Academic programs seen to help address workforce gap in cybersecurity sector

By Aubrey Rose A. Inosante

CYBERSECURITY electives offered in universities and colleges are not enough to fill the lack of experts in the field in the Philippines, industry officials said.

"We have not been able to produce a lot [for our] workforce because our academe does not provide degrees in cybersecurity. Instead, what they are doing is offering it as an elective," Allan S. Cabanlong, Regional Director for Southeast Asia on Cyber Expertise, said in a Viber message.

Certification bodies like the Cybersecurity and Infrastructure Security Agency, Certified Ethical Hacker Certification, Computer Forensics and Security Institute, and more drove the number of sector professionals, he said.

However, certification, which can be obtained in a few weeks, does not guarantee a student will possess operation knowledge, he added.

The demand for cybersecurity practitioners is at an all-time high amid rising online attacks, with recent schemes even targeting government agencies.

According to the National Association of Data Protection Officers of the Philippines, about 180,000 professionals are needed in the country.

"Singapore has about 2,000 cybersecurity professionals, and the Philippines has about 200. And of the 200, 80 percent of that are working abroad," said Department of Information and Communications Technology (DICT) Secretary Ivan John Uy earlier said.

Mr. Cabanlong said an ideal setup for Philippine schools offering cybersecurity programs is to have partnerships with foreign academic institutions and private firms for on-the-job training,

"If someone wants to offer cybersecurity — whether it's cybercrime investigation, network security, cyber defense, or cyber diplomacy — the basics of it or the advanced part of it, or the executive courses, they should already have guidelines," he said.

Mr. Cabanlong was a former DICT assistant secretary. During his tenure, the agency forged a partnership with AMA University in 2018 to offer a Bachelor of Science in Cybersecurity.

Among other educational institutions offering are BS Computer Science elective in Cybersecurity at the Ateneo Davao University, St. Paul University, Mapua, and a Masters in Cybersecurity at Holy Angels University.

University of the East (UE) Caloocan recently announced it will offer a four-year BS Criminology program with specialized cybersecurity courses.

Michelle Concepcion, dean at the UE College of Arts and Sciences (CAS), said the university has a pool of information technology (IT) and criminology experts equipped to teach its cybersecurity and criminology courses for the program.

"The university has eight IT laboratory classrooms equipped with computers and software apps for cybersecurity specialization courses such as cyberspace and cybersecurity, information assurance and security, network and data communication protocols, digital forensics, machine learning in security, and security penetration testing and audit," Ms. Concepcion said in a Viber message.

UE targets to get 100 to 200 enrollees for the degree's pilot academic year, she said.

UE CAS Caloocan aims to produce graduates who are competent and will uphold strong ethical standards in delivering services including crime prevention, detection, investiga-

tion, law enforcement, public safety, custody, offender rehabilitation, and criminological research, she added.

Digital Pinoys National Campaigner Ronald B. Gustilo however noted that these specialized courses are mostly in private institutions and relatively have high tuition fees.

"The government needs to allocate funds to state colleges and universities (SUCs) so that they will be able to offer cybersecurity and information technology courses. The state should improve the facilities of SUCs and hire professionals who will teach students," he said.

ICT ACADEMY

Under the National Cybersecurity Plan, setting up an ICT academy and a Cybersecurity Center of Excellence is one of the strategies to produce more cybersecurity experts.

The DICT targets to produce 300,000 cybersecurity professionals by 2028.

DICT Undersecretary for Infostructure Management, Cybersecurity, and Upskilling Jeffrey Ian Dy said these facilities are targeted to be established informally within the year.

"However, institutionalizing an academy needs an enabling law. We will advocate for its establishment as part of the cybersecurity bills pending in Congress," he said in Viber message.

The agency provides partial scholarships and offers online and computer-based training for students. It recently gave out 500 Google Cybersecurity Certifications provided through the agency's learning management system, Mr. Dy said.

"With Microsoft, we have an agreement on sharing of intelligence and training of our National Security Operations Center personnel," he added.

BOOMI held its biggest ever Boomi World conference in Denver, Colorado on May 7-9.
CRAG

Boomi eyes expansion in Asia-Pacific

By Cathy Rose A. Garcia
Editor-in-Chief

DENVER, Colorado — Boomi is looking to expand its business in Asia-Pacific, including the Philippines.

"Boomi being a global company, we have a large base of our employees in the broader Asia-Pacific and Japan. We have a strong team there. We have a large engineering presence in India. We have a very large, sales, marketing, go-to-market organization in Tokyo, Singapore, Sydney. And we will continue to expand," Boomi Chief Executive Officer Steve Lucas said in a press briefing here on May 8.

Mr. Lucas noted that at present, around 10 to 15% of the company's total revenue is from Asia-Pacific, including Japan.

Thomas Lai, vice-president and general manager of Boomi APJ (Asia-Pacific including Japan), said the company hopes to increase the total revenue share of Asia-Pacific in the next few years.

"As a percentage of revenue, we'd probably want to get more than 15 to 20% over time," he told *BusinessWorld* in an interview here.

"We've been pretty mature in North America and the next levers of growth for us are in less dense markets, right? And so that's everything in the Southeast Asia corridor all the way up through Japan and India," he added.

Boomi has offices in Tokyo, Singapore, Bangalore, Sydney, and Melbourne.

While Boomi does not have a direct presence in the Philippines, it services the market through local partners and its Singapore office.

"For us, we want to do that the right way, meaning what I've encouraged the team is to make sure that we work closely with the partners. We work closely with the customers to make sure that they're wildly successful and that we earn more of their business

over time and that goes through our partners as well," Mr. Lai said.

Boomi is looking to work with the public sector, such as with local government units (LGUs) and departments, in the Philippines.

"We actually built an integration to the BIR (Bureau of Internal Revenue). Now there's a little bit of work on the BIR side, but we've done our part," Mr. Lai said.

Last year, Philippine company Yazaki-Torres Manufacturing announced it chose the Boomi platform to modernize its legacy systems. Yazaki-Torres is a wiring harness manufacturer and top exporter of automotive parts.

A Boomi statement last year indicated that Torres Technology, Inc. is implementing the low-code, on-premises version of the Boomi platform. This would allow Yazaki-Torres' system to connect to the BIR's electronic invoicing/receipting system.

Mr. Lai also said Boomi works with some retail and financial services companies in the Philippines.

"If you look at COVID, it was a wake up call for a lot of these organizations to digitize... Singapore led the way in Southeast Asia.... And now you're seeing investments by almost every government to be digital first," Mr. Lai said.

He hopes to work with LGUs in the Philippines in their digital transformation, as well as companies involved in manufacturing, transportation logistics and financial services.

"It will actually help their businesses be more agile by actually creating a set of processes which are more digital.

And then they can actually have better growth long term," Mr. Lai said.

Boomi, a global software as a service or Saas company, has over 20,000 customers and a network of 800 partners around the world. Organizations use the Boomi platform to connect their applications, data and people to accelerate digital transformation.

ASF vaccine enters third phase of trials — DA

THE Department of Agriculture (DA) on Wednesday said a vaccine for African Swine Fever (ASF) is in the third stage of trials, and could be approved within the year.

"We are in the third phase, the last trial. And hopefully, it will be over soon because that's what the industry has asked for," Agriculture Undersecretary Deogracias Victor B. Savellano told reporters on the sidelines of the Livestock and Aquaculture Philippines 2024.

As of April 26, 11 provinces had active cases of ASF, according to the Bureau of Animal Industry (BAI).

These are Batangas, Quezon, Oriental Mindoro, Occidental Mindoro, Camarines Sur, Albay, Bohol, Misamis Occidental, Sarangani, Agusan del Norte, and Surigao del Sur.

"What needs to be done now is for the (Food and Drug Administration) and the BAI to work together, so that we can speed up the response to ASF," he added.

The DA has said that the BAI, FDA, and the Department of Health are set to sign a memorandum of agreement regarding the fast-tracking of the approval process for animal vaccines.

During the first quarter, hog production declined 4.3% to 419.37 thousand MT, according to the Philippine Statistics Authority. This was a reversal of the 5.1% growth a year earlier.

Separately, Alfred Ng, vice-chairman of the National Federation of Hog Farmers, Inc said hog industry output is expected to grow 10% to 15% even without the ASF vaccine.

"The repopulation effort (in the hog industry) is ongoing," Mr. Ng said on the sidelines of the event.

However, he added that the hog industry is not seeing further ASF cases at the moment due to biosecurity measures implemented by raisers.

"There aren't many reported cases of ASF. So, we are not too alarmed by that. Although the weights (of hogs) are getting smaller," he added.

He said imports of pork meat remain a challenge for hog raisers.

"Imports are very high... it's a challenge for local production," Mr. Ng said.

Pork imports rose 11.92% to 128.51 million kilograms during the first quarter, according to the BAI. — **Adrian H. Halili**

GREENSTONE RESOURCES CORP.

EMB cites Surigao del Norte gold miner for release of tailings into community

THE Environmental Management Bureau (EMB) said on Wednesday that it issued a notice of violation to Greenstone Resources Corp. over the release of tailings from its Tailings Storage Facility (TSF), putting it in breach of its Environmental Compliance Certificate (ECC).

In a statement, the EMB said it found cracks along the base of the company's TSF embankments, resulting in tailings being released into a nearby barangay.

"The heavy flow of the tailings from TSF 3 damaged 25 houses in Barangay Siana, Mainit, Surigao del Norte. They also damaged electrical distribution lines and coconut trees. The tailings also crossed the barangay road," the EMB said.

It added that the company also violated the provisions of Republic Act 9275 or the Philippine Clean Water Act of 2004.

Last week, Greenstone said that it had voluntarily suspended mining operations in order to expedite its emergency responses.

The cracks emerged following an earthquake and rains in Mindanao.

Greenstone Resources operates the Siana gold mine in Surigao del Norte.

In its report, the EMB said that eroded tailings downstream of the TSF and those that are still

inside the facility are exposed and vulnerable to runoff water during heavy downpours and may flow onto the nearest body of water.

"The risk of polluting Magpayang River and other waterbodies farther downstream is very high because of the volume of unsecured tailings. These tailing materials may still contain chemicals as a result of the mineral processing some time ago therefore it shall be considered hazardous waste," it added.

The EMB is recommending that Greenstone Resources submit measures to address the immediate needs and impacts of the incident.

The company should also determine the volume of the tailings that were displaced and have a long-term program to address the environmental impacts of the incident.

"(The company) is further recommended to regularly update EMB on the status of the company's response operations, to conduct regular water sampling at the established sampling stations to closely monitor the extent of contamination, and to conduct a Root-Case-Analysis of the incident," it added.

Additionally, the company said that it will submit its rehabilitation plan and pay the penalty for each violation. — **Adrian H. Halili**

Bill seeks to impose price controls on building materials during calamities

FREEPIK

A HOUSE BILL is seeking to add construction materials to the list of basic goods and commodities, effectively keeping sellers from raising prices during calamities.

House Bill No. 16464 adds plywood, cement, hollow blocks, and steel bars to the list of items subject to price controls during emergencies, to allow for rebuilding unhampered by undue price increases.

"This Bill would protect survivors of disasters from predatory pricing and some sellers exploiting the need for construction materials in rebuilding shelter and livelihood," Dinagat Islands Rep. Alan 1 B. Ecleo said in a statement.

The inclusion of the construction materials to the list of basic necessities and prime commodities under Republic Act No. 7581 or the Price Act would stabilize the prices of such products against price surges during emergencies, Mr. Ecleo, who chairs the House Committee on Disaster Resilience, added.

Basic goods under the Price Act include flour, canned goods, dairy products, chicken, meat, and toiletries, among others.

Construction materials "are essential to consumers in times of emergencies," he said, as they are vital in rebuilding their homes. — **Kenneth Christiane L. Basilio**

Alsons Aquaculture hoping to quadruple tilapia harvest

ALABEL, SARANGANI — Alsons Aquaculture Corp. (AAC) is installing another in-pond raceway system (IPRS) pump technology in a bid to quadruple tilapia harvest from its Sarangani facility.

"Since we can't expand land anymore, Alcantara will install another P30-million IPRS next year," said AAC Technical Services Supervisor Dennis J. Pelaez told reporters during a facility tour on May 18.

This IPRS helps to increase yields and promote sustainability in fish farming, allowing the cultivation of fish at higher densities.

Mr. Pelaez said under the IPRS system, water is recirculated without the need for discharging.

He added that the harvest in a two-hectare pond is typically around 30 tons, but a single IPRS-powered pond can generate 120 tons.

The company exports processed products under the Sarangani Bay brand to Europe, the Middle East, and the US.

AAC said aquaculture businesses continue to be hampered by the elevated cost of feeds and risk of white spot syndrome virus (WSSV).

"In aquaculture, the challenging part is how to get rid of the WSSV in the crustaceans. In fish, we don't have a problem," he said.

The shift to producing more tilapia and milkfish was attributed to the risk of WSSV, with an outbreak detected in March 2023.

"Instead of *vannamei* (shrimp), we switched to tilapia. We had some losses, but we were able to produce additional tilapia, and managed to recover," he said.

AAC is the aquaculture unit of the Alcantara Group. — **Aubrey Rose A. Inosante**