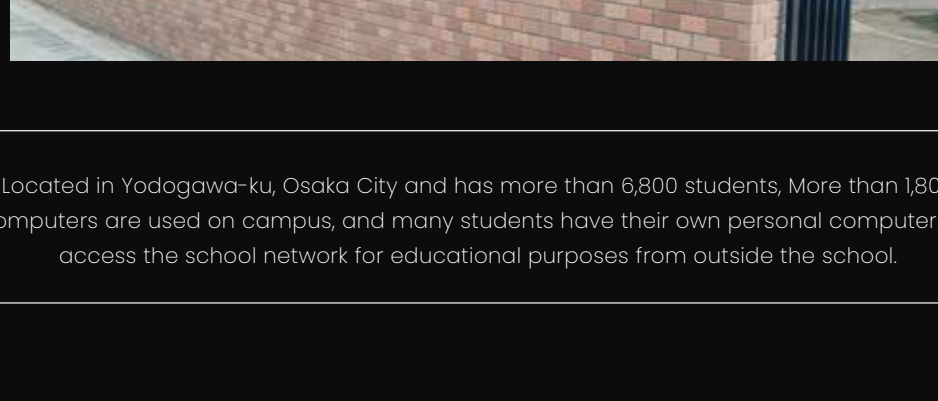


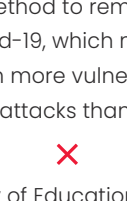


OSAKA UNIVERSITY OF ECONOMICS

How Osaka University of Economics established the University-wide Information System Operation Council and used KELA cybercrime intelligent technology as trump card to strengthen cyber security measures.



Located in Yodogawa-ku, Osaka City and has more than 8,800 students, More than 1,800 computers are used on campus, and many students have their own personal computers to access the school network for educational purposes from outside the school.



The problem

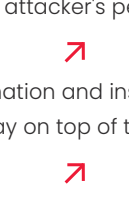
Universities had to adjust their teaching method to remote teaching due to Covid-19, which made the ICT system more vulnerable to cyber-attacks than before.



The Ministry of Education announced that all the Universities must strengthening Cyber Security Measures at Universities.



Organizations are seeking a solution to mitigate threats and reduce cybercrime risks.



The solution

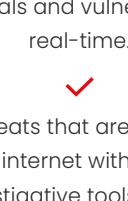
Identify the University's attack surface from the attacker's perspective.



Track information and insights in order to stay on top of threats.



Monitor threats and ensure Universities can protect their valuable assets.



The benefits

Discover information about leaked credentials and vulnerabilities in real-time.



Detect threats that are traded deep within the internet without installing investigative tools on the organization's network.



Take measures to prevent cyber attacks and stay ahead of attackers.

→ Challenges

In recent years, attacks against educational institutions in Japan have become more prominent. In April 2022, computers used by students and staff at a Japanese national university in Tokyo were infected with malware (viruses and other malicious programs) that stole authentication information and other data.

Similar attacks on educational institutions are increasing rapidly around the world; for example, in 2021, the number of cyber-attacks on educational and research institutions increased by 75% year-on-year around the world, including Japan. In the U.S., there have been reports of schools being forced to close due to the extensive damage caused by ransomware (a ransom-type virus).

80% of the digital infrastructure is on the cloud and 20% is operated on-premise. The university is also connected to the SINET academic information network, so the university has long had cyber security measures in place. "Fortunately, we had not suffered a major cyber-attack that made the newspapers, but in 2018 we had an incident in which router information was rewritten by hackers", said Minoru Yokoyama, Director of Finance Department, who is in charge of cybersecurity measures at the university.

Educational institutions handle the personal information of a large number of students, faculty, and staff. In addition, many universities hold intellectual property such as advanced researches and scientific training techniques, and information leaks can affect the reputation of the university and even damage the national interest potentially.

In May 2019, the Ministry of Education, Culture, Sports, Science and Technology issued a notice titled "Strengthening Cyber Security Measures at Universities" for private universities nationwide

CHALLENGES

↘ Reducing Risks With Kela

Osaka University of Economics has taken this notice as an opportunity to develop internal regulations. The university established the University-wide Information System Operation Council and introduced Kela's platform in 2022 as a trump card to strengthen cyber security measures.



I first became aware of KELA's products when I registered with LUMINT, a glimpse into KELA's events and insights from the cybercrime underground. After the registration, I was contacted by a KELA sales representative who explained about RADARK - KELA's product that provides organizations with external attack surface visibility, as seen from the eyes of cybercriminals, and I thought it would be useful. Then we were introduced to KELA platform, and after seeing a demonstration, we thought it would best-fit our needs and made our decision.

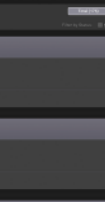
Kazuyoshi Kikukawa, Director of the Systems Section of the Finance Department.



KELA'S PLATFORM



KELA's platform specializes in cybercrime investigations and includes a 24/7 analysts' tech support. Although KELA has a proven track record in government entities and major telecommunications companies, there have been few cases in Japan where medium-sized companies and university/educational institutions have adopted KELA's technology.

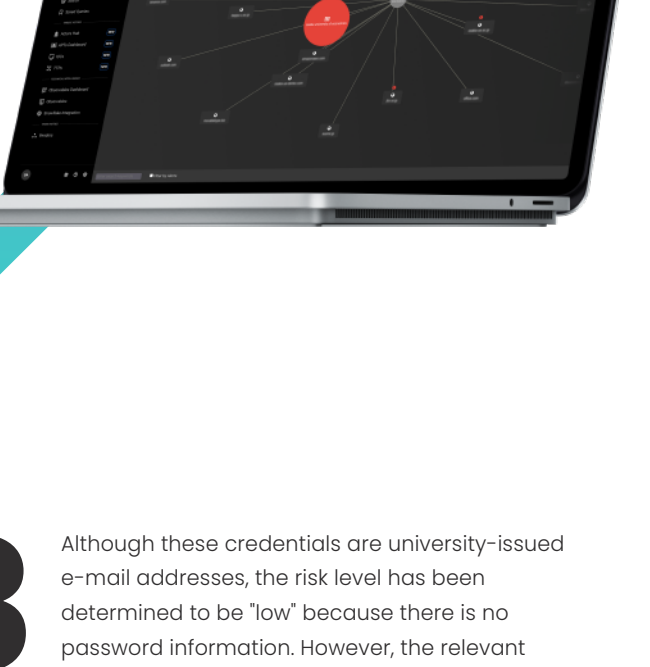


Osaka university's path to cybercrime defense



1 KELA is a cybercrime intelligence platform. To deploy the system, users register the domains, IP addresses and keywords to be monitored. The system detects the movement of the monitored information, such as the exchange of information on underground forums, and notifies the administrator through the dashboard.

2 This represents a dashboard interface featuring a summary of their alerts. The alerts are categorized based on their severity level. In the demonstration, there are critical alerts, relatively high-severity alerts, and low-severity alerts. Noteworthy alerts include the discovery of newly exchanged credentials in a hacker conversation. Additionally, high-severity alerts indicate the sharing of a new file on a dark file-sharing service within the darknet.

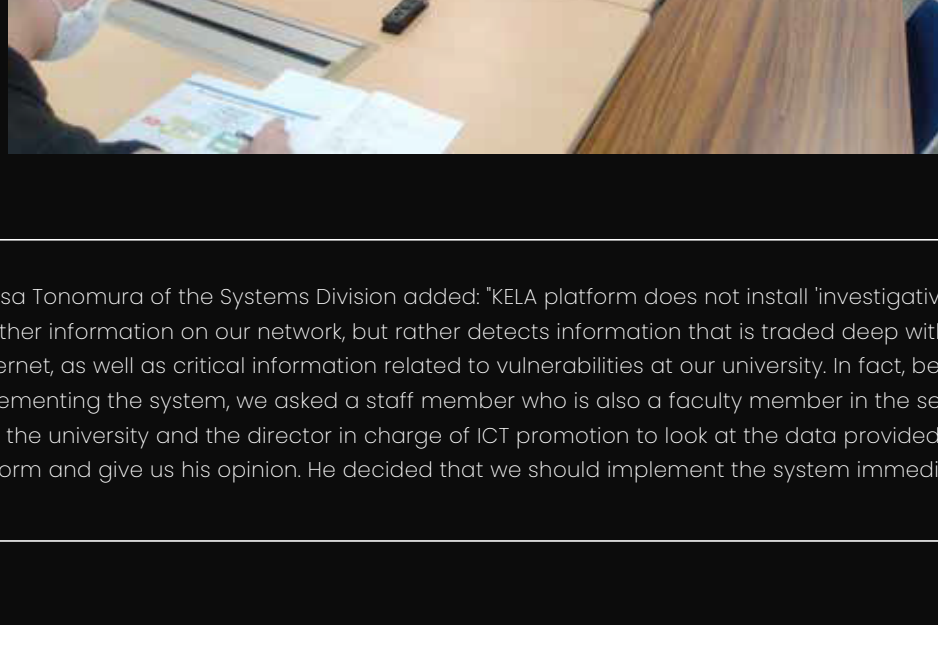


3 Although these credentials are university-issued e-mail addresses, the risk level has been determined to be "low" because there is no password information. However, the relevant individuals with these e-mail addresses will be instructed to change their passwords or take other countermeasures. When university-issued e-mail addresses are used to get an account on another site, and as a result of that site's information leak, the credentials are leaked to the cybercrime underground and might be sold. KELA platform can quickly detect such information and take measures such as disabling or changing passwords before they are abused by cybercriminals, thereby preventing you from becoming a victim of cybercrime in advance.



We had been using a service that notified us of email addresses and authentication information that had been leaked on the internet, but it was shocking that KELA platform discovered more information about leaked credentials and various vulnerabilities in our school's system that we could not detect before.

Kazuyoshi Kikukawa, Director of the Systems Section of the Finance Department.



Tsubasa Tanomura of the Systems Division added: "KELA platform does not install 'investigative tools' to gather information on our network, but rather detects information that is traded deep within the internet, as well as critical information related to vulnerabilities at our university. In fact, before implementing the system, we asked a staff member who is also a faculty member in the security field at the university and the director in charge of ICT promotion to look at the data provided by KELA platform and give us his opinion. He decided that we should implement the system immediately."

↗ Results

After the introduction of the system, the university worked with outside contractors and other parties to resolve high-risk vulnerabilities that had been picked up by KELA platform one by one, eliminating the problems as they arose.

"KELA platform informs us of potential risks that can cause tremendous damage to the institution's operations-threats that could occur in the future-and recommends countermeasures. We are now more confident in our cybersecurity measures at our school than we were before the introduction of the system", said Sotomura.

"As of today, most of the risks have been resolved, and no new threats have emerged. Still, KELA platform continues to monitor the site to make sure we don't let our guard down. The dashboard-style top screen of KELA platform is easy to intuitively understand at a glance, which is also helpful", said Kikukawa.

Therefore, in the case of Osaka University of Economics, a reasonable KELA platform program is being deployed in the university-related sector, thus realizing a low price. We plan to continue to expand the program to universities, educational institutions, hospitals, and other medical institutions" (KELA representative).

It can also monitor information about vulnerabilities on the network. Here, it was found that the FTP site installed can be accessed by third parties. Specific measures can be taken for this information as well, such as changing or stopping the service based on the usage of the FTP service.

Protect your organization with Kela's cybercrime intelligence platform

START NOW

