BUSINESS & TECHNOLOGY INNOVATION REPORT

Week 27

Headlines

ICT Industry

- Samsung is poised to issue guidance for its best quarterly profit in more than two years.
- LG Electronics Inc said its second-quarter operating profit likely reached a two-year high.
- Apple is opening up in Naples, Italy.
- Polycom Inc said it agreed to be bought by a private equity firm for about $1.7 billion.
- Foxconn filed for an initial public offering of its cable and connector unit in Hong Kong that could raise up to $1 billion.

Semiconductor Industry

- Austria’s AT&S expects its heavy investment to produce the latest in microchip technology will boost annual sales by a third to more than 1 billion euros.

Software Industry

- Google is buying Anvato.
- Google has purchased French firm Moodstocks.
- Monsanto Co and Microsoft Corp announced a partnership to invest in agricultural technology startups in Brazil.

Service Industry

- South Korea has launched its first commercial, low-cost Internet of Things (IoT) network.

Transportation Industry

- Uber has secured a $1.15 billion leveraged loan.
- Tesla Motors Inc. said its second-quarter global sales rose 25% to 14,370, less than the 17,000 it had expected.
- LG Electronics Inc said it will work with Volkswagen to jointly develop a connected car.
- Alibaba’s internet-connected car will set the Chinese e-commerce giant up to quickly introduce driverless vehicle technology.
- Panasonic says it expects to more than double annual sales of its batteries for electric cars to around $4 billion over the next three years.
- DeNA Co. said it would start a transportation service in Japan that uses self-driving buses.
- Hanergy has unveiled four solar-powered electric concept cars.

IoT Industry

- Internet of Things (IoT) sensors and devices are expected to exceed mobile phones.

Robotics Industry

- Voith has decided to sell its 25.1% stake in robot maker Kuka to Chinese bidder Midea.
In the next few decades, about 56% of all salaried workers could be displaced by automation and advanced technologies, such as 3D printing.

**Fintech Industry**
- Apple has begun working on bringing Apple Pay to the Web via its Safari Technology Preview browser.
- Wal-Mart said on it has completed the rollout of its Wal-Mart Pay mobile payment service across the United States.
- Barclaycard recently introduced a new product, called Loop.
- Bitcoin exchange Coinbase said it received a $10.5 million investment from Bank of Tokyo Mitsubishi UFJ.
- PSBC said it plans to "actively explore" the setting up of a mobile payment system.
- Visa announced the winners to the second iteration of its "Everywhere Initiative,"
- Wendy’s Co said that a malware it had found at some franchisees in June had enabled hackers to access payment card information from the point-of-sales systems.
- Singapore is rushing to reinvent itself as Asia’s financial technology.
- The European Commission proposed stricter rules on the use of virtual currencies and prepaid cards.
- U.S. mobile payments accounted for an estimated $67 billion of purchases in 2015, and are expected to grow this year to $83 billion.

**ICT Industry**

**Samsung**

**Financial**
- Samsung Electronics Co Ltd is poised to issue guidance for its best quarterly profit in more than two years, propelled by a surge in mobile earnings on the back of robust sales of its flagship Galaxy S7 smartphones.
- The South Korean giant will disclose its estimates for second-quarter earnings, with analysts predicting a strong mobile division contributed to a 13 percent jump in operating profit from the same period a year earlier.
- The average forecast from a Thomson Reuters survey of 16 analysts tips Samsung to report April-June operating profit of 7.8 trillion won ($6.8 billion), the highest since an 8.5 trillion won profit in January-March of 2014.

**LG**

**Financial**
- South Korea’s LG Electronics Inc said its second-quarter operating profit likely reached a two-year high, with analysts pointing to strong contributions from its mainstay home appliances and television set businesses.
- The world’s second-biggest TV maker by market share, behind compatriot Samsung Electronics Co Ltd, said in a regulatory filing that April-June profit was likely 585 billion won ($504 million), compared with the 599 billion won average of 23 analyst estimates in a Thomson Reuters I/B/E/S survey.
Apple

Financial

- Apple is opening up in Naples, Italy.
- Apple announced the center in January, after it reached a tax deal with the Italian government.
- Apple and University of Napoli Federico II revealed what the app-development center will look like and what its "specialized curriculum" for app developers will offer.
- It's going to be a nine-month course "supported by Apple," and administered by the University of Napoli Federico II. Classes start in October.

Polycom

Acquired by Siris Capital

- Video conferencing equipment maker Polycom Inc said it agreed to be bought by a private equity firm for about $1.7 billion, scrapping a three-month old deal with Canada's Mitel Networks Corp.
- The PE firm, Siris Capital Group, offered $12.50 per share in cash for Polycom, representing a premium of 15 percent to Polycom's Thursday close.
- Polycom's shares rose about 13.6 percent to $12.35 in premarket trading on Friday, just shy of the offer price. Mitel shares jumped 22 percent.
- The deal could be a setback for activist investor Elliott Management, which disclosed stakes in both companies last October and subsequently championed a deal between the two.
- Mitel said in April it would buy Polycom for about $1.96 billion in cash and stock.

Foxconn

IPO of Cable and Connector Unit

- Taiwan’s Hon Hai Precision Industry Co., which assembles most of Apple Inc.’s iPhones, filed for an initial public offering of its cable and connector unit in Hong Kong that could raise up to $1 billion as it seeks to tap the growing demand for its products in cloud computing.
- The unit, called Foxconn Interconnect Technology Ltd., could raise between $500 million and $1 billion from the IPO, according to people familiar with the matter, although a final decision on the exact amount the company wants to raise hasn't been decided.

Semiconductor Industry

AT&S

Microchip Technology investment

- Austria’s AT&S expects its heavy investment to produce the latest in microchip technology will boost annual sales by a third to more than 1 billion euros ($1.1 billion), its chief executive said.
- The maker of printed circuit boards (PCBs) is investing half a billion euros on a Chinese plant in an effort to compete with the likes of Samsung and Foxconn in producing ever smaller and smarter chips to address the needs of a digitally connected world.
- The so-called inter circuit substrates the factory will produce are designed for use in high-end applications for tablets, medical devices and navigation systems, Chief Executive Andreas Gerstenmayer told Reuters.
- The third phase of the site's operational start-up is slated for the autumn and Intel, the world's leading chipmaker, is set to be among the first customers, helping to justify an investment that equates to nearly two thirds of AT&S's revenue last year.
Software Industry

Google

Acquisition of Anvato

- Google is buying Anvato, a company that provides video editing and processing capabilities, to beef up its public cloud.
- Anvato’s media services let customers like NBCUniversal NBC 0.00%, CBS Local Media, Cox Media, Bravo, and Telemundo encode, edit, and distribute video to iOS AAPL 0.69%, Android, desktop and connected devices.

Acquisition of Moodstocks

- Google has purchased French firm Moodstocks. The acquisition was made for an unknown sum, and seems primarily a grab for talent. Moodstocks' engineers and researchers will move to Google's Paris R&D site, and the startup's primary commercial product — an image recognition API for smartphones — will be phased out.

Microsoft

Partnership with Monsanto in agricultural Tech Startups in Brazil

- U.S. biotech company Monsanto Co and Microsoft Corp announced a partnership to invest in agricultural technology startups in Brazil.
- Monsanto will join a Brazilian investment fund with up to 300 million reais ($92 million), managed by Microsoft, evaluating ideas for new digital tools to be applied to agricultural production in the country, executives said.
- Selected ideas will receive initial funding of up to 1.5 million reais ($459,000) for early development. Project owners will have the option to pay back the investment after three years or convert the money into equity.

Facebook

IRS investigation

- The U.S. Internal Revenue Service is examining Facebook Inc (FB.O) over its transfer of various rights associated with its worldwide business to a holding company in Ireland, according to court papers.
- The U.S. Justice Department filed a lawsuit on Wednesday in federal court in San Francisco seeking to enforce IRS summonses served on Facebook and to force the company to produce various documents as part of the agency's examination.
- The lawsuit said that the documents in question relate to an IRS examination of the company's tax liability for 2010, when Facebook's tax return reported royalty income from transfers of intangible property to Facebook Ireland Holdings Unlimited.
- Facebook transferred rights associated with its worldwide business to the Irish company, with the exception of the United States and Canada, the lawsuit said.

End to end encryption on Facebook Messenger

- Facebook Inc said it began testing end-to-end encryption on its popular Messenger application to prevent snooping on digital conversations.
- The limited testing on Messenger, which has more than 900 million users, comes three months after Facebook rolled out end-to-end encryption to its more popular WhatsApp, a messaging application with over 1 billion users that it acquired in October 2014.
**Avast**

### Acquisition of AVG Tech.

- Czech antivirus-software maker Avast Software s.r.o agreed to pay $1.3 billion to acquire rival AVG Technologies NV, part of a wave of mergers in computer security.
- The deal comes less than a month after antivirus pioneer Symantec Corp. agreed to pay $4.65 billion for cyberdefense vendor Blue Coat Systems Inc.
- Industry players expect more deals, as larger players with established revenue streams look to build out their product lines to take on a new generation of cyberthreats.

**KKR & Co.**

### Acquisition of Epicor Software Corp.

- KKR & Co. has agreed to buy business software company Epicor Software Corp. from Apax Partners, the latest in a streak of technology company buyouts.
- The buyer paid about $3.3 billion, including the assumption of Epicor’s existing debt, according to people familiar with the matter. For Apax, the transaction amounted to a return that is more than four times its investment in the company, one of the people said.
- The companies announced the deal Monday morning, following an earlier report by The Wall Street Journal.
- Epicor, based in Austin, Texas, provides back-office and sales software to manufacturers, retailers and distributors such as Ace Hardware and AutoZone Inc.

### Service Industry

#### SK Telecom

### Low Cost IoT Network Service

- South Korea has launched its first commercial, low-cost Internet of Things (IoT) network aimed at making the country even more connected.
- The network would allow smart devices to talk to each other via the network.
- Phone carrier SK Telecom is behind the initiative, which uses technology that will allow it to reach 99% of the country’s population.
- Aside from South Korea, the Netherlands also has a nationwide IoT network.
Transportation Industry

Uber

Secured $1.15 Billion Loan

- Uber Technologies Inc. [UBER.UL] has secured a $1.15 billion leveraged loan, a person familiar with the matter said on Thursday, the latest capital infusion for the well-financed ride-hailing company.
- Turning to the leveraged loan market, which was previously exclusive to more established companies, allows Uber to take advantage of historically low interest rates while keeping venture capital backers happy by not further diluting their equity.
- In leveraged loans, investment banks arrange and syndicate among institutional investors a loan to a company with significant existing debt.
- The leveraged loan market saw volume of $783.3 billion in 2015, according to Thomson Reuters data, more than 13 times venture capital investments last year.

Tesla Motors

Sales

- Tesla Motors Inc. said its second-quarter global sales rose 25% to 14,370, less than the 17,000 it had expected, as it worked to produce more vehicles.
- Tesla said it produced 18,345 Model S and Model X vehicles in the same three months and that thousands of vehicles were in transit at the end of the three months that ended June 30.
- While a 25% increase might seem strong, deliveries of its Model S sedan fell 15% to 9,745. Deliveries of the company’s Model X stood at 4,625. Since last year, the company began selling the Model X sport-utility and it has had problems ramping up production.
- Tesla said in a statement that it has now achieved regular levels of higher production and expects to produce 50,000 vehicles in the second half of 2016. Through the first six months it has delivered fewer than 30,000 vehicles.

Volkswagen

Connected Car Platform with LG

- South Korea’s LG Electronics Inc said it will work with German carmaker Volkswagen AG <VOWG_p.DE> to jointly develop a connected car platform to enable vehicles to communicate with external devices.
- LG, in a statement, said it and Volkswagen will work to jointly develop over "the next few years" technologies allowing drivers to control and monitor devices in their homes such as lights and security systems, as well as in-vehicle entertainment technologies and an alerting system for drivers providing "recommendations" based on real-time situations.

Alibaba

Driveless Car with SAIC Motor

- Chinese tech firm Alibaba’s internet-connected car will set the Chinese e-commerce giant up to quickly introduce driverless vehicle technology, Chief Technology Officer Wang Jian told Reuters.
- Alibaba and the country’s largest automaker SAIC Motor Corp demonstrated their jointly developed car equipped with the YunOS operating system, which can link up with smart phones, at an event in eastern China’s Hangzhou. The car is slated to go on sale later this year.
- Chinese tech giant Alibaba has launched the OS’Car RX5, a rugged-looking SUV that’s connected to the internet and powered by the company’s
YunOS, allowing it to offer passengers a host of futuristic features.

- For starters, it can recognize the driver by their smartphone or smartwatch and customize things to suit them, such as music and navigation waypoints.
- It also boasts an intelligent map that offers location tracking and directions without the need for Wi-Fi or GPS services. Plus, the cabin is designed to be controlled primarily through voice commands.

Panasonic EV Cars Battery partnership with Tesla

- Japanese electronics giant Panasonic says it expects to more than double annual sales of its batteries for electric cars to around $4 billion over the next three years, partly thanks to its partnership with Tesla Motors.
- A Panasonic PCRFY 1.73% executive made the comments to a group of reporters in Japan, a week after the Silicon Valley automaker revealed that there had been a fatal accident in one of its cars while its autopilot software was engaged.
- Tesla also announced that it had missed its car delivery targets for the second quarter in a row.

DeNA Self Driving Bus Service

- Japanese mobile internet company DeNA Co. said it would start a transportation service in Japan that uses self-driving buses, its latest push into autonomous driving.
- DeNA will use the EZ10 electric shuttle produced by EasyMile, a French driverless technology startup, that it has dubbed the “Robot Shuttle.” It will begin offering services next month at a large park partially managed by a shopping mall developer in Chiba prefecture, near Tokyo.
- The Japanese company has joined global auto makers, as well as nontraditional players, such as Alphabet Inc.’s Google and Chinese internet search giant Baidu Inc., in the race to develop driverless vehicles.

Hanergy Solar powered Electric Concept Cars

- China’s Hanergy Holding Group (Hanergy) has unveiled four solar-powered electric concept cars, set for production within three years. Hanergy is a large clean-energy company and one of the largest thin-film solar cell manufacturers in the world. Hanergy is also the owner of U.S. based Alta Devices, which it bought in 2014.
- Much of the technology used in the solar panels that cover the Hanergy cars is based on Alta Devices AnyLight, which was devised as a range-extending technology for electric vehicles.
- Hanergy is planning to use this technology to build fully-solar powered cars in the future. The company says the current solar energy conversion rate of its high-end cells is 31.6%. This is expected to go up to 38% in 2020 and 42% in 2025, which would make a fully-solar powered car possible, according to the company.
IoT Industry

**IoT market**

**Market Research**

- Internet of Things (IoT) sensors and devices are expected to exceed mobile phones as the largest category of connected devices in 2018, growing at a 23% compound annual growth rate (CAGR) from 2015 to 2021.
- By 2021 there will be 9B mobile subscriptions, 7.7B mobile broadband subscriptions, and 6.3B smartphone subscriptions.
- Worldwide smartphone subscriptions will grow at a 10.6% CAGR from 2015 to 2021 with Asia/Pacific (APAC) gaining 1.7B new subscribers alone.

**THE INTERNET OF THINGS**

- 400 million IoT devices with cellular subscriptions were active at the end of 2015, and Cellular IoT is expected to have the highest growth among the different categories of connected devices, reaching 1.5B connections in 2021.

Robotics Industry

**Kuka**

- German mechanical engineering group Voith has decided to sell its 25.1% stake in robot maker Kuka to Chinese bidder Midea for about 1.2 billion euros ($1.34 billion), it said on Sunday.
- The sale smooths the path for Midea’s takeover of Kuka, which initially upset German politicians who feared a loss of important technology. The two companies have since addressed those concerns by agreeing a deal to keep its existing headquarters, factories and jobs.
- Midea has offered 4.5 billion euros for Kuka, making it the biggest German industrial technology company to be targeted by a Chinese buyer in a wave of deals over recent months.

**Robotics market**

- 56% of all salaried Workers displaced

- In the next few decades, about 56% of all salaried workers in Cambodia, Indonesia, the Philippines, Thailand, and Vietnam could be displaced by automation and advanced technologies, such as 3D printing. That’s the conclusion of an extensive series of new studies by the International Labour Organization (ILO).
Apple has begun working on bringing Apple Pay to the Web via its Safari Technology Preview browser.

Safari Technology Preview is different from the Safari browser you find on your Mac (or in the iPhone and iPad) in that it’s aimed at Web developers. It offers a bleeding edge look at incoming technologies; think of it like Chrome’s various channels (stable, beta and dev) only Apple chose to break its ‘dev’ channel out into a standalone app.

Wal-Mart

Wal-Mart Pay Mobile Service

Wal-Mart Stores Inc said on it has completed the rollout of its Wal-Mart Pay mobile payment service across the United States and that 88 percent of transactions on the payment app are from repeat users.

Overall transactions in the service, which the world’s largest retailer launched in December, jumped 45 percent in the last week, Daniel Eckert, senior vice-president of services at Wal-Mart US, said on a conference call with the media.

Barclaycard

Loop – Wearable Payment

Major UK issuer Barclaycard recently introduced a new product, called Loop, that will allow users to integrate payment functionality into wearables that they already own, according to Finextra.

Loop, which expands upon the firm’s bPay line of wearable payment devices, is a £19.99 ($25.79) silicon case with an NFC chip that can be slid onto the strap of a watch or fitness band in order to enable payment functionality. Barclaycard is also teaming up with Mondaine and Garmin to offer Loop to users buying Mondaine and Garmin products. The service, like other bPay products, is available to anyone with a UK-issued Visa or MasterCard, regardless of the issuer.

Coinbase investment

Bitcoin exchange Coinbase said it received a $10.5 million investment from Bank of Tokyo Mitsubishi UFJ (BTMU), the bank’s Mitsubishi UFJ Capital unit and Sozo Ventures as part of a strategic partnership involving its long-term expansion.

Coinbase, which is the world’s largest bitcoin company and currently operates in 32 countries, does not operate in Japan just yet, though it runs an exchange in Singapore. The company said Japan is a big part of its international expansion.
Postal Savings Bank of China

Online Financial Services

- As part of plans for an up-to-$10 billion initial public offering, Postal Savings Bank of China (PSBC) aims to transform itself from a brick-and-mortar lender into a digital player, helped by its investors Ant Financial and Tencent Holdings.
- According to both the state-owned bank's IPO prospectus and people familiar with its plans, PSBC plans to work with online services firm Tencent and Ant, an online payments affiliate of e-commerce giant Alibaba Group Holding, to launch a range of internet-based consumer finance services.
- In the document, made public this week, the bank with a network of 40,000 branches across China said it wanted to deepen cooperation with Ant and Tencent's online finance arm, WeBank, in internet and mobile finance.
- PSBC said it plans to "actively explore" the setting up of a mobile payment system and speed up the development of mobile phone-based services. The 843-page prospectus officially started the countdown towards an IPO as early as September that is expected to be the world's biggest new listing in about two years.
- Both Ant and Tencent, China's biggest social network, came on board as PSBC shareholders as part of a nearly $7 billion pre-IPO investment round late last year.

Visa

Everywhere Initiative

- Visa announced the winners to the second iteration of its "Everywhere Initiative," which poses three Visa-specific business challenges to startups and asks them to develop potential solutions.
- The challenges were related to Visa Developer, the firm's new API platform, as well as cardless payments and event attendee engagement. Winners receive $50,000 in funding and the opportunity to work with Visa on a pilot.

Wendy's

Hacker attacks on payment system

- U.S. burger chain Wendy's Co said that a malware it had found at some franchisees in June had enabled hackers to access payment card information from the point-of-sales systems.
- The company said hackers targeted cardholder names, card numbers and the three-digit card verification value (CVV) number found on the back of cards.

Fintech Market

Singapore Fintech Hub

- Singapore is rushing to reinvent itself as Asia's financial technology, or fintech, hub to fend off a regulatory threat to its wealth management industry and revive a sluggish economy.
- State funding, light-touch regulation and a recent move to allow start-ups to test financial products in a controlled environment have put Singapore ahead
of rival Hong Kong to be Asia's fintech hotspot.

- Much like Uber, Airbnb and others have harnessed technology and online social networking to disrupt taxi and hotel services, fintech firms are shaking up the traditional banking and financial services industry.
- Singapore's fintech drive comes as its role as an offshore private banking center is under threat from a multi-billion-dollar money laundering scandal in neighboring Malaysia, and as Indonesia chases undeclared money parked in the low-tax city state.

**EU Commission Rules on Virtual Currencies**

- The European Commission proposed stricter rules on the use of virtual currencies and prepaid cards in a bid to reduce anonymous payments and curb the financing of terrorism.
- Virtual currency exchange platforms will have to increase checks on the identities of people exchanging virtual currencies, such as Bitcoin, for real currencies and report suspicious transactions.
- Under the Commission's proposals the threshold for making anonymous payments with pre-paid cards was lowered to 150 euros ($167.28) from 250 euros.
- "Member states will be able to get and share vital information about who really owns companies or trusts, who is dealing in online currencies, and who is using pre-paid cards," EU Commission First Vice-President Frans Timmermans said.

**US Mobile Payment Market**

- U.S. mobile payments accounted for an estimated $67 billion of purchases in 2015, and are expected to grow this year to $83 billion, or 24 percent of all purchases made via smartphones, according to the latest Forrester Research data.