ASIA-PACIFIC

Asean SMEs prioritise investing in tech: Survey

Small and medium-sized enterprises (SMEs) in Singapore and across the region are prioritising tech investments over assets such as factories and machinery, according to a new survey. The poll by United Overseas Bank (UOB), professional services firm EY and consultancy Dun & Bradstreet found that three in five Asean SMEs intend to focus on technology investments in the coming year, with the majority keen on investing specifically in software.

The study polled 1,235 SMEs across the six largest Asean countries - Indonesia, Malaysia, the Philippines, Singapore, Thailand and Viet Nam - about their plans for participating in the region's growth. Among the companies surveyed, 203 were from Singapore.

Among those prioritising tech investments, 78 per cent are keen to invest specifically in software such as improving their websites and creating mobile apps, the report found. Hardware and infrastructure investments ranked second, at 65 per cent.

The poll also found that Software-as-a-Service (SaaS) and digital talent were relatively low on respondents' list of investment priorities. "SaaS has yet to gain critical mass despite being cheaper to implement versus a traditional on-premises application. This suggests respondents are more familiar with traditional licensed software than applications delivered as Web-hosted services," the report noted.

The study also found that more than a third of respondents have ambitions for overseas expansion. Overseas operations already account for up to 30 per cent of revenues for 60 per cent of the respondents, and more than 30 per cent of revenues for the remaining 40 per cent. Companies polled were also generally upbeat about the regional growth outlook, with 52 per cent anticipating revenue growth and 26 per cent projecting a double-digit expansion. Firms in the agriculture, manufacturing and financial services sectors were most optimistic.

http://www.straitstimes.co

CHINA

Govt plans national technology transfer system

The State Council has released a plan to build a national technology transfer system. A national technology transfer system is conducive to capitalization and industrialization of sci-tech achievements and innovative development in China, the circular stated. It sets a target of building a basic national technology transfer system and a market of technologies by 2020, embedded with market-oriented technological transfer institutions, professionals and extensive international cooperation under the Belt and Road Initiative.

By 2050, a mature national system for technology transfer will be built, and the technology market will be fully developed, with various innovation entities coordinating with each other in an efficient way. Enterprises are encouraged to take a major part in R&D of technological projects that will enter the market. Also, national technology innovation centers and manufacturing innovation centers should support transfer and diffusion of key technologies. More efforts will be made to develop technologies to improve people's livelihood, including environment governance, targeted poverty alleviation, population and health, and public security.

To build a uniform and open technological market, the circular urged setting up a national technology transaction network, and stepping up development of technology market equipped with improved services, the circular stated.

The circular also encouraged universities and research institutes to set up technology transfer institutions, and private intermediaries to provide professional services, under improved government guidance and public services. Besides, the circular stressed efforts to enrich the technology transfer talent pool. Sci-tech researchers are welcome to start businesses by taking temporary post, taking part-time job, or leaving post, in a way to transfer the sci-tech results to small and medium-sized enterprises. Also, maker spaces and open innovation platforms are encouraged to bolster the startups.

http://english.gov.cn

R&D spending up in 2017

China's spending on research and development (R&D) grew faster in 2017 as the country continued to push for innovation-driven development. Preliminary calculations showed that R&D spending rose 11.6 percent year-on-year to 1.75 trillion yuan (about 280 billion U.S. dollars) in 2017, 1 percentage point higher than in 2016, the National Bureau of Statistics (NBS) said.

The spending accounted for 2.12 percent of China's gross domestic product, 0.01 percentage points higher than the previous year. Chinese enterprises spent more than 1.37 trillion yuan on R&D last year, up 13.1 percent from 2016, while R&D spending at government institutions and colleges increased 7 percent and 5.2 percent, respectively. Some 92 billion yuan, or 5.3 percent of the total spending, was put into fundamental research in 2017, up 11.8 percent from a year earlier, the NBS said.

According to the 13th five-year plan for national science and technology talent development (2016-2020), China will increase its annual per capita spending on R&D to 500,000 yuan by 2020, up from 370,000 yuan in 2014. China had 5.35 million people working in R&D at the end of 2015, the world's largest pool of R&D personnel.

http://www.ecns.cn

Innovation promotes patent development

China's increasing ability in technological independent innovation has promoted fast development of patent industry, according to an official from the National Bureau of Statistics. The government and society have paid great attention to technological innovation and advancement in the past decades, said Zhang Zhongliang, director of the bureau's social science, technology and cultural industry department.

Chinese leaders said "science and technology constitute a primary productive force" as early as 1988 and aimed to build an "innovative country" in 2006. In recent years, President Xi Jinping has emphasized many times "innovation is the primary engine of development" and set "innovation-driven" as a strategic plan for the country's development.

The nation's 1.4 billion population and improving education system provide strong human resource support for technological innovation, Zhang said. China topped the world in total investment of R&D personnel in 2013 with 3.53 million people per year and it increased to nearly 4 million people per year in 2017. The number of daily new registered enterprises surpassed 16,000 last year, up from 15,000 a year earlier.

Sustainable development of economy also provides adequate financial support for technological innovation, according to Zhang. China became world's second-largest country in research and development investment in 2017 with 1.75 trillion yuan ($278.5 billion), accounting for 2.12 percent of GDP and surpassing the average number of 15 European countries. Chinese companies have become the main force for technological innovation and over eighty percent of research and development investment comes from enterprises in 2017. Some companies such as Huawei have emerged as industrial leaders in research and development.

Compared to developed countries, relatively low industrial concentration forced Chinese companies to enhance technological innovation speed, Zhang said. Statistics of production capacity in steel industry indicate that the industrial concentration of top 4 large enterprises in the United States and Japan is above 70 percent; while the industrial concentration of top 10 Chinese enterprises is less than 40 percent.

Statistic shows that China had the world's largest number of invention patent applications in 2011 and the number for last year was 1.328 million in 2017. With 49,000 international patent applications, China became the largest source of patent applications filed under the World Intellectual Property Organization's Patent Cooperation Treaty in 2017. The total number of China's international technological thesis has maintained world's second for nine consecutive years and the quoted quantity of the thesis also jumped to world's second in 2017, surpassing Germany and Britain.

http://www.ecns.cn

IP transfer to secure transparent business environment

With the aim to build a more fair and transparent regulation process for technology exports and foreign investment, China has issued a guideline tightly reviewing the transfer of intellectual property rights to overseas buyers.

"To establish and perfect the review mechanism for IP transfers overseas is not a move to upset foreign investors. The guideline has rather formulated concrete measures to secure a better business environment," said Zhang Zhicheng, director of the Protection and Coordination Department at the State Intellectual Property Office of China (SIPO).

The proposed IP transfers will be reviewed if they involve patent rights, exclusive rights to layout designs of integrated semiconductors, software copyrights, or rights to new plant varieties. According to the guideline, Chinese companies and individuals have the right to transfer their IP to overseas enterprises, individuals or groups. IP transfers will be reviewed if they appear to affect national security or the country's core technology in key fields.

In 2017, China's intellectual property royalties earned abroad surpassed 4 billion U.S. dollars, according to SIPO. Regulating IP transfers involving national security complies with international rule and practices, he said, citing the WTO's Agreement on Technical Barriers to Trade, which gives recognition to all members to protect legitimate interests according to their own regulatory autonomy.

http://xinhuanet.com

Artificial intelligence development in universities

China will push forward artificial intelligence (AI) development in universities, according to the Ministry of Education (MOE). To that end, the MOE issued a detailed action plan saying that Chinese universities should have optimized systems that fit both scientific innovation especially new-generation AI development and disciplinary growth by 2020. By 2030, they will be the core of the world's main AI innovation centers, capable of providing China with technical support and professionals.

The plan asks for interdisciplinary links of AI with subjects like computer science, mathematics, physics, psychology, and sociology. It also calls for strengthened fundamental research, establishment of more AI centers, a high-level think tank, as well as international cooperation. According to Science and Technology Daily, 19 universities added majors in intelligent science and technology in 2017. Also, a program, organized by organizations including the MOE in hopes of training AI talent, started in April. It will help train 500 university teachers and 5,000 students over five years.

http://www.xinhuanet.com

INDIA

Innovation growth programme

Tata Trusts, Lockheed Martin and Department of Science and Technology (DST) have earmarked USD 2 million for this year's edition of the India Innovation Growth Programme (IIGP) 2.0 which focuses on providing support to startups in the country. The partners intend to invest the amount for the seed money and to provide support to entrepreneurs to develop technology-based solutions in various fields like agriculture, healthcare, water, energy and life sciences. The programme offers an opportunity for innovators across India to bring breakthrough ideas to market.

Established by the Department of Science and Technology, Lockheed Martin Corporation and Tata Trusts, the IIGP 2.0 was launched in 2017. The first edition of the programme that began in 2007 and ran for a decade provided support to a total of around 500 startups. Last year IIGP 2.0 awarded nine University Challenge teams

and 10 individuals under Open Innovation Challenge a total support of USD 5 lakh for innovations in the areas of medicine, healthcare, water, agriculture and aeronautics, among others. Five of the winners from last year have already begun to market their products in India and overseas, while two others have conducted field trials.

Lockheed Martin started the programme in 2007 and DST joined it in 2009. IIGP 2.0 would run for three years between 2017 and 2019 which could even be expanded later. Other partners of the programme includes Massachusetts institute of technology (MIT), IIM Ahmedabad, and IIT Bombay. The IIGP has two separate tracks, a University Challenge, which is aimed at students, and an Open Innovation Challenge aimed at innovators and entrepreneurs across the country.

https://economictimes.indiatimes.com

NEPAL

Transforming agriculture with digital technology

The United Nations Capital Development Fund (UNCDF)'s Mobile Money for Poor (MM4P) programme has partnered with Sun Farmer Nepal and Prabhu Management to implement the innovative project that will enhance farmers' income by integrating digital technology in agricultural value chains. This partnership aims to facilitate the farmers to buy quality inputs to bring transformation in production of crops and vegetables and help them link with the market.

UNCDF believes that transformation in the agriculture sector and improvement in livelihoods of rural smallholder farmers is possible through the use of advanced technologies. With support from UNCDF, Sun Farmer Nepal in partnership with Prabhu Management will help farmers dramatically increase their income with modern agricultural solutions and digital finance. Farmers will get support in infrastructure (irrigation and processing), quality inputs, training on cultivation of high-value crops and improving linkages to the market, as per UNCDF country office.

Launched in 2014, Sun Farmer Nepal is a renewable energy solution company that provides solar-powered irrigation solution to help farmers increase their productivity and income. The company will sell farmers products via a co-owned company jointly set up by Sun Farmer Nepal and partner farmers. Prabhu Management is a sister company and the agent network manager for Prabhu Money Transfer and has one of the largest distribution networks with more than 3,500 agents in rural areas, mainly in saving and credit cooperatives.

UNCDF MM4P will support Sun Farmer to implement an innovative community-owned contract farming model driven on digital innovations. The solution will include pay-as-you-go solar pumps, a state-of-the-art agriculture market intelligence system for farmers and access to finance for agriculture inputs, logistics and sales. Prabhu Management, with its vast rural agent network, will provide the distribution infrastructure for financial services.

https://thehimalayantimes.com

PHILIPPINES

Online platform for MSMEs

The Department of Trade and Industry (DTI) will tie up with the Department of Science and Technology (DOST) to help micro, small and medium enterprises (MSMEs) expand their market and reach clients online with the OneSTore.ph. "MSMEs are the backbone of the Philippine economy. And as part of President Rodrigo Duterte's whole-of-government approach to assist MSMEs, we are teaming up with DOST to impact the lives of more Filipino entrepreneurs," said DTI Secretary Ramon M. Lopez. The OneSTore.ph is a government e-commerce platform (business–to-customer and business-to-business platform) dedicated to marketing high-quality Filipino products of MSMEs online.

Under the OneSTore.ph agreement, DTI will promote the oneSTore.ph to MSMEs through Negosyo Centers. At the same time, DTI will make Negosyo Centers accessible to clients of DOST and allow clients to display and dispatch their products with its payment and logistic partners in One Town One Product (OTOP) Philippines HubStores, subject to availability of space and to DTI priorities and promote oneSTore and provide signs for the spaces provided for oneSTore.ph and oneSTore hub in every OTOP Store identified as co-branded hub, among others. DOST, on the other hand, will develop and maintain oneSTore.ph where its accredited regional hubs and MSMEs can sell products and services to its clients and engage with payment and logistics partners and provide oneSTore.ph services to accredited regional hubs, MSMEs and partner agencies.

DOST will also provide priority to dentified OTOP products for development initiatives including improvements in packaging and labeling, subsidy or discounts in testing fees, equipment support such as the Small Enterprise Technology Upgrading Program (SETUP), and strengthen research and development efforts.

http://www.sunstar.com.ph

REPUBLIC OF KOREA

Startups growth

As the Republic of Korean economy is rapidly changing to the digital economy, startups which are based on the mobile ecosystem with annual sales of more than 100 billion won (US$93.55 million) are starting to spring up. In particular, online to offline (O2O) services providers show a steep growth in sales. Woowa Brothers Corp., the food-tech industry leader that runs the country's most popular food delivery mobile app "Baedal Minjok," and Republic of Korea's leading accommodation platform Yanolja Co. surpassed the sales of 100 billion won (US$93.55 million) last year by diversifying their services and pushing into the global market. They are also expected to record the sales of some 200 billion won (US$186.88 million) this year. The Farmers, which operates Market Kurly that converges food with information and technology (IT), is forecast to post some 100 billion won (US$93.55 million) in sales this year for the first time in three years after the establishment.

According to industry sources on April 9, leading O2O startups, like Woowa Brothers, SoCar and Yanolja, all exceeded the sales of 100 billion won (US$93.55 million) last year. Woowa Brothers is highly likely to surpass the 200 billion won (US$186.88 million) mark this year considering the fact that the company saw its sales increase to 162.6 billion won (US$151.88 million). SoCar tentatively posted some 120 billion won (US$112.09 million) in sales last year, while Yanolja posted in some (US$93.55 million).

In addition, all eyes are on whether Market Kurly, which provides a fast delivery service named "Morning Star Delivery" to offer the freshest and the healthiest food by 7 am at customers' front door when customers place an order before 11pm on the previous day, will be able to see its sales exceed 100 billion won (US$93.55 million) this year. Market Kurly posted 9 billion won (US$8.41 million) in sales in January and 10 billion won (US$9.34 million) in March. The company is expected to surpass the sales of 100 billion won (US$93.55 million) this year.

SoCar saw its number of vehicles available for sharing and number of members grow to 8,000 units and 3 million, respectively, as of the end of last year. The company attracted 60 billion won (US$56.03 million) from domestic private equity fund Private Equity on April 4, heralding a significant growth this year again. SoCar is South Korea's largest car-sharing platform that allows users to book and drop a car at their closest parking lot by using the mobile application. Recently, the IT industry considers car sharing can create a synergy with future growth engines like artificial intelligence (AI) and autonomous vehicles so it has been aggressively joining hands with car-sharing service providers.

Yanolja has declared to tap into the global market and is planning to expand its services to Japan and China by the end of this year. The company is also strengthening its O2O services at the same time by building new hotel "Heyy" offline. In regard to the appearance of startups with annual sales of more than 100 billion won (US$93.55 million), an official from the industry said, "Leading firms by industry generally post over 100 billion won (US$93.55 million) in sales as they are able to gather cash cows through global investment and expand their services to new areas and global markets."

http://www.businesskorea.co.kr

R&D investment in large corporations

According to the Korea Institute for Industrial Economics & Trade (KIET) on March 25, merely 70 South Korean companies put their names on the EU Industrial R&D Investment Scoreboard in 2016 whereas the number amounts to 822 for the United States, 376 for China, 365 for Japan and 134 for Germany.

Besides, Samsung Electronics, LG Electronics, and Hyundai Motor Group accounted for no less than 62.7% of the total R&D investment of the 70 South Korean companies, which means South Korea's R&D activities were led by a small number of large corporations. The reliance in the electronics and automobile industries amounted to 92.7% and 88.6%, respectively. The KIET explained that the rest in the electronics industry is divided into 2.8% by small and medium-sized enterprises and 4.5% by venture firms. For reference, large and smaller companies account for 2.6% and 98.3% of the same industry in terms of number.

In the automobile industry, Hyundai Motor Group and major auto parts manufacturers represented 88.6% of the total R&D investment in 2015. In addition, the ratio of finished vehicles to the total R&D cost was as high as 74% whereas that was 66.2% for Germany, 68.4% for Japan and 72.7% for France.

"R&D investment by South Korean companies showed an average annual growth of more than 7% from 2010 to 2015 and, as a result, they ranked fourth in total R&D investment and second in R&D investment-to-GDP ratio among the 34 members of the OECD," the KIET explained, adding, "In contrast, they stood at 28th in technology exports-to-R&D ratio and 33rd in the number of SCI papers per researcher."

http://www.businesskorea.co.kr

IP protection

The Republic of Korean government will set aside 15.4 billion won (US$14 million) to help protect the intellectual property of small and midsized exporters, the Korean Intellectual Property Office said on April 12. The patent office said it has selected 205 promising companies from a total of 845 companies that had applied for the program this year. Among them, 51 companies are developing next-generation technologies, such as artificial intelligence, virtual reality, precision medicine and the internet of things, according to KIPO.

Under the program, KIPO will provide the selected firms with support in various areas, including consultations on intellectual property, the application of patents overseas, the analysis of patent and design strategies, and brand development for products and packaging, over the next three years.

In February, KIPO announced it would create an intellectual property fund of around 100 billion won to support small and midsized firms, colleges and public research institutes that have outstanding patents. The 100 billion won will be allocated to a new growth business fund (17 billion won), public patent business (20 billion won), overseas IPs (30 billion won) and IP direct investment (32 billion won).

The new growth business fund will focus on key technologies for the "fourth industrial revolution," including artificial intelligence, big data and robots. KIPO said it has financed 160 billion won in the fund of funds from 2006 to 2017 and has so far collected 199 billion won.

http://www.theinvestor.co.kr

R&D focus on AI, smart factory, renewable energy

The government will spend its research and development budget mainly on strengthening artificial intelligence (AI), smart factory, renewable energy and seven other key sectors, Seoul's finance ministry said. According to the ministry, the R&D budget will be also allocated to autonomous driving and drone technology.

The ministry said it will set up task forces comprised of government officials, researchers and private companies to draw up detailed investment roadmap.

http://english.yonhapnews.co.kr

SRI LANKA

ADB provides us $ 75m for SMEs

The Government of Sri Lanka had obtained ADB Financial assistance of USD 100 million in 2016 to finance the Small and Medium-Sized Enterprises (SME) Line of Credit Project. The objective of the project was to strengthen the SME sector by facilitating access to finance and expanding the employment opportunities in the sector. The project is being successfully implemented and given its importance, the Government of Sri Lanka decided to obtain additional financing through a loan of USD 75 million with the intention to scale up the ongoing SME Line of Credit Project.

The additional financing will be utilized to: Increase of financing to SMEs through intermediaries, Development of innovative SME financing scheme, Enhancement of capacity of SMEs in targeted clusters for accessing financial services and Strengthening of international competitiveness of information and communication technology/business process outsourcing (ICT/BPO) cluster.

The additional loan of USD 75 million is planned to be disbursed in 3 tranches of approximately USD 25 million each. The Government will relend the loan funds in local currency to participating banks through three semiannual allocations based on the banking sector's average weighted deposit rate. The proceeds of the loan will be available to the participating banks for relending to the SMEs based on the previously agreed targets between the Asian Development Bank and the Government, specially focusing on first time borrowers, women-led SMEs and SMEs located outside of Colombo etc.

The Ministry of Finance and Mass Media will be the Executing Agency of the SME Line of Credit (Additional Financing). The Department of Development Finance will be the Implementing Agency for Outputs of Increase of financing to SMEs through intermediaries, Development of innovative SME financing scheme and the Export Development Board will be the implementing agency for outputs of Enhancement of capacity of SMEs in targeted clusters for accessing financial services and Strengthening of international competitiveness of information and communication technology/business process outsourcing (ICT/BPO) cluster. The overall project is scheduled to be completed by 31st March 2020.

http://www.sundayobserver.lk

THAILAND

R&D spending

Thailand's investment in research and development (R&D) and related areas of technological advancement is this year expected to reach 1 per cent of gross domestic product (GDP) for the first time, an agency tasked with driving innovation said. The National Science Technology and Innovation Policy Office (STI) projects investment for 2018 to swell to Bt160 billion, with 70 per cent from the private sector and the rest from the state sector. Kitipong Promwong, secretary general of the STI, said that aside from direct R&D, the expected investment would cover science and technology, human resources development and innovation technology as part of stepped-up efforts to boost the country's productivity and international competitiveness.

Kitipong said the factors driving the increased inflows include a range of incentives and privileges provided by the government. Among them, he said, are tax privileges from the Broad of Investment (BOI) that offer benefits to enterprises for between eight and 13 years and an incentive from the Revenue Department that makes some companies eligible for tax deductions of up to 300 per cent. This would apply to companies in robotics, healthcare, agriculture, biotechnology and the creative economy as part of the government's Thailand 4.0 vision.

The STI also expects that the country's spending on R&D, science and technology and other innovative technologies will climb to 1.5 per cent of GDP in 2021. Kitipong said that last year these outlays amounted to Bt142 billion, representing around 0.95 per cent of GDP. As with this year's projection, the private sector accounted for 70 per cent of this investment.

In 2016, the investment totalled Bt113.5 billion, with private companies contributing 73 per cent of this amount. For 2017, the International Institute for Management Development (IMD) reported that Thailand ranked No 27 out of 63 countries in the IMD World Competitiveness table. Within the overall ranking of 27th, Thailand was ranked 10th for economic performance, 20th for government efficiency, 25th for business efficiency and 49th for science infrastructure.

http://www.nationmultimedia.com/

VIET NAM

Project to improve energy efficiency

The World Bank and Vietnam's Ministry of Industry and Trade today jointly launched a $102 million project to support the efforts of industrial enterprises to adopt energy-efficiency technologies and practices. Under this project, industrial enterprises can access a new line of credit to fund their purchases of energy-efficiency and production-optimization technologies, thus reducing energy consumption and production costs and increasing their overall competitiveness in the domestic and international markets.

Funding under this project will be provided to participating financial institutions, which will then lend to industrial enterprises to invest in energy-efficient subprojects. Of the $158 million, $100 million comes from the World Bank's International Bank for Reconstruction and Development, the financing resource for middle-income countries, and $1.7 million is from the International Development Association, the Bank's fund for the poorest countries. The rest of the project's funding will come from the Vietnam government participating financial institutions, and industrial enterprises.

https://moderndiplomacy.eu