrate cloud technologies with our current platforms. It enables us to be adaptable and meet users’ needs, as well as be prepared for new and changing threats.”

Seth Edgar, Chief Information Security Officer, Michigan State University

The Solution
With a finite budget, MSU needed cybersecurity that not only balanced protection and privacy, but also added the most value to the security team. The MSU team chose Proofpoint because it could do three key things:

• Defend the university
• Automate incident response
• Deliver deep insight and intelligence into cyber threats

Gaining more control
Proofpoint Email Protection helps users avoid spam and fine-tune the bulk mail they do want to see. Proofpoint Targeted Attack Protection (TAP) proactively stops advanced threats before they reach users’ inboxes. That includes zero-day and emerging threats that might be new and unknown to the team. Proofpoint Threat Response Auto Pull automatically removes unsafe email from users’ inboxes—even after it’s been delivered or forwarded to other MSU accounts.

“Proofpoint TAP gives us a lot of intelligence for incident response,” said MSU Incident Response Analyst Jim Beckmeyer. “Forensic analysis of malware attachments, information on senders, how the campaign is organized—it’s a level of insight we never had before.”

Securely cloud-bound
More of the school’s infrastructure and departments are moving to the cloud. That migration has spurred the MSU team to keep pace with evolving security and governance. To that end, it deployed Proofpoint Cloud Access Security Broker (CASB). CASB provides risk-aware, people-centered visibility and control over cloud apps. Powerful analytics enable the team to grant the right levels of access to users and third-party apps based on the risk factors that matter most to them.

As an added layer of protection, MSU also deployed Proofpoint Internal Email Defense. The solution stops unsafe email from legitimate but potentially compromised MSU accounts.

“The solution stops unsafe email from legitimate but potentially compromised MSU accounts.”

The Results
MSU’s team saw results right away. After deploying Proofpoint campus-wide, the school saw a dramatic drop in the volume of security incidents that required the security team’s intervention. Incident responders now have the tools they need to get to the root of attacks rather than constantly having to manually block IP address and senders. Team members can proactively work on the things people do best—adding layers of protection, training users, deploying new technologies, and other strategic actions.

“Proofpoint offers secure ways to integrate cloud technologies with our current platforms,” Edgar said. “It enables us to be adaptable and meet users’ needs, as well as be prepared for new and changing threats.”