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Innovation spurs PH's forward jump in global index, science chief says

Text & photo by Rodolfo P. De Guzman, DOST-ST//



Partment of Science and Technology Secretary Fortunato T. de la Peña bannered the Philippines' innovation strengths as contributing factor to the Philippines' notable jump to 54th from last year's 73rd in the Global Innovation Index (GII). The index covered 129 economies worldwide.

Philippines also placed 42nd this year in terms of innovation outputs, referring to the impact of innovation initiatives. Further, the country ranked as number 1 worldwide in the category of High-tech Net Exports Percentage Total Trade, which the science chief attributed to the 60 percent increase in semiconductors manufacturing.

Moreover, Sec. de la Peña said that the Philippines ranked sixth worldwide in terms of Research Talent Percentage in Business Enterprises, showing that the country is able to translate research initiatives into tangible benefits for business.

Further, the country ranked eighth worldwide in the field of Creative Goods Export Percentage Total Trade, because of the increasing presence of Filipinos in the creative

PH jumps to 54th in 2019 from 73rd in 2018 in the Global Innovation Index that covered 129 economies

arts business involving animation, gaming, and other related fields.

With the much improved performance of the country as recognized by international organizations, Sec. de la Peña heralded DOST's completed and ongoing programs on innovative technologies.

In support of the micro, small, and medium enterprises (MSMEs), the DOST chief said, "Our Small Enterprise Technology Upgrading Program or SETUP has helped many MSMEs improve their productivity and competitiveness that address the GII criteria on technology absorption and technology diffusion."

He further said that the program has components that support MSMEs like oneSTore, an electronic ordering system, where SETUP beneficiaries can market their products online.

He also mentioned OneLab in which the DOST provides laboratory testing and analysis of MSMEs' products through a network of laboratories nationwide.

"With the OneLab project we are able to provide testing and analysis services to our MSMEs in the regions without them going to Manila because DOST will take care of forwarding the material to laboratories that are capable of testing the desired parameters," explained Sec. de la Peña. "After the testing, the results are forwarded to the clients. They no longer have to make follow ups."

The science chief cited that the laboratories of the Department of Health plus some 10 private laboratories are already part of the network, including two laboratories in Thailand and one in Vietnam.

To strengthen the research and development (R&D) efforts of the Department, Sec. de la Peña said that the Science for Change Program was created in close collaboration with state universities and colleges based in the regions.

"The program has four component projects called NICER, RD Lead, CRADLE, and BIST," said Sec. de la Peña. "Through this program, we are able to conduct researches in different areas like white potato by the Benguet State University, tamarind by the Pampanga State Agricultural University, and on renewable energy by the Ateneo de Davao University."

NICER stands for Niche Centers in the Regions, a project that aims to establish R&D centers in the regions to spur regional development. To date there are 14 NICER Centers all over the country and the number is still growing.

Sec. de la Peña showcased the many innovative products that the DOST developed through extensive R&D, such as the Hybrid Electric Train that is now adopted by the Philippine National Railways; Biotek-M Dengue Aqua Kit for early detection of dengue; the Space Technology Program that resulted in the creation of the Diwata satellites; and the

Marketers urge tech gens to tell their stories

By Jund Rian A. Doringo, DOST-TAPI



Participants of the Technology Portfolio Presentation and Mentoring Workshop, which was held 15 August 2019 at the Herald Suites Hotel Solano, Makati City. (Photo from DOST-TAPI)

T n an effort to commercialize the technologies from research and development institutes, the Department of Science and Technology-Technology Application and Promotion Institute (DOST-TAPI) organized a technology portfolio and mentoring workshop on 15 August 2019 at the Herald Suites Hotel Solana, Makati City.

"The DOST wants your technologies to reach the target users as public goods or through commercialization," said Noel A. Catibog, officer-in-charge of the Technology Transfer and Promotion Division (TTPD) of DOST-Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD).

The mentoring workshop secures and finalizes the business model canvas of the technology in view of providing technology generators with the necessary knowledge on efficient marketing techniques and development of technology portfolio. Basketball and fitness coach Ruben Lanot II and Neal Tieng of Go Negosyo served as resource speakers and mentors who explored the details of market assessment and strategies, and marketing hacks and business model among the technology generators.

"No matter how innovative your technologies are, at the end of the day, investors would always want to know your story and the story behind your technologies," said Lanot.

He also emphasized the importance of speaking the language of inventors or adoptors to be able to effectively communicate the benefits and features of the technologies being pitched to them.

The following technologies on agriculture are hoping to be commercialized at the end of the year: impeller rice mill, Chevon products in retort pouches, rice combine harvester, FertiGroe, rice transplanter, dewormer for native chicken, infrared grain dryer, micro algal paste as aqua feeds, rice seeder, and LAMP kit for shrimp pathogens.

"I hope that the first batch of technologies become an avenue to open doors and opportunities for more technologies to be commercialized," said Eilleen S. Fernando of DOST-TAPI.

The activity was done in collaboration with the DOST-PCAARRD under the project on market matching of DOST-PCAARRD-funded technologies in support to the technology transfer activities of the DOST.

ABOUT US

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carrageenan as plant food supplement developed by the DOST-Philippine Nuclear Research Institute using irradiation technology.

Other initiatives include the Universal Structural Health Evaluation and Recording System, a cost-effective 24/7 health monitoring system; the Contactless Apprehension of Traffic Violators on a 24-Hour Basis and All-Vehicle Detection System software that monitors traffic situations and track violators; the Eco-Sep Vigormin Organo Mineral for septic waste water treatment; and the Hazard Hunter app, a software application developed by DOST-PHIVOLCS to identify, assess, and provide action recommendations for both geological and hydro-meteorological hazards like earthquake, tsunami, landslide, flood, etc.

The Global Innovation Index 2019, in its 12th edition this year, is co-published by Cornell University, INSEAD, and the World Intellectual Property Organization, a specialized agency of the United Nations. The main focus of the GII Report consists of the ranking of world economies' innovation capabilities and results.

DOST, PayMaya partnership a win-win for OneSTore.ph clients, merchants

By Sheila Marie Anne J. de Luna, DOST-STII

A payment solution that will make online purchases easier and more convenient for both customers and merchants has been added to OneSTore. ph, the Department of Science and Technology's (DOST) e-commerce platform for all DOST-assisted products.

The DOST signed up online payment solutions provider PayMaya to be its newest payment channel partner. The partnership is expected to enhance OneSTore.ph's online market platform to accept payments for credit, debit, and with a prepaid card or e-wallet like PayMaya.

With the partnership, PayMaya will provide end-to-end payment solutions for OneSTore through online store gateway checkout.

"PayMaya does the end-to-end acquiring service for DOST—we process the payment, we do fraud management, and we provide the resettlement solution for DOST," said Ma. Rocielo B. Nunez, digital portfolio manager of PayMaya Business.

Another advantage of the PayMaya's integration in OneSTore is that it makes it faster for merchants to receive settlement for their products—just a day after purchase. Currently, it takes about two months to disburse the sales from OneSTore.ph to their over 500 merchants. With PayMaya Checkout, settlement of payment for merchants can be shortened to next day after the transaction.

"What we are doing right now is we are providing them with a disbursement solution so that DOST can receive the settlement [for the transaction] and process the settlement for its merchants in real-time the next day so that they no longer have to wait for two months," added Nunez. Launched in 2017 and developed together with the Department of Trade and Industry, OneSTore is the DOST's marketing platform that helps micro, small, and medium enterprises (MSMEs) expand their market reach through presence in the digital space.

Products featured at OneStore are from MSMEs that were assisted by the DOST through its Small Enterprises Technology Upgrading Program or SETUP.

"We have been helping micro, small, and medium enterprises to enable them to adopt technological improvements mainly by improving the technology that they use, by giving them access to new equipment, hardware, and software. This has significantly improved their productivity, remarkably expanded their market, grew their employment figures, and of course, increased their incomes," said DOST Secretary Fortunato T. de la Peña.

The DOST chief further explained that even with well-established marketing platforms, the DOST has decided to put up its own e-commerce platform for the MSMEs that they have been assisting.

"Definitely, the payment system (PayMaya) will help a lot. It will help our clients—the merchants—and even the buyers do their purchases more conveniently," added Sec. de la Peña.

PayMaya's Founder and CEO Orlando B. Vea hailed the partnership with DOST and expressed hope that it will really enable DOST to bring technology to MSMEs.

"Being partners with DOST confers a certain validation on the technology that we offer. We think that we can enable not only government but the private sector in the payments processing space," said Vea. The PayMaya partnership also opens up other avenues for the two organizations to work together as PayMaya also offers to provide disbursement solutions for OneLab and OneSTore hubs.

OneLab is a digital platform for a network of laboratories to provide a referral system for convenient and easy access to laboratory testing and calibration services. Meanwhile, OneSTore hubs are the physical stores for OneSTore.ph merchandise, which are currently located in 21 sites nationwide.

"For OneLab we are also offering payment gateway checkout and for OneSTore hubs we're offering our POS (point-of-sale) terminals that are portable, wi-fi enabled, and have their own SIM cards for data," explained Nunez. This will enable OneSTore hubs to accept card payments instead of just cash.

Aside from that, Nunez added that PayMaya would also like to provide QR codes to OneSTore hubs so they can accept QR payments. A QR code (Quick Response code) is a machine-readable code that can be read by the camera on a smart phone, while a QR payment is done by scanning a QR code from a mobile application.

Other areas for partnership between DOST and PayMaya is the possible application of PayMaya payment systems for the Hybrid Electric Train and for disbursing allowances to DOST scholars.

PayMaya now joins other third party solutions for OneStore.ph that include 2GO, AIR21, Shopinas.com, Landbank of the Philippines, Dragonpay, and Black Arrow.

The MOU ceremonial signing and partnership launching was held 13 August 2019 at the Launchpad Building in Mandaluyong City.



The Department of Science and Technology adds another online payment solution provider to its payment channel partners for OneSTore.ph as it signs a partnership agreement with PayMaya. The Memorandum of Understanding (MOU) signing was led by DOST Secretary Fortunato T. de la Peña (third from right) and PayMaya Founder and CEO Orlando B. Vea (third from left). The MOU signing was witnessed by (from left to right) Mar Lazaro, director and head of PayMaya Business, PayMaya President Shailesh Baidwan, DOST Undersecretary for Regional Operations Dr. Brenda L. Nazareth-Manzano, and DOST Region II Director Engr. Sancho A. Mabborang. (Photo by Henry A. de Leon, DOST-STII)

DOST-PAGASA weather station to rise in Siquijor

By Framelia V. Anonas, DOST-STII

The Department of Science and Technology-PAGASA will soon set up a synoptic weather station in Brgy. Caipilan, Siquijor town, and Siquijor Governor Zaldy S. Villa is ecstatic.

"The setting up of this station is crucial in the operation of our would-be airport in Siquijor," he announced during the groundbreaking. "The establishment of the airport has been approved in 2016. Hopefully, there will be no more hindrance after the synoptic station is set up."

The DOST-PAGASA synoptic weather station is vital in the island-province's push for the speedy completion of its airport. Its groundbreaking was held as part of the celebration of the Regional Science and Technology Week held 15-17 August at Capital Square in Siquijor, Siquijor.

Airports are required to have their synoptic stations where all meteorological elements are made and transmitted to the Central Office, Secretary Fortunato T. de la Peña said.

DOST-PAGASA Administrator Dr. Vicente Malano told that synoptic stations enable the dissemination of public weather forecasts, tropical cyclone bulletins, warnings and advisories and other related information that protect the lives and property of the general populace.

The completion of Siquijor airport is very crucial in addressing the spurt of tourist arrivals in the province, which reached its peak in 2018 with a 48.8 percent growth, according to the Philippine Statistics Authority.

Siquijor's airport is about 5 km west of Siquijor town. In 2017, construction began to expand it into a full airport with international flights. However, it is still up for completion.



DOST Sec. de la Peña (middle) leads the installation of the time capsule at the groundbreaking ceremony of the DOST-PAGASA Synoptic Station in Brgy. Caipilan, Siquijor, Siquijor. The synoptic station is crucial in the establishment of the Siquijor airport which is being fast-tracked to meet the almost 10 percent influx of tourists in the island-province. Joining the groundbreaking are (L-R) PAGASA Chief Administrative Officer Catalino Davis, DOST-VII Regional Director Edilberto Paradela, Siquijor town Mayor Richard Quezon, Siquijor Provincial Governor Zaldy Villa, DOST-PAGASA Administrator Vicente Malano, PAGASA Regional Services OIC Engr. Alfredo Quiblat, and DOST-Negros Oriental Provincial Director Atty. Gilbert Arbon.

According to a report, the terminal is expected to hold 120 passengers per hour. It will also have a power house building and vehicle parking area with an 80-car capacity. Meanwhile, it will have a 1.2km x 30 meter concrete runway. Gov. Villa said that the budget for the Siquijor airport was directly given by President Rodrigo Duterte himself.

The President gave PhP 500M for the airport extension plus additional PhP 200M," he said.





DOST partners with logistics provider for OneStore. Department of Science and Technology (DOST) Secretary Fortunato T. de la Peña (second from right) and DOST Region II Regional Director Engr. Sancho A. Mabborang (rightmost) signed the Memorandum of Understanding (MOU) with (from left) AAI Logistics Cargo Account Manager Reiza D. Lizano and Account Executive John Karlo Manzano. The MOU officially seals the partnership with Black Arrow Express and enable shipping services for OneSTore.ph products. Black Arrow Express is the brand of AAI Logistics Cargo Express Inc., an all Filipino logistical solutions provider. Since 2016, Black Arrow Express has made improvements in their logistical services to address the growing digital economy and express business demands. Through their new client access system, customers can manually book their own shipments and monitor the status of their orders from OneSTore.ph. OneSTore.ph is DOST's platform to help micro, small, and medium entrepreneurs in the country to grow their business through e-commerce. Through this partnership, products purchased from OneSTore.ph can now be delivered directly to customers. The MOU between DOST, AAI Logistics Cargo Express Inc. was signed on 26 August 2019 at Hotel Roma, Tuguegarao City during the celebration of the Regional Science and Technology Week. (Text by Angelica Marie Paz and photo by Henry A. de Leon, DOST-STII)