Asian ICT Council Newsletter

Confederation of Asia-Pacific Chambers of Commerce and Industry

Message from the Chairman

On behalf of the Asian ICT Council, it is my great pleasure to present to you the sixth edition of the Asian ICT Council Newsletter.

Last September, I had the honor of once again chairing the Asian ICT Council breakout session during the 28th CACCI Conference held in Kuala Lumpur. The session, which was co-organized with the Asian Council on Health and Education, carried the theme "The Digital Economy: Transforming the Marketplace." The panelists had a lively and interactive discussion on the current status and future trends of the digital economy. A brief report on the session is included in this issue of the newsletter.

Articles and reports on the recent ICT sector development of CACCI member countries such as Indonesia, Mongolia, Turkey, Taiwan and the Philippines are also featured in this new issue.I hope that you will find it informative, and can provide you with discussion points in your future gatherings.

I hope you enjoy this issue of the Asian ICT Council Newsletter. I do encourage you to contribute to this publication by sending articles related to ICT.

Dr. Gwo Jiunn Huang
Fellow, Institute for Information Industry

KL conference participants discuss how digital economy is transforming the marketplace

Clockwise: (1) Mr. Kamil Othman, VP, Creative Multimedia, Multimedia Development Corp. (MdeC); Dr. GJ Huang, Asian ICT Council Chairman; Ms. Fione Tan, Councilor, The National ICT Association of Malaysia (PIKOM); Amb. Victor CY Tseng, CACCI Director General; Mr. Ninad Karpe,CEO and Managing Director Aptech Ltd.; and Dr. V. Sivapalan,Co-Founder and Chief Investor, Proficeo Ventures Sdn. Bhd. pose for a photo after the breakout session. (2) Asian ICT Council Chairman Dr. GJ Huang welcomes participants to the session. (3) Ms. Fione Tan answers questions from the audience.

The 28th CACCI Conference held on September 19, 2014 in Kuala Lumpur featured a breakout session on the topic *The Digital Economy – Transforming the Marketplace* during which invited speakers and CACCI members addressed critical questions facing many industries amidst major transformations taking place in the marketplace resulting from the rapid growth of the digital economy.

The breakout session featured panelists that included: **Mr. Ninad Karpe**, CEO and Managing Director, Aptech Ltd.; **Mr. Kamil Othman**, Vice President, Creative Multimedia, Multimedia Development Corporation (MdeC); **Ms. Fione Tan**, Councilor, The National ICT Association of Malaysia (PIKOM); and **Dr. V. Sivapalan**, Co-Founder & Chief Investor, Proficeo Ventures Sdn. Bhd.

Chairing the session was **Dr. G. J. Huang**, Chairman, Asian ICT Council and Fellow at the Institute of Information Industry from Taiwan.

The speakers talked about the history, the current status, and the future trends in digital economy. They shared their viewpoints and perspectives on various issues such as how to create a global business using e-commerce; steps to take to achieve digital transformation; areas in which the digital trend will have its impact in the future (e.g., healthcare, subway shopping, agriculture, smart homes, driving without intervention); challenges in moving towards the digital economy and how to facilitate the process; and cultivating a culture and mindset for a digital economy.

The session also looked at the internet setting in motion a third wave of capitalism that is transforming many aspects of the global marketplace – from consumer behaviour to new business models.

As a result of the maturing digital economy, companies across a range of industries have seen their business models upended as they contend with the twin forces of technology and globalization.

Over the next few years, many sectors – including technology, telecommunications, entertainment, media, banking, retail, education, and healthcare – will continue to be reshaped through the application of information technology. ■

PH, Thailand highest eCommerce growth in ASEAN

Philippines and Thailand have the highest eCommerce growth in Asean, but the region's most populous member Indonesia is seen to have the most potential, according to analysts.

In its analysis dated June 13, 2014 entitled "Is Asean at an inflection point for eCommerce?", UBS Securities (Thailand) Ltd. said that 2013/2014 is the inflection point for internet penetration and eCommerce in Asean.

The Philippines saw a three-fold increase in smartphone penetration in 2012 alone, while Thailand has increased from 20 percent in 2012 to 35 percent currently.

This is despite a low credit card penetration, inefficient supply chains, inhibitive customs and tax regulation and embryonic internet penetration, which do not bode well for online e-tailing in ASEAN.

But business is thriving, UBS said, adding the region has reached its 'mobile moment', with the majority of traffic coming from mobile devices with the rollout of 3G, and more affordable devices.

Thailand and the Philippines have the highest growth in the region, while we think Indonesia has the most potential, the analysis said.

While market data suggests online penetration in Asean could be as low as 62 million users, UBS said its analysis suggests Asean has 199 million internet users (32 percent penetration), rising to 294 million (48 million) within three years.

Currently, there are 180 million active social netizens. Estimates on the size of the e-Commerce market vary greatly, said UBS adding they used proprietary analysis based on Big Data

algorithms to model the market from bottom-up perspective.

UBS estimates that B2C eCommerce currently grosses only $0.5 to $1.1 billion (0.2 percent of retail sales), but could increase at least fivefold by 2020, with opportunity set as high as $35 billion. Inclusion of all eCommerce channels could multiply the overall market size.

But beneficiaries of this boom are limited to telcos (data boom), logistics, & warehousing (complex supply chain for e-commerce), and international social media sites (Asean is sociable).

The analysis also noted that online retailing, especially through platform 'price disruptions' is a key risk to the traditional 'bricks & mortar' retail models. UBS urged retailers to quickly devise a cohesive eCommerce strategy.

Globally, the hypermarket model has come under pressure from eCommerce platforms.

In the Philippines, UBS said SM Investments and Robinsons Retail could be negatively affected due to their dominance in department stores and exposure to specialty stores.

Plans of both traditional brick and mortar retailers to launch full-scale online products in two to three years was also considered too late.

Among the countries in the region, Thailand's Big C hypermarket model would seem at risk yet they arguably have the most advanced eCommerce strategy of any of the traditionals in the region.

While consumer education and 'trust' is the key bottleneck to ecommerce growth in ASEAN, a lack of logistics infrastructure is a key impediment to online shopping, at least in terms of next day delivery. This is especially true across the Indonesian and Philippine archipelago, UBS added.

Inefficient infrastructure in Asean is not the only issue; eCommerce supply chains can be significantly more complex than the industrialized pallet model that has been the backbone of the logistics industry. This has led to a number of eCommerce start-ups. ∎

The Manila Bulletin

Indonesia: IT community competes in disaster management software development

Story Highlights:
• Indonesia's capital, Jakarta, is prone to natural disasters, such as floods.
• The Jakarta Disaster Management Agency held a competition to explore the potential of using information technology (IT) to manage damage risks and impacts.
• Competition organizers hope that the initiative will help improve the city's disaster risk resilience and generate new ideas for applying IT in disaster management.

Indonesia's capital, Jakarta, is prone to natural disasters. At the height of flooding in 2014, around 134,000 persons were directly affected. During the dry season, fires are also rampant.

The Jakarta Smart Disaster Management Software Competition sought to tap IT potential to improve disaster resilience. The Jakarta Disaster Management Agency (BPBD) organized the competition with support from the World Bank's Global Facility for Disaster Reduction & Recovery. Among those who joined were university students, IT professionals, and researchers.

"IT experts and disasters are usually two different worlds apart. Competitions like this help bring them together," said Onno W. Purbo, a Surya University IT expert who is often involved in IT for disaster risk management initiatives.

"It would also be good if IT experts, who are interested in disaster management, could get on-the-ground experience by being involved in real disaster situations," said Purbo, who was also one of the competition judges.

The first category was a hackathon where participants were challenged to develop an additional feature for INASAFE . This is an open-source software currently used by the BPBD that produces natural hazard impact scenarios for better planning, preparedness, and response activities.

"At the moment, the software is mostly used for disaster preparedness, " says Iwan Gunawan, World Bank Senior Disaster Risk Specialist in Indonesia. "Damage and loss assessments are still done manually and we would like to add this feature to the software."

Through the competition, BPBD intends to speed up its damage and loss assessments following disasters. "After the 2013 floods in Jakarta, it took our agency a long time to calculate the cost of damages," says BPBD's Head of Informatics, Bambang Suryaputra. "We would like to obtain the data much faster and hope to achieve this though collaboration from the IT community."

The hackathon lasted for two full days, with participants spending the evening at the agency's office. Nonetheless, Indonesians from across the country were eager to participate.

"I've worked in the oil and gas sector for 14 years, and I'm interested in applying my IT and data management skills to another field," said Ahmad Ruswandi. He travelled from Balikpapan, about 1,234 km from Jakarta, just to participate in the competition.

The competition also showcased the government's commitment to transparency by making their data become more accessible to the public.

"I've noticed that the government is now more open and transparent. It's involving developers to contribute. I want to be a part of this movement," said Rizky Maulana, the software developer who won first prize for the Hackathon leg of the competition.

The second competition category sought to obtain ideas on how IT can be used in disaster situations. Participants pitched IT-based technology that could be used for disaster management purposes, such as web-based applications, mobile apps, and innovations, through social media.

One of the participants, who developed the Jakarta Flood Alert app, was among the winners for the Global Code for Resilience competition. The app provides the latest information on 14 flood gates in the city and the probability of upcoming floods in specific locations. This information can then be shared through social media to inform the wider public based in those areas.

"The eagerness of the IT community to help is encouraging", said Iwan Gunawan. "Their involvement, along with the growth of the internet and smartphone use in Indonesia, will strengthen the country's response to natural disasters. It will preserve all the gains that were achieved from decades of development work, which can often be easily reversed with just one disaster." *The World Bank* ∎

Technology sector sizzles as Myanmar eyes Internet for all

From navigating gridlocked city roads to playing a favorite national sport, new homegrown apps are blossoming in Myanmar as cheap mobile technology ignites an Internet revolution in the once-isolated nation.

Myanmar Web surfers were once paradigms of patience and ingenuity as they dodged and weaved through the former military regime's communications blocks in decrepit backstreet Internet cafes.

But commuters in Myanmar's biggest cities can now be seen tapping away on smartphones as an online awakening sweeps the country, fuelled by the loosening of junta-era restrictions and foreign telecoms firms unleashing a flood of affordable SIM cards.

Big brand names like Facebook, Google, Viber and Instagram have rapidly expanded their presence in the country, lured by the growing market — and Web-savvy local entrepreneurs are also seizing the chance to create Internet ventures in Myanmar style.

"There are so many things I want to do — I think about it not as business but as a way to find solutions to problems I face," said Ei Maung as he demonstrated his prototype traffic app in a car inching through the congested streets of the commercial hub Yangon.

His Cyantra: Crazy Yangon Traffic app went live in June and allows smartphone users to share traffic problems and view potential snarl-ups on their driving routes.

Myanmar search engine technology team, Bindez Pte Ltd., poses for a photo at their office in Yangon on July 2.

Internet Boom

Internet access has already increased exponentially since the country began to throw off the shackles of military rule.

Just one percent of the population was thought to be online three years ago, as the democratic transition began, but the loosening of Web controls and greater access to affordable phone cards has opened the Internet up to millions.

On September 27, Norway's Telenor launched SIM cards costing just 1,500 kyat (US$1.5) in Mandalay — a far cry from the US$3,000 a card could cost

under military rule — ahead of a wider roll-out in Yangon and Naypyidaw.

The move comes after Qatari firm Ooredoo began selling its SIM cards at the same price last month, throwing open the mobile Internet floodgates.

An estimated 25 percent of people are already online and the Myanmar Computer Federation expects around half of the population, over 25 million people, to be surfing the net in the next three years.

David Madden, whose Yangon-based Code for Change group seeks to promote and support budding techies, said that unlike in the West where Web design began with a focus on computers and laptops, Myanmar Internet consumers will be primarily using cheap smartphones.

"People are going to be able to afford one thing and they are going to want it to do a lot," he told AFP. "It's the thing you want in your pocket, it's the thing you want when you are sitting in a bus stuck in traffic."

Local Twists

Social media giant Facebook has dominated the Myanmar Web to such an extent that it is the first — sometimes only — port of call for Web users.

But Google's Myanmar-language search engine has struggled to attract users because it uses a

standardized font — unicode — whereas many Myanmar websites are written in a locally produced zawgyi font, meaning they are unreadable on the international search engine.

A local firm Bindez, led by former Google employee Rahul Batra, is taking on the Web Goliath as it tries to create a zawgyi-compatible search engine.

The booming tech scene has also given the country a chance to showcase local passions, from checking personalized horoscopes, to a game that allows armchair sportsmen to play virtual "Chinlone" — a beloved traditional cane ball game — with a quirky owl avatar.

And while connections often remain glacially slow, online entrepreneurs are now grappling with the dilemma that has tormented Web-based firms the world over — how to turn clicks into cash.

Mobile money — using the credit bought to top-up mobile phones to make payments for other goods and services — helped by the flood of affordable SIMs now entering circulation, could help.

It is seen as a vital potential tool for the vast swathes of Myanmar's largely unbanked and rural population to access anything from loans to retail payments. *Agence France Presse* ∎

Taiwan aiming high to boost 4G industry output by 2016

Taiwan's fourth-generation (4G) wireless industry is estimated to be worth up to NT$1.5 trillion (US$50 billion) in two years, driven by a wider availability of 4G applications, according to the Ministry of Economic Affairs.

To achieve that target, the ministry plans to help build 4G services integrated with security, health care, logistics, entertainment and cash flow systems around Taiwan and its outlying islands to increase public access to 4G applications.

The 4G industry will be also reinforced by central government subsidies, which are expected to attract support from local companies, the ministry said in a presentation to the Legislative Yuan's Economics Committee.

With these initiatives, Taiwan's 4G industry output is estimated to reach NT$1.5 trillion by 2016, the ministry said, without giving exact forecasts for either this year or next year.

In late July, President Ma Ying-jeou said at a local summit on 4G development that the number of subscribers to Taiwan's 4G services is expected to exceed 10 million by 2016, outpacing the government's planned expansion of the sector.

Each of Taiwan's three major carriers — Chunghwa Telecom Co., Taiwan Mobile Co. and Far EasTone Telecommunications Co. — said in August that they had signed up about 200,000 4G service subscribers since they launched 4G services in late May or early June.

The China Post ∎

Indonesia set to lead South East Asian online shopping boom, analysts say

Indonesia is set to lead a boom in online shopping across Southeast Asia as Internet access explodes and investors pour money into a rapidly growing host of retail startups, analysts say.

Much like China several years ago, the region is enjoying a rapid increase in web access that observers say is starting to drive a fundamental shift in shopping habits among the emerging middle class.

According to a recent report by investment bank UBS, business-to-consumer e-commerce in Southeast Asia will increase at least five-fold by 2020, and could reach as much as US$35 billion a year.

It cited strong growth in Thailand and the Philippines but said Indonesia, the region's biggest economy, was the most promising market despite currently having modest online sales and low Internet penetration.

This hope is based on an expected rapid increase in web users, with consultancy Redwing saying that 125 million people are expected to be online by the end of 2015, from 55 million in 2012, coupled with an increasingly affluent middle class.

"There is huge opportunity," Daniel Tumiwa, head of the Indonesian e-commerce association, told a recent startup conference in Jakarta.

E-commerce growth across Southeast Asia has been given a kick-start by an explosion in the availability of cheap smartphones, analysts say, with many getting their first taste of the Internet on handsets that come loaded with social media and popular retail sites.

The past two years has seen a noticeable shift in Indonesia with many starting to shop online, for everything from fashion to electronics, and consumers putting aside initial worries about fraud to opt for the convenience of "e-tail," Tumiwa said.

Biggest Startup Investment

The current star of Indonesia's nascent e-commerce scene is Tokopedia, a marketplace that allows users to set up online shops and handles transactions. In

October, the site won a US$100 million investment from Japan's SoftBank and U.S. firm Sequoia Capital.

It was the biggest startup investment in Indonesia to date and the first in the country by Sequoia, a Silicon Valley venture capital firm that has been an early backer of success stories such as WhatsApp and Apple.

Numerous online shopping websites have also proven popular, from those that host classifieds, such as Kaskus and OLX, to retail sites including the Indonesian branch of Lazada, which bills itself as Southeast Asia's answer to Amazon.

Lazada, founded in 2012 and with operations in six Southeast Asian countries, has also attracted investor interest. At the weekend it secured US$250 million in a fresh round of funding led by Singapore state investment giant Temasek.

The new government of President Joko Widodo is taking an interest, with Information Technology Minister Rudiantara, who goes by one name, saying that they are looking at ways of supporting the sector.

But while there is much optimism, the e-commerce sector in Southeast Asia — home to 10 countries and a population of about 600 million people — still has long way to go, according to analysts.

E-commerce currently accounts for just 0.2 percent of retail sales in the region, compared with 8.0 percent in China and 8.7 percent in the United States, according to the UBS report.

And huge challenges remain in Indonesia, not least due to the government's decision earlier this year to block foreigners from investing in e-commerce, critics say.

Agence France Presse ∎

How telecommunications changed the lives of herders in Mongolia

Story Highlights:

• In 2005, only 1% of residents in Mongolia's countryside had telephone connections.

• A World Bank/IDA-supported project helped Mongolia provide quality and affordable telecommunication and Internet services to the rural people.

• The project helped transform the lives of Mongolian herders in an unprecedented way.

In the world's least densely populated country, where three million people are spread over 1.5 million square kilometers, half of them clustered in the capital of Ulaanbaatar and one third still living a nomadic life, just think how hard it would be to send a message to a herder somewhere in the hills, or hear from someone in a ger (Mongolian term for tent) in the next valley.

As Mongolia increased its wealth, so did its people's demand for information and communication technologies (ICT) surge. As a result, the ICT market grew over 25% annually in the early 2000s. But in the countryside, where companies found it hard to make headway into the sparsely populated rural areas and provide access to services outside of the main population centers, "teledensity" (the number of telephone connections per every hundred individuals living within an area) was as lean as 1% in 2005.

The World Bank/IDA-supported Information Communications Infrastructure Development Project (ICIDP) helped the Government of Mongolia use a public-private-partnership approach to fill the gap. "Best practice cooperation between the Government and the private sector helped deliver competitive, quality and affordable telecommunications services to remote rural communities, transforming the lives of herders and other rural inhabitants", says Peter Silarszky, who led the World Bank's support for the project.

"This project allowed us to work closely with the private sector, to complement each other. This was one of the first times that this public-private-partnership happened in Mongolia. This kind of synergy was unprecedented," says J. Bat-Erdene, former Vice Chairman of Information Communications Technology and Post Authority of Mongolia, now CEO/President of Telecom Mongolia.

Unparalleled Convenience

In the remote Darhat Valley in Northern Mongolia, herders were packing for the spring migration. "I called my son who lives in the town to come to help us with his transport truck," says Tsorj, a herder. "Having a phone is the most important thing. I can call relatives who live in the town and nomads in the next valley. It's also very useful for keeping track of missing animals," he says.

The project has changed the lives of herders like him and Purevjav. Purevjav, 70, has witnessed tremendous changes in Mongolia. In the past 20 years, the country has transformed into a vibrant multiparty democracy with a booming economy growing at double-digit rates today.

His children didn't further their education and became herders like him. "But their children need to go to school. So they moved to towns and cities. Our family is now split up between the countryside and town," he says.

To stay in touch with the rest of the family, Purevjav makes calls. "We call our children in the town, tell them what we need, such as feed for animals or medicine for us," he says.

"Before, we used to ride into town to get the doctor and climb over that steep pass," Tsorj says, as he points at the mountain pass in front of his ger.

Now, just a phone call away, the doctors come to them. "We are able to call in medical emergencies, call for an ambulance," he says.

Improving Rural Businesses

In rural Mongolia, ICT offers more than just convenience.

The life-changing experience for herders, made possible by having phones and access to the Internet, also include better business opportunities, says Tenzin Norbhu, lead ICT specialist at the World Bank.

With better access to information, herders have a stronger market position and are able to secure more favorable prices for their products.

Before they started the spring migration, Purevjav and his wife Tsogtsolma wanted to sell the cashmere they produced this winter. Before doing so, Tsogtsolma called their daughter who lives in town to check on the cashmere prices there.

"Selling around 90,000 tugrik a kilogram here," the daughter says on the phone.

"Okay, sounds about right. The middleman is here and is offering 88,000 tugrik," Tsogtsolma replies.

"The middleman started saying the price of cashmere had dropped. Then he looked around to see if our phone was working," says Purevjav.

"Without the phone we would have gotten less for our product. *Continued on next page*

Turkey develops fast-rising ICT sector

The Information and communication technologies (ICT) sector has become an essential part of the economy, in particular social life, since it is directly or indirectly affecting the ever-changing business world. Turkey is well aware of the fact that this sector will have a much more influential role in the future than it currently has.

Searches for solutions brought about by this development and growth, which are appropriate for the requirements of today, and the efforts to enable today's economic and social life to acquire these most up-to-date and fast solutions instantly, together form the basis of information and communication technology, since these solution searches basically require the utmost efficient utilization of both time and physical resources.

In this regard, Turkey has increased its interest in the ICT sector further, and started the necessary studies so as to have a voice in the sector in the future. The greatest indicators of these efforts are the new initiatives and R&D Law issued for the investors.

As the young population increases and online market expands, the total number of mobile phone subscribers is expected to reach 75 million by 2017.

IT spending on hardware, software, IT services and telecommunication services in Turkey is expected to increase to USD 25 billion by 2016.

ICT spending in Turkey is expected to grow faster than the world average. With regard to its large domestic market with sizeable potential in the ICT sector, sector growth is expected with a CAGR of 7.4 percent during the 2012-2017 period.

More than half of all households in Turkey have computers with internet access, which is expected to rise to 65.6 percent over the next five years.

The percentage of internet users in Turkey is around 42 percent and this is forecast to rise to above 47 percent in 2017.

Turkey's ambitious vision of 2023, the centennial foundation of the republic envisages grandiose targets for the ICT sector in Turkey. These targets include:

• Reaching 30 million broadband subscribers

• Providing internet connection for 14 million houses at a speed of 1,000 Mbps

• Increasing the sector's share in GDP from 2.9 percent to 8 percent

• Becoming one of the top 10 countries in e-transformation

• Having 80 percent of the population computer literate

• Increasing the number of companies to 5,500; employees to 65,000; and exports to USD 10 billion in TDZs

• Increasing the ICT sector's size to USD 160 billion, with a market growth of around 15 percent each year

• Increasing the R&D expenditure to GDP ratio to 3 percent from 0.85 percent *Source: www.invest.gov.tr* ∎

Prices 'mysteriously' drop when you don't own a phone," he says. G. Oyunbayar, Director of Sales, G-Mobile, Mongolia, says that "the phone has become indispensable in rural economy".

"Phone connections have dramatically changed rural business practices. People can now adapt to the laws of supply and demand. Herders can now directly connect with local markets, and go even further, by distributing their products on a national scale," he says.

Results

From 2005 to 2013, thanks to the ICIDP Project:
All 360 soum centers (villages) in Mongolia have access to modern phone and Internet services. 34 soum centers have access to high speed Internet.

Telephony minutes originated in soum centers increased from 1.2 million per year in 2006 to 56.5 million in 2013. Telephony minutes originated in rural areas outside of soum centers increased from almost zero in 2006 to 530,000 a year in 2013.

The number of Internet users in soum centers increased from 300 in 2006 to 12,000 in 2013. The government improved the policy and regulatory environment and promoted investments in ICT in rural areas, which ensured the continued additional annual investment in the

ICT sector of the country – annual investment increased from $37.6 million in 2005 to $395 million in 2013.

A mechanism has been established to collect resources into a fund to finance universal access to telecommunication and Internet services. *World Bank* ∎

Single e-payment platform for PH eyed

Using physical cash to pay for just about everything in the country has to be stopped. It's inefficient, dangerous and makes little sense given the availability of new technologies that can replace notes and coins.

This is the driving force behind an ongoing project by local regulators and banks, in cooperation with the US government's chief aid agency, that seeks to promote electronic payments solutions in the country.

"The concept is to minimize the use of physical cash," said Lorenzo Tan, president of the Bankers Association of the Philippines (BAP). "It doesn't make sense," he said in a recent interview, referring to the use of physical cash for virtually all transactions in the country. Dubbed as the e-Peso initiative, the project is a joint effort by the BAP, the Bangko Sentral ng Pilipinas (BSP) and the US Agency for International Development (USAID). The project's goal is the creation of a single electronics payment platform for all transactions in the country.

This will replace existing payments highways such as Bancnet and Megalink, among others.

USAID noted in a report late last year that 98 percent of all retail transactions in the country were still done using cold, hard cash. In more advanced countries like Japan, e-payments are responsible for 88 percent of all retail transactions.

In the United States, cash accounts for 57 percent of total payment volumes; 55 percent in France; 61 percent in the United Kingdom, Australia and Hong Kong; and 75 percent in Germany.

The main draw for cashless transactions is that it eliminates the need for cash to be transported via armored cars around the country.

Cashless systems are also more transparent because all transactions are recorded electronically, minimizing losses from pilferage or, in the government's case, small kickbacks by front liners.

According to Tan, he said the government and the private sector were still ironing out the details on how this single platform could be created. One option is to mimic a similar system built by Samsung in South Korea that serves as the platform for all cashless transactions such as bank withdrawals and even stocks and bond trades.

The main challenge is the project's unprecedented size and scale, which local firms may find difficult to cope with.

Other projects are also in the works in lieu of the economic integration of the Association of Southeast Asian Nations (Asean).

Tan said countries in the region were in discussions for the creation of a single platform for automated teller machine (ATM) transactions that aims to bring costs down and make it more convenient for consumers to travel in the region.

USAID, in its 2013 report, said switching to cashless modes of payment might bring down transaction costs by as much as 90 percent in the Philippines. *Philippine Daily Inquirer* ∎

Low-cost smartphone brands on the rise in Bangladesh

Sales of smartphones more than tripled year-on-year to 1.6 million units in July-September, led by low-cost devices.

The number is a 128.6 percent rise from the April-June quarter of last year when 700,000 units were sold, according to CyberMedia Research (CMR), a market research firm based in India.

Sales of feature phones that lack advanced functionality of a smartphone also rose in the third quarter - 6.4 million units were sold with 106.5 percent growth over the second quarter.

On average, the country's handset market grew 108 percent in July-September 2014 compared to the previous quarter.

About 7.9 million handsets of both types were sold in the third quarter with a 16 percent rise year-on-year.

Bangladesh continues to show consistent growth in both feature and smartphone segments. This is among very few Southeast Asian markets where growth is seen in both segments, the CMR said in its quarterly mobile handsets market review. *Asia News Network* ∎