Special Report
Delta assists NCTU to obtain the "Energy Efficiency" Award at 2014 Solar Decathlon Europe

Brand Circle
The 1st Delta Greater China Advanced Automation Design Contest builds a bridge for industrial-academic cooperation in Taiwan and China

Brand People
Establish the Legal Information Systems and provide a transparent management platform
An interview with C.P. Ting, General Counsel of Delta Group
From the Editor

Special Report

02 Delta’s latest energy-saving application yield extraordinary results in Europe - Assists NCTU to obtain the “Energy Efficiency” Award at 2014 Solar Decathlon Europe

Brand Circle

06 The 1st Delta Greater China Advanced Automation Design Contest builds a bridge for industrial-academic cooperation in Taiwan and China
08 The 2nd & 3rd phase of the 2014 Strategy Meeting held successfully
08 BMO promotes the updated CIS and brief introduction
09 Delta Research Center “Open House” initiates cooperation and innovation opportunities
10 Delta exhibits its branded solutions in Japan for the first time
10 Delta and Vivitek shine at InfoComm 2014
11 Delta builds green datacenter for National United University in Taiwan
11 Delta UPSs protect Russian oil company headquartered in Moscow
12 Delta presents Power Management Solutions for the Era of Big Data at 2014 DatacenterDynamics Converged
12 Delta Ultron EH Series UPS awarded the most innovative and energy efficient UPS product of 2014 in India
13 Delta launches “PAC Platform - Integrated Fieldbus Motion Control Solution”
13 Delta IES products face the challenges of harsh application environments
14 Mumbai Metro runs on Delta video wall
14 Delta’s display solutions bring Taiwanese Opera to a new presentation
15 Delta LED display solutions light up the world’s largest marine theme park
17 Delta inverter forges solar power agricultural greenhouses
17 Kick off for the “International Solar Building Design Competition 2015”
18 “Delta PLC Programming Technology and Application Case” published
18 Delta’s ventilation fans first demonstrate at the 2014 Shanghai Kitchen & Bath Exhibition
19 Delta Greentech exhibition highlights
20 DPC TPS team goes mobile
20 Delta extends PJB open frame power supply series with 24V 150W product
21 DET and Huachiew Chalermprakiet University sign MOU for academic programs
21 50 DET employees’ children awarded annual scholarship

Brand People

22 Establish the Legal Information Systems and provide a transparent management platform - An interview with C.P. Ting, General Counsel of Delta Group

Brand Academy

25 Listen to the voices in the community to understand customers’ needs - The brand marketing experience of Innergie and IBM

News Station

28 News Station

Delta Green Life

29 Enjoying the summer of Europe with low-carbon travel
31 Thousands of children educated by DEF’s 6th Energy Educational Volunteer Camp
31 Young architects DIY making energy - saving teaching tools
Towards the end of June, with daytime temperatures climbing to over 30 degrees Celsius, a group of employees from Delta SIBD (Solutions & Integration Business Division) are working diligently day and night near the Palace of Versailles. They're there to help students from the National Chiao Tung University build the sustainable, energy conserving "Orchid House".

Delta developed a customized system for the energy generation, energy storage, and energy management of the "Orchid House," which participated in the 2014 Solar Decathlon Europe. Thanks to the team's efforts, NCTU was in the leading group among 20 other teams in finishing the placement of the energy system and passing the event's examination. After 2 weeks of competition, the "Orchid House" won the "Energy Efficiency Award" for its energy management and effectiveness. Delta's Founder Mr. Cheng and Chairman Mr. Hai both flew to France to show their support and are very proud of the results. In this issue of "Special Report," we will have more exciting details to share with you!

The final contest of the "1st Delta Greater China Advanced Automation Design Contest" that took place in mid-July at the Delta's Wujiang factory was another great example of the collaboration between school and industry right after the SDE. About 250 students from 48 institutes of higher education from both China and Taiwan participated in this competition with the theme of "Discovering Talents of Energy Efficiency." They combined Delta's industrial automation products with innovative ideas in automation to develop energy-saving solutions. The complete report is available in <Brand Circle>.

The person we'll be introducing in <Brand People> is General Counsel Ms. C.P. Ting. Starting from developing infrastructures and frameworks, increasing cross-department collaboration, and actively assisting regional operations, Delta's legal team has gone through obvious changes since last January, when C.P. took the reins. In just one year and a half, she has led the team to achieve great results. What are her goals and strategies? Let's take a further look.

"Social Marketing" has become the most powerful tool in promoting brands in this age of digital media. Innergie, a consumer brand of Delta, created a fan page on the most popular social media, Facebook, this April. It interacted with fans throughout the 2014 Computex and VieShow Brazil World Cup Football Carnival by raffling off pocket cells and promotional discounts, resulting in great feedback. <Brand Academy> will explore Innergie's experience in marketing promotions.

In this issue of <Delta Green Life>, we invite you to follow our colleague, Judy, from MCISBU, and head to the beautiful countries of Germany and Austria. During her vacation, she backpacked with her family, visiting famous sights in both countries. We will show you how you can travel and be environmentally friendly so as to enjoy a low carbon, beautiful summer in Europe.

Shan-Shan Guo,
Brand Management Office
Delta's latest energy-saving application yield extraordinary results in Europe Assists NCTU to obtain the "Energy Efficiency" Award at 2014 Solar Decathlon Europe

< Text by Brand Management Office >

July 11, from the other side of the globe, Versailles, France, came exciting good news. The energy balance solution developed by Delta has assisted National Chiao Tung University (NCTU) team in winning third place in the Energy Efficiency competition at 2014 Solar Decathlon Europe (SDE). This is the best achievement by an Asian team over the years. In the "Special Report" of this issue, we are going to share with you this success story, and the spirits of Innovation, Agility as well as Teamwork demonstrated by Delta colleagues.

Solar Decathlon and its objective

The Solar Decathlon is a competition, initiated by the Department of Energy (DOE), U.S., sponsoring an experimental project in anticipation of finding an intelligent housing and living program for sustainable social development in the face of future impacts from exacerbating climate change. This competition was first held in Washington DC, U.S. in 2002, and it received a lot of attention from the academic and industry. Teams from Stanford University, Massachusetts Institute of Technology (MIT) and other top universities have participated in the competition for many years. Since 2010, Europe has also worked with the organizers to hold Solar Decathlon Europe in Madrid, Spain for the first time.

The competition rules are simple and clear. It is a competition requiring all participating teams to use solar power as their main source of power, working in conjunction with Passive Technology of architectural design, Active
Technology of system design, to complete construction of a building structures and complete system installation within ten days, and simultaneously proceed with ten contests. The 2014 SDE competition particularly emphasized "Ecology Energy Transitions", for example, collective residential design able to reduce the environmental impacts, buildings able to combine urban design, residential design and transport system, in response to six key issues of domestic social, cultural, and weather from the participating teams. The competition was held from June 16 to July 14 at the famous French landmark next to Versailles.

Delta's system integration capabilities and brand image were specifically presented August 2013, introduced by Dr. Tsai of MCISBU, Vice President Yi Ping Lin of NCTU led the team visiting Delta in seeking for collaboration, jointly received by Vice Chairman, Mr. Mark Ko, Dr. Robert Lour of SIBD, Assistant Vice President of Corp. Comm. Mr. Jesse Chou and Chief Brand Officer, Ms. Shan-Shan Guo. NCTU team specifically pointed out that they have seen Delta's exhibition of "Delta Sunshine Elementary School" at Computex Taipei last June that portrayed a complete picture of providing smart green lifestyle with intelligence application and system integration capability, matching the design concept proposed by NCTU team in participating 2014 SDE. Mr. Lin was hoping to invite Delta to join the team and provide the technical capability of Energy Balance and Environment Control.

NCTU team adopted the theme of Orchid House to present Taiwan Cultural Imagery, designing the building with clean energy source and solving urban heat island effect, and in responding to exacerbating climate change phenomenon by modular design, recycling large amount of rain water, improving domestic water circulation systems to reduce the impact on urban environment and, at the same time, significantly improving the chaos of illegal rooftop buildings commonly seen in Taiwan, and reshaping Taiwan's urban skyline.
After thorough assessment by Mr. Ko, Dr. Lour and other senior managers, the consensus was participating this competition could be the best live demo of Delta’s building energy management application and, at the same time, strengthen the brand image of “Smarter. Greener. Together.” in EMEA region. The conclusion was then followed by founding a project team by Brand Management Office (BMO) and SIBD in cooperation with NCTU SDE team.

### Innovative products, cross-regional teamwork

After assessing the requirements and design of NCTU team, SIBD then quickly proposed a solution consists of four systems: Solar Energy Generation System, Environment Control System, Energy Storage System and Online Monitoring and Control Platform, in addition to assigning project team members to provide NCTU with needed system design and technical consultation. Weekly integration meetings were held with NCTU team to provide the most comprehensive support and at the same time, seamless teamwork with other 3rd parties.

According to the rules of this competition, in order to highlight the application of energy-saving technologies, solar energy devices and power generation capacity are particularly limited. Therefore, SIBD colleagues actively looked for an available energy storage program within Delta’s internal organizations, anticipating to reduce the dependency on the power grid and to enable better efficiency of energy utilization. Finally, the program proposed by our Poland technical team, BESS (Battery Energy Storage System), was adopted to complete the overall system design.

BESS program was developed by the Poland technical team, and Chief Technical Officer, Mr. Puczko, pointed out that by integrating high-efficiency Rectifiers, Micro PV Inverters and Lithium Battery Pack, the BESS program is capable of balancing solar energy, grid power, battery storage and power consumption of home appliance. The working principle is quite simple, through detection by Current Transformer (CT), when the solar energy power and battery capacity combined is more than power consumption of home appliances, BESS will send the power back to the, otherwise it retrieves power from grid for supplying home appliances' power consumption.

It is worth mentioning that, BESS’ rectifier, DPR 2000, was developed by Delta’s Swiss team who won the “2012 Delta Innovation Award”. Micro-Inverter was developed by EPSBG in Chungli. Moreover, Lithium Battery Pack control software and the overall system software and hardware platform was developed by Poland technical team.

---

1-2 Delta introduces its BEMS (Delta Building Energy Management System) and the Battery Energy Storage Solution (BESS) to the channel partners
In addition, including Delta’s ventilation fans, AC pedestal charging post for EV, LED lighting applications, programmable logic controllers (PLC) and human machine interfaces (HMI), etc., were important component and sub system in this energy balance solution.

Branding initiatives combined with regional development strategies

In addition to live demonstration of system integration capability, Delta’s brand promotion will never be left behind. In the beginning of the program, BMO immediately briefed to Corp. Comm., Mr. Jackie Chang, GM of EMEA, and associated colleagues at planning stage. Since France, Germany and Italy are EMEA’s key markets, as well as relatively well developed countries for solar energy application, with Mr. Chang’s strong support, EMEA communication team and Corp. Comm. team started planning the overall brand promotion and publicity activities, expecting to combine international press conference, new product launch conference, and channel partner event to promote Delta’s brand awareness in France, and demonstrate Delta’s system integration capability at the international arena.

Delta's strength internationally renowned

Facing 19 teams from top universities around the world and European teams owning the cultural and geographical advantages, Delta Team demonstrated strong capabilities. Before the competition, SIBD colleagues arrived on the scene early under the scorching sun and flying dust, to get familiar with the on-site power infrastructure and working environment, hoping to complete the Delta’s system installation in the shortest possible time.

To prepare all the materials and tools in a completely unfamiliar environment, and to build a fully functional house within a short period of ten days, at the same time, to pass three inspections of building structures, electrical systems and environment, health and safety (EHS) before eligible for participating in the competition. This could have been called a "Mission Impossible", but the NCTU team and the Delta team worked together to complete the mission. In particular, we were the first and only team among all 20 teams to apply before the competition and specify the date for power system inspection. Furthermore, they passed the electrical systems inspection on June 24 (8th day into competition) by the organizer as the first officially approved team.

The most precious part was that the organization's power infrastructure, electrical standard and inspection were led by the professional technician from Schneider Electric. In addition to the proof that Delta’s system is in line with international standards, during the course of inspection discussion, SIBD engineers learned the design logic and practices from the international renowned company.

Innovation, Agility, Teamwork

2014 SDE concluded on July 14, NCTU team won a total of four awards, among them, Delta team deeply involved in Energy Efficiency category. In addition to leading most European teams, this is also the best achievement of all Asian teams.

During the 14-month-long project period, Delta’s Team demonstrated Delta's values of Innovation, Agility and Teamwork. Delta takes pride in managing project execution to overcome all difficulties. Founder and Honorary Chairman, Mr. Cheng arrived at the scene, and after a full understanding of the project planning and execution, he gave a thumb up to the project team, offered his highest recognition.
The 1st Delta Greater China Advanced Automation Design Contest builds a bridge for industrial-academic cooperation in Taiwan and China

< Text by IABG, DGC IABU >

To cultivate talented students for the automation field in Taiwan and China, Delta started an industrial-academic cooperation project in 2005 to work with academic organizations in building cooperative laboratories, training talent, and holding competitions. This year, Delta has extended its industrial-academic cooperation to include the 1st Delta Greater China Advanced Automation Design Contest. During the contest Delta encouraged college students to put theory into practice through innovation and improve their implementation abilities.

Delta invited students from colleges and universities in Taiwan and China to propose projects according to the theme “Discovering Talent for Energy-efficiency” for the contest at the beginning of this year. Over 120 teams from more than 60 universities in Taiwan and China signed up for the contest, and 60 teams from 48 universities made it to the final contest on July 18th.

The special awards went to the University of Shanghai for Science and Technology, Chengdu University of Information Technology, Fujian University of Technology, Hangzhou Dianzi University, and Nanjing Institute of Industry Technology. The award-winning projects included energy-saving solutions for motors and HVAC, waste management, drivers control, solar tracking systems, and more. The judges rated the projects for their energy savings, applicability, and potential for profitability in the market.
Discovering talent for energy-efficiency

What's worth mentioning is that 70% of the contesting teams came from universities that have not cooperated with Delta before. They signed up for the contest on their own and took an active part with Delta Greentech’s support in providing Delta's automation products. The grading policy of the contest included "Theories" and "Applicability." The "Applicability" part required each team to set up and adjust the equipment that showcases the theory or idea of their proposal in a limited time to display to the judges. Delta provided all the required equipment and technical support for the participants in the contest.

The IABG's general manager Mr. Simon Chang gave positive comments on the contestants' proposals. He said, "The creativity and applications for these proposals are amazing. Their efforts will surely bring new energy to the industrial automation fields soon."

The journey continues

During the contest, the students had the chance to visit Delta's laboratories and factories at the Wujiang Plant to learn about the industry and the enterprise. They were also able to participate in many activities and forums, such as "Business Opportunities in Future Automation Markets", "Cultivating Talent for Automation in Taiwan and China" and more, giving them faith and passion for the automation industry. With this year's success, Delta is planning to make the contest an annual event and believes it will attract more outstanding contestants from Taiwan and China.
The 2nd & 3rd phase of the 2014 Strategy Meeting held successfully

< Text by Brand Management Office >

The 2nd and 3rd phase of the Delta 2014 Strategy Meeting was ceremoniously held on 7/24 at the Taipei Headquarters. Close to one hundred managers from operation sites all over the globe participated in the meeting.

Since 2013, the form and content of the strategy meetings have made drastic adjustments. In May, business units' strategic plans are discussed; in July, the manufacturing base is brought in line with functional departments, to explain how to connect together company development strategies, and then the Delta Research Center presents Delta's technology blueprints (software and hardware).

During the meeting, each business unit elaborates on the short term and long term strategic key points. Then a panel formed by high level managers review the completeness of the strategic plan from various angles, and through discussion and idea exchanges. The Delta operation team is thus more optimistic about the company's future developments.

BMO promotes the updated CIS and brief introduction

< Text by Brand Management Office >

In order to establish a consistent brand image, the Brand Management Office consolidated requirements from all business units and now promotes the “Updated Corporate Identity System”. New contents include: Trademark registration process and 2013 and 2014 overall visual design. All Marcom colleagues from regional offices/BG/BU all over the globe are welcome to use this system as reference.

For all other colleagues, BMO also added Corporate Identity Basics to cover Delta corporate identity brief introduction (corporate logo & corporate logo with brand message lock-up), corporate colors, fonts, file application (email signature and PowerPoint introduction), and visual design introduction. Colleagues are welcome to download all from mydelta.

Moreover, to allow fellow colleagues to gain a deeper understanding of Delta’s brand development, BMO has initiated a series of brand training sessions from the end of the previous year at various Delta regional sites. It has already completed manager and trainee instructor trainings over the past six months, and the training session is now online as teaching materials, and ready to use in August on the HR platform.
Delta Research Center "Open House" initiates cooperation and innovation opportunities

Delta Research Center on July 18th invited all business units within Delta to participate in the first ever "Delta Research Center - Open House" event. DRC teams from Zhongli, Taoyuan, Tainan, Beijing, and Singapore shared experiences in project achievements.

"Open house is like opening the door and inviting all colleagues to come in for a visit!" says Mr. Thomas Li, the Chief Technology Officer. "The prerequisite for cooperation is to open up to the outside, so that innovative thinking and capabilities will form as a result. The main objective of this event is to open one's arms to embrace all, allow team members to exchange ideas and hold discussions, to gain better understanding of each other's job details and at the same time allow others to know what you're doing, and inspire new sparks of creativity."

Members of each DRC team shared project experience encompassing a wide range of fields, from the easy to understand "difference between open source software and traditional software" as a start, to highlighting the "importance of software development and design in the application of various industrial fields", then cutting straight into "DevOps intelligent software development new technology" covering the need of both developmental stages and back-end operations, and the "Zillion massive data analysis sharing and storage platform" about the application and sharing of massive amounts of data in the digital age.

Visionary new fields are where the DRC team is putting in development efforts, including "IOT/RAM" Internet of Things applied sensing, positioning, visual recognition technologies, "Life Science Research Center" undertaking diagnostic monitoring, disease prevention and health promotion (Early Detection & Early Diagnostic) technology development, "GaN new material development and testing", etc.

Towards the end of the event, participants were shown the fruits of each research and development projects by DRC colleagues. This activity not only promoted better understanding between DRC teams, but at the same time with the participation of all the different company units, initiated the opportunity for cooperation and innovation.

1 I Delta CTO Thomas Li shares the DRC project achievements
2 I The fruits of each research and development projects introduced by DRC colleagues
Delta exhibits its branded solutions in Japan for the first time

< Text by Brand Management Office >

Techno-Frontier 2014, Japan’s top technology exhibition, was held in Tokyo from 7/23 to 7/25. This is the first time that Delta exhibited in Japan with a complete line of branded solutions, including all-around electricity generation, storage, energy saving, encompasses telecommunication and network communications, renewable energy, electric-car charging, data center and industrial automation, etc, assisting Japan to resolve the ever-increasing energy issue, and demonstrating Delta's brand promise for "Smarter. Greener. Together."

DEJ GM Mr. CH KO participated personally, and introduced Delta products in detail to customers. Every hour during the exhibition, there were also professional tour-guide colleagues who introduced Delta's mission and various total solutions to customers, leaving a deep and lasting impression on visiting guests.

Delta and Vivitek shine at InfoComm 2014

< Text by DPC >

Delta’s DSBU and Vivitek teams displayed their latest display solutions at InfoComm 2014, from June 18th-20th. “Vivitek, a brand of Delta” was introduced for the first time at the show. Multiple display technologies, including visual collaboration, digital signage, control room display and premium projectors were demonstrated.

The DSBU team unveiled their new interactive solution product for business. The WX21i-HD was displayed featuring, finger-touch interactivity and dry-erase capability, allowing users to annotate freely over on a massive seamless display for effective collaboration of shared content. A wide range of Delta's LED technology for both indoor and outdoor applications were showcased for digital signage. Also, two different DLP cube arrays were shown along with both DVCS and MiniCon video wall controllers for control room applications.

Vivitek’s latest ultra-short throw D755WTi projector in conjunction with NovoConnect displayed a real-time interactive education application. The edge-blending and projection mapping techniques were also on display.
Delta builds green datacenter for National United University in Taiwan

National United University (NUU) is located in central Taiwan and has an enrollment of over 8,000 students. It is an integrated university that focuses on both education as well as research. NUU hopes to become a green university and a model of educational institution for greenhouse gas reduction and has decided to collaborate with Delta to construct an all-new data center in the 6th floor of the Library Building in Campus 2. The objective is to achieve a significant improvement over the existing average power usage effectiveness (PUE) of 2.99 and reach an average PUE of 1.6, bringing it closer to the gold-level rating of 1.43.

Delta's energy-efficient InfraSuite Datacenter Solutions act as the guardian to these critical facilities. The entire Delta datacenter solutions include NH Plus 100K Modular UPS, 125 kVA Power distribution cabinets, 29kW RowCool, Hot Aisle Containment, 23" Modular Racks and Delta DCiM (InfraSuite Manager) data center management system.

Hot and cold aisles of the previous datacenter in NUU were not well separated, resulting in serious hot and cold air mixing and unstable incoming air temperature for the server racks. This resulted in numerous issues of equipment overheating and shutdown as well as excessive energy consumption by the cooling system. The new datacenter improved cooling efficiency by hot and cold aisle separation and eliminated the problem of air mixing. Delta RowCool solutions have also been installed between the server racks for effective cooling by directing cold air towards heat sources and reduce power wastage. Delta's modular server racks design also included high perforation rate over 70% to optimize heat dissipation. Additionally, Delta RowCool are designed with continuously variable fan speed control which can automatically adjust fan speed according to the load percentage, providing yet another aspect of PUE optimization for the NUU datacenter.

Delta UPSs protect Russian oil company headquartered in Moscow

Delta together with its partner in Russia, Spektr PC, recently completed a project installing UPS in TNK-BP's Tyumen office situated in the commercial section of the multipurpose Magellan Center. TNK-BP is Russia's third-largest oil producer.

A team of project engineers, service technicians, and managers from Spektr PC was brought together to develop and design this project. This team of experts undertook the major task set by the client of implementing a stable operating system. To begin, they conducted a thorough analysis of the building's design and its technical parameters. "This project allowed us to feel like pioneers because in Russia and in countries of the CIS these kinds of complex projects are rarely carried out. We have found a solution that is custom designed to work in our country. It allowed us to achieve the optimal balance between price, power, and reliability within a strict set of requirements and deadlines. It would have been impossible without close collaboration with Delta. The solutions were the only ones on the market that met the project's needs," said Galia Sibdikova, project leader at Spektr PC.
Delta presents Power Management Solutions for the Era of Big Data at 2014 DatacenterDynamics Converged

In the era of big data, IT managers will be facing three major challenges: the growth of data, increased data value, and booming costs. With the growth of mobile devices and the cloud, big data continues to be the trend and these challenges are the issues IT managers must face. How to increase the datacenter's "availability", "scalability" and "high energy efficiency" are the most critical issues for datacenter managers.

Delta's MCISBU showed how to optimize the power management of datacenters and how to tackle datacenter issues in the era of big data at the 2014 DatacenterDynamics Converged, the world's leading peer-led datacenter conference and expo. During the conference in Mumbai India, Delta demonstrated how a modularized solution can achieve high availability with a full redundancy design and self-synchronization, how to right-size your datacenter and pay as your business grows, and how to attain high power performance by applying products with leading efficiency.

Delta Ultron EH Series UPS awarded the most innovative and energy efficient UPS product of 2014 in India

Delta has won the award for most innovative UPS Series product of 2014 from India's NCN publication for the outstanding design of the Ultron EH Series UPS.

The Ultron EH Series UPS, with power ratings of 10/15/20kVA, is a true online uninterruptible power supply device with three-phase four-line input and single-phase output, which can provide a reliable and stable sine wave power supply to protect mission critical applications from downtime, data loss and corruption. The Ultron EH Series UPS provides clean power supply for server rooms, communication systems, computer network systems, medical treatment systems, surveillance systems, factory equipment, and more. The award boosts Delta's standing within India's IT channel community.
Delta launches "PAC Platform - Integrated Fieldbus Motion Control Solution"

< Text by Claire Ou/ IABG >

Delta and SYN-TEK have jointly launched the "Programmable Automation Controller (PAC) Platform - Integrated Fieldbus Motion Control Solution" via a road show in north, middle and south Taiwan, presenting the brand new PAC motion control system. Delta IABG's GM Mr. Simon Chang attended the first launch event held in Taoyuan, stating that motion control systems with high speed, high precision and multi-axis control functions play important roles in automated manufacturing facilities and equipment.

In the current automation market, motion control systems are categorized into four types: embedded systems, small PLCs with simple motion control functions, mid-range and high-range PLCs with advanced multi-axis motion control modules, and PC-based control systems.

This PAC platform adopts Delta's AC Servo Drive ASDA-A2 Series and is a complete motion control solution that covers control, drive and motor. It is also one of the few solutions that are able to support both EtherCAT and Delta's high-speed communication DMCNET. This PAC motion solution has complete Fieldbus master/slave modules and can synchronously control a maximum of 64 axes. Its confidential programming protection function ensures a highly secure motion control system. In addition, the open software and flexible platform of this PAC motion control solution allows users from various industries to build diverse integrated motion control solutions for different equipment. It is the most suitable and cost-effective motion control solution for high-end machines.

Delta IES products face the challenges of harsh application environments

< Text by IABG, DGC IABU >

Recently, Delta introduced a Gigabits Managed Ethernet Switch, two Gigabits Unmanaged Ethernet Switches and three Megabits Switches, advancing Delta's industrial Ethernet communication products IES series further toward perfection. Currently, IES series includes Ethernet Switch, IEEE 802.11 Wireless Communication, Mobile Wireless Communication, Multi-Port Serial Server, Communication Gateways and other products, IES full range of products provide flexible solutions for constructing perfect critical systems for many industries with highly reliable quality and excellent industrial grade design technology as well as flexible installation mechanism, which also achieve outstanding performance in the harsh industrial applications.

Delta's IES series line of products are specially designed to strengthen the protection of hardware, human based network management software interface and frame protection mechanism. They are compatible with a variety of communication standards. They emphasize high security of industrial networks to help users quickly and easily construct industrial Ethernet systems, to meet the needs and expectations of different application areas, including power, monitor and control systems, factory automation, transportation and other fields.

Delta IES products are IP40 industrial protection class, wide operating temperature from -40℃ to 75℃, can withstand the operating humidity range from 5% to 95%. They passed International Electro-technical Regulation EMC Class 3 and Class 4 certification, 1.5kV insulation isolation protection, a full range of aluminum alloy casing to resist corrosion from harsh environments and with fan-less design, significantly upgraded adaptability in industrial applications, and strengthen the high reliability and security during unattended operation. The key system solutions provided outstanding performance in constructing Ethernet Network System of wind power, intelligent transportation and other applications.
Mumbai Metro runs on Delta video wall

< Text by Sanjit Gupta/ Delta India >

Delta provided a high-end video wall solution to the Operations Control Centre (OCC) of Mumbai Metro One Pvt. Ltd (MMOPL).

The MMOPL features an advanced signaling system, including an automatic train protection system (ATPS) and automated signaling to control train movements. Delta offered rear projection lamp video-wall and a controller capable of handling multiple inputs and cube control software which provides precise information on the status of the video wall at any point of time.

Content viewed on Delta's video wall at OCC is divided into two portions. The upper portion displays the dynamic status of each train, route and signal on a real-time basis while the lower portion displays the status of the 25 KV AC traction power supply on each section of the main line. Faults in the supply, if any, are noticed immediately through the Video wall and can be acted upon by the MMOPL operators.

Delta’s display solutions bring Taiwanese Opera to a new presentation

< Text by Ray Shen/ DSBU >

Last summer, Delta cooperated with the National Center of Traditional Arts in Yilan and made a popular presentation with Along the River During the Qingming Festival Starlight View. This summer, the center has again brought in the event series called “66 Nights of Traditional Arts” and extended the daily exhibition time until 9pm. It has also combined Taiwanese Opera with Delta’s display solutions to give audiences an innovative presentation.

Delta has utilized eight professional projectors in conjunction with seamless blending technology, presented on a near 400-inch projector, in combination of animation and real actors. With technology, it has brought traditional arts performance to a new stage.

1-2 | Delta’s seamless blending projection has brought in brand new elements to traditional Taiwanese Opera
Delta LED display solutions light up the world's largest marine theme park

< Text by Video Wall System Department/ DGC >

Recently, the world's largest marine theme park, Zhuhai Chime Long International Oceanic Resort officially opened. Delta LED display solutions successfully built a giant sky tent in the park and a large curved performance screen with dozens of LED displays.

During the bidding for Zhuhai Chime Long, a strict selection process was undertaken on the qualified contractors. In addition to referencing the successful cases including Delta's construction of Peony Pavilion 12 meters arc-blending projection for Beijing National Grand Theater, 270 degree circular curved walls in Taiwan Lantern Festival "Ring of Celestial Bliss" and among other large projection, Chime Long staff personally visited Delta's Manufacturing R&D Center. Eventually, by virtue of the Delta's superior quality video products as well as DGC's excellent system integration capabilities and before/after sales services, Delta not only won the bid successfully, but also became a strategic partner of Chime Long Group.

Giant LED sky screen creates blue oceanic visual impacts

The Giant Sky Screen - Oceanic Avenue, located at the main entrance of Oceanic Kingdom constructed by Delta LED large screen solution, displaying simulated scenes of deep-sea fishes and creatures, bringing tourists profound visual impact.
LED Sky Screen on Ocean Avenue uses Delta T-20 LED display unit. It is 67 meters long, 24 meters wide, with a total area of 1608 square meters of indoor display large screen, with perfect color uniformity and contrast. In the case of global LED Sky Screens, this is one of the few large area high-end applications. In addition, the core component of the light-emitting LED Sky Screen systems chooses the best world-class chips, integrated molding die-cast aluminum structure, to create a IP65 class of screen front and back protection, combined with Delta's independent image control system, provides the user a perfect all in one solution.

Curved LED large screen adds to performances atmosphere

Using the large curved LED display screen to create gorgeous stage effects is one of the highlights of the Chime Long Oceanic Kingdom and International Circus City. In the White Whale Hall and Dolphin Hall of Chime Long Oceanic Kingdom, Delta constructed indoor curved LED large screen in the area of 460.8 square meters and 60.83 square meters. Taking the screen located in the Hall with seawater environment, the screen surface is specially designed with anti-corrosion and anti-salt spray. In addition, a large outdoor curved LED large screen in the area of 674.6 square meters is built in Chime Long International Circus City, standing on the outside wall of Performing Hall.

Multimedia display upgrades hotel quality

Chime Long Hengqin Bay Hotel is the largest marine ecological theme hotel in China. It is also the first super five star luxury hotel in Zhuhai. More than ten Delta LED Displays from 5.24㎡ to 88.48㎡ are installed in various function rooms in the hotel, providing advertising, information navigation, service instructions and a variety of functions, indicating the hotel has significantly improved the hardware quality.

Zhuhai Chime Long International Oceanic Resort is located in, close proximity to Macau, the China National New District - Hengqin District, with 1,888 rooms, is the largest marine ecological theme hotel in China. It officially opened the first phase of the construction project includes Chime Long Oceanic Kingdom and Chime Long International Circus City, as well as Chime Long Hengqin Bay Hotel. Delta LED display solution has successful application in all three theme park areas, offering visitors ubiquitous visual enjoyment wherever they are.
**Delta inverter forges solar power agricultural greenhouses**

*< Text by PV Inverter Department/ DGC >*

Recently, Delta solar energy inverter assisted Changzhou city's Longtan Lake Agricultural Ecology Park and Jiaze Agricultural Expo to forge a solar energy agricultural greenhouse. The project totals 10 greenhouses across two parks, coming to approximately 60,000 square meters, and the scale of construction of the system is 2MW. This project's grid-connection installation is currently on going in earnest, and the energy generated from the system will all be directed to local power grids.

This time around, the large greenhouses’ solar energy system utilizes amorphous silicon thin-film battery modules, allowing the wavelength from the major light spectrums that are beneficial to plant photosynthesis, 640~660nm red light portion, and wavelength 400~500nm blue light portion, to penetrate greenhouse rooftop's solar energy battery and be absorbed by the plants. Most agricultural greenhouses use sunshades to reduce ultraviolet lights, whereas for the greenhouses with amorphous silicon-thin-films, ultraviolet lights would simply be absorbed for energy generation, greatly reducing impact to plants.

It is completely different from traditional solar energy power generation system principles. Traditional silicon components are not translucent, and therefore can only be placed on rooftops or barren ground. Whereas thin-film solar energy agricultural greenhouse possess excellent light penetration properties, have absolutely no negative effects on agricultural products, and have obvious economic, social and environmental benefits.

Delta's external wall-mounted solar inverter, single unit power 20KW, transformation efficiency 98.3%, IP65 protection level, was selected for this project. The system used 100 inverters in total, in 10 greenhouses across two different parks, assembled into two separate and independent 1MW units, step-up to 10KV, and integrated into the local power grid company's power grid.

**Kick off for the "International Solar Building Design Competition 2015"**

*< Text by Sophia Zhou/ China Corporate Communication >*

The kick off ceremony for the "International Solar Building Design Competition 2015", exclusively sponsored by DEEF was held in Qinghai, China. The subject of this competition is "Sunshine and Beautiful Countryside." It individually selects Qinghai and Hubei as competition subjects, designing low power consumption for farmer/rancher settlement project and farming low-carbon housing industrial project.

The settlement project in Qinghai anticipates using solar energy and green building technologies to design low cost, high performance farming resident to meet the demand of healthy, safe, low carbon and adequate farmer/rancher living requirement, thereby exploring urban and rural integration, resource-intensive, livable urban development model of harmonious development. Focusing on China's Hubei rural low-carbon housing industry projects designed for industrial farm house in hot summer and cold winter areas, solving the design of industrial structure, construction and application problems, demonstrating the concept of advanced housing design and construction techniques, disseminating residential culture of the central region, promoting the industrialization of residential applications, thereby increasing productivity and farm house quality, reducing ecological damage situation.
"Delta PLC Programming Technology and Application Case" published

< Text by IABU/ DGC >

Delta has achieved brilliant success once again in automation education area! "Delta PLC Programming Technology and Application Case" complied and authored by Professor Cheng Chuan Liu of Tianjin University of Science & Technology was published in June, 2014. This is the sixth professional education material based on Delta’s automation technologies and products in the past two years.

Delta’s Senior VP and GM of IABG, Mr. Simon Chang, indicated, "Industrial automation has become a major indicator measuring a country’s industrial advancement level; therefore, it is particularly important to train automation professional elites and innovative talents. Education carries heavy responsibilities through thick and thin. Delta will advance with the times, through continuous investment and expanding educational cooperation to increase the intensity of work in this area."

Since Delta established "Delta Mainland China University Cooperation Plan" in 2009, it has involved more than twenty domestic automation professional institutions, building laboratories, organizing competitions, authoring teaching materials, providing joint training as well as other efforts to support Automation Education, which were warmly welcomed and highly praised by the teachers and students.

Delta’s ventilation fans first demonstrate at the 2014 Shanghai Kitchen & Bath Exhibition

< Text by Peter Lin/ China Sales and Marketing Div. >

The 19th International Kitchen and Bath Exhibition, which has also been known as the "Kitchen & Bath Oscar", had its grand opening held in Shanghai in May, and this exhibition is the third largest professional kitchen & bath exhibition and the largest in Asia. Delta participated in this exhibition with "Fresh, Quietness, Energy Saving" as the main theme, making first appearances with ventilation fans and line of products made with DC motor technology.

Delta products comes in five major lines of products: metallic ventilation fans, plastic ventilation fans, wall-mounted ventilation fans, bathroom ventilation units with heaters, and suspended ceiling ventilation modules. Consumers can install these products based on their requirements in conference rooms, lounge rooms, bedrooms, study rooms, bathrooms and kitchens to improve indoor air quality through proper air ventilation.

In addition, the Delta-developed, energy-efficient, VFB17 line of ventilation fans have a low energy consumption rate of only 7.5W, leading other similar products in the industry. The four-day exhibition attracted the attention of many attending business owners who took a step further to know more about the products in detail and expressed intentions for further cooperation.
Delta Greentech exhibition highlights

<Text by Marketing Communication Department/ DGC>

China Strait Project Trade Fair

On June 18, the 12th China Straits Technology and Projects Fair was held in Fuzhou, exhibiting the latest all-round products, technologies and services of IOT, Cloud Computing and Internet of Vehicles. Delta presented solar power and wind power systems, EV charging solutions, intelligent landscape LED lighting solutions, energy management solutions, and iPEMS monitoring and management systems.

Shanghai 2014 SNEC International Solar Energy Exhibition

From May 20 to 22, the most influential Eighth International Solar Energy Industry and Engineering Exhibition was held in Shanghai. Delta overall demonstrated the most advanced green energy technologies and products-Delta RPI M50A brand new string type solar energy grid inverter, outdoor and indoor centralized solar power solution, distributed solar power solution, distributed solar rooftop solution and professional programs, Delta's system integration capabilities also provide many industrial users with high-performance solar power system solutions.

Delta exhibits the new generation, revolutionary RPI M50A string type inverter product is currently the world's smallest and lightest outdoor wall-mounted 50kW inverter, using transformer-less design technology to achieve maximum efficiency of 98.6%, body size (740x612x278), lightweight (70KG/set).

Beijing Machine Tools Exhibition

During "2014 China International Machine Tool and Tools Exhibition (CIMES)", Delta exhibited targeting integrated solutions and products for the high end machinery manufacturing industry in high speed and high precision application area, including machine digitization solution, machine spindle solutions, motion control solution, automated material loading / unloading robot solution, numerical control machine industry solution, etc. Meanwhile, in order to enhance live experience, and to dynamically exhibit exciting applications of Delta's integrated solutions in high-speed precision drilling and tapping machining centers and high speed tapping machine.

World Elevator and Escalator Expo

As a world-class enterprise in the field of industrial control, Delta has in-depth technical accumulation in the elevator inverter and integrated machine control systems. In the "China World Elevator and Escalator Expo 2014", it presented the perfect upgrade products of IED series - IED-G series new generation elevator integrated machine, with Delta AFE, REG and other energy feedback products, innovative elevator control and energy-saving technologies. It also displayed elevator system solution, control cabinets and other new products; combining a variety of products provided by Delta specifically for the elevator industry in control category, drive category and energy saving applications.
DPC TPS team goes mobile

< Text by TPS team/ DPC Marketing >

DPC's Telecom Power Solutions team has been spending time on the road with their customers since early this year exhibiting Delta DC power solutions. TPS's "roadshow" truck was outfitted to highlight Delta product quality and innovation, specifically targeting Verizon Wireless's 22 regions across the United States. With the customized mobile display vehicle, the TPS team was able to capture Verizon's regional engineering and commercial team's mindshare. Since the start of the roadshow, the TPS team has been experiencing record number turnouts at every customer location they visit. In addition to the target DC power engineers at each location the TPS team is also getting feedback from field technicians, installation & operation teams and senior level management. This direct communication and information sharing has proven to be invaluable.

Since the initial design, the truck has been updated with new products and has been used to visit other key customers other than Verizon Wireless, most notably, T-Mobile USA, AT&T, Sprint, Alcatel Lucent and Ericsson. This has resulted in numerous breakthroughs, particularly with national and regional Wireless carriers.

The truck is wrapping up its US tour this fall, with its final showing at a tradeshow floor in October. Plans are being developed now to resume the tour in the spring of 2015.

Delta extends PJB open frame power supply series with 24V 150W product

< Text by Delta Electronics Thailand >

The PJB open frame power supply series now offers 150W output power with 24V output voltage. The power supply comes with universal AC input at 85Vac to 264Vac and built-in active PFC which provides PF>0.98@100Vac. The PJB-24V150WCRA features 200% Power Boost from the rated output power for 10 seconds. Such feature enables reserve power to be always available for reliable startup of loads with high inrush current. Like the rest of the PJ series, conformal coating is applied on the PCBAs to protect against dust and chemical pollutants and only recognized Japanese capacitors are used so as to enhance product reliability.

Besides, Delta recently introduces CliQ II DC-UPS module to support 24V system with up to 40A output and back up time of 4.5 minutes for 15AH battery capacity. DRU-24V40ABN offers a wide input voltage from 24-28V and a wide operating temperature range from -20˚C to +60˚C. This product comes with potential free contacts for battery management signals and LED indicator for battery status.
DET and Huachiew Chalermprakiet University sign MOU for academic programs

< Text by Delta Electronics Thailand >

On June 4, DET signed the MOU with Huachiew Chalermprakiet University. The framework of cooperation between the two parties covers many areas such as training programs, research activities, academic collaborations and more. The wide ranging benefits for both parties will include student internships by Delta for the university and academic support for Delta by the university.

Huachiew is a highly regarded university founded in 1941 by a Thai Chinese foundation in Thailand. Delta and Huachiew have enjoyed a long standing friendship over the years with many programs already being established together in the field of education.

Mr. Dick Hsieh (left), President of DET and Dr. Prachak Poomvises, President of Huachiew Chalermprakiet University sign the MOU and exchange souvenirs

50 DET employees’ children awarded annual scholarship

< Text by Delta Electronics Thailand >

On May 24, 2014, Mr. Anusorn Muttaraid, HR Director of DET, presided over the annual DET scholarship ceremony for the employees’ children. Up to 50 scholarships were awarded to students from primary, secondary, college, diploma and post-graduate levels.

Employees have always been of utmost importance among the stakeholders and this has also been stated in Delta's CSR policy. The annual DET scholarship is just one of the many ways the company is showing its appreciation for the employees who have been contributing to DET's social and environmental sustainable growth over the years.

Mr. Anusorn Muttaraid (middle with blue shirt), HR Director of DET, takes a photo with the children awarded scholarship
Establish the Legal Information Systems and provide a transparent management platform
An interview with C.P. Ting, General Counsel of Delta Group

Over the past year, in several important international exhibitions that Delta participated, such as the HM, CES, Computex Taipei, etc., unlike in the past, apart from the colleagues of exhibition business units, legal colleagues were also seen. In addition to a professional lawyer providing legal consultation on-site, before the exhibition the colleagues in the Legal Team had already completed product retrieval surveys, which provide more effective protection for Delta.

From the establishment of the infrastructure, improvement of cross-department collaboration, to the assisting of regional businesses, an obvious shift of Delta's Legal Team started in January 2013 when the new General Counsel, C.P. Ting took office. In just a year and a half, she has led the team to demonstrate such results. What was Ting's target strategy? We will guide you through how she did it.

Establish a foundation, adjust gradually

"I have not had much success yet, isn't it a bit of an overstatement for me to be interviewed now?" This spring, General Counsel of Delta Group, C.P. Ting declined our interview invitation in a low profile. It was then just over a year after she joined Delta, she was quite modest about the progress the Legal Team has made, hoping that she would be given more time to put in efforts. After a lapse of nearly half a year, we invited her to be interviewed for a second time, and though Ms. Ting still did not dare to claim credit, she was willing to share what she has learned and seen during her one and a half years in Delta, as well as the team's growth and breakthroughs.

"The Legal Team in Delta actually has a lot to offer and can create value!" Ms. Ting uses this sentence to explain her positioning and expectations for the team. "This past year, what I've done is 'establish a foundation'. We hope to become partners of every business unit, assist everyone in controlling risks effectively, or in another term, our job is to defend and protect the company. For patent, trademark or legal work, what we want to do is to play these two roles well to reduce risks for the enterprise."

Over the past year, Ting has been involved in Delta's transformation of business type, and she gradually realized that, in the huge organization of Delta, the Legal Team, which is located at more of the back end of the pipeline (organizational processes), must try to catch up with the pace of the company's growth and provide services. "For example, when the company gradually developed solutions, compared to general products, the required 'insurance' is relatively specific; this is the planning that the legal department can conduct in response".

Expecting to keep up with the company strategy and changes in Delta, Ting sets the second year after her taking
office as "adjustment year". She wants to lead the team to become a recognized and respected unit. "We hope that we are not only legal advisors, but also business advisors."

Set up an international team to assist regional businesses

But in comparison to the industry, the size of Delta's Legal Team is actually very "lean", with only 13 legal affairs members of staff in the corporate headquarters, 13 working in the China region, and a total of approximately 40 patent engineers working in Taiwan and Shanghai. Such manpower corresponds to the huge business demand from Delta's many business units and regional offices.

Among which the regional business is particularly difficult. Laws in different countries and regions are different. How to respond accordingly?

"When I first joined Delta, CEO Ping Cheng hoped that there could be an 'International Team' in the legal affairs team. Considering the comparatively sparse manpower of the department, I was afraid that it might not be easy to execute. In addition, the main jobs of the international team is to assist all regional businesses, so we need a 'generalist' who must be familiar with contract, intellectual property, litigation, local ordinances, and so on, which are not the same with the internal job allocation of the past. After several discussions and communications with Mr. Cheng, the international group was established in May last year, and has seen increases in relevant patent staffing afterwards."

Ms. Ting and the international team spent six months' time taking the initiative to "market" themselves, contacting each regional office, to clearly describe the service and assistance that her team can provide. The colleagues of the team even actually made long stays in each regional office, to cooperate in-depth with local partners. After a year, the international team received positive feedback.

"Now, all regions are willing to accept us as a part of their team, and when they encounter problems, they naturally think of us as well. The operational responsibilities and the roles of legal affairs in the corporate headquarters and in each region were also clarified gradually. In the long run, this will also help us in assisting each region to establish a local legal affairs team."

Every year, the global contracts to be reviewed by Delta's legal department alone are more than 2,000 cases, and there are still other operations such as patent, trademark, litigation, etc. How to increase productivity and improve service quality with limited manpower, and most importantly, how to achieve rapid response? These are the issues that Ting keeps thinking about.

Enhance legal affairs management platform

“Delta's OA and IT team have always had strong backing.” Speaking of the existing internal patent system that is being upgraded and re-developed, and will be online at the end of the year, Ting attributes it to the assistance...
of the OA team. "We do need good tools and platforms to improve work efficiency; meanwhile, the new systems to be developed in the future may also increase the transparency of information. Engineers from many business units have put forward their demands, hoping to be able to search for the patents belonging to Delta through a comprehensive patent platform, and thereby enhance R&D cooperation business and communication between departments."

Enhancing the legal affairs management platform is currently one of the important jobs to be done by Ting. The next stage is to create an online contract management system, so that colleagues may make queries on the contract conditions Delta signed in the past with external companies, and if different units correspond to the same company, we are able to know ourselves and know others, avoiding damage to the interests of Delta.

"Recently there has been ongoing collaboration between ourselves and the Delta Research Center (DRC)." Giving further explanation on cross-department cooperation, Ting could hardly conceal her excitement. She revealed a bit of notice in advance. "This is a patent analysis platform development project; DRC uses patent documents as sources of information, develops 'semantic analysis' tools and gradually enhanced the math skills, searching out the patent documents required to be analyzed within the vast sea of words utilizing keywords or technical terms. As a result, reading one after another paper manually will no longer be necessary, improving efficiency greatly. This technology, if successfully developed, may also become Delta's new business."

Ting went on to explain, "If it is required to read at least 100 patent documents when conducting a patent analysis, if the accuracy rate of 70 percent be achieved, it means that the time legal affairs colleagues spend on reading irrelevant documents (30 percent) can be shortened, and therefore productivity enhanced." This project has been carried out for over four months. There are preliminary results presently, but we will continue to test and adjust to improve the recognition and accuracy rate. We expect it to be completed next year, and released to the public.

**Respect the specialties of colleagues**

Ms. Ting is not unfamiliar with the cooperation with the DRC, and shows a high degree of interest; perhaps it is related to her degree in Chemical Engineering. After graduating from the university, with her engineering background, she entered a law firm as a patent engineer, and later, continued her studies in the field of law, and completed her doctorate. Ting's industry experience is also abundant. She has tempered herself in the semiconductor and solar industry, but after joining Delta, it turned out to be a very different experience for her.

"In Delta, my horizon's been expanded!" was the concise sentence spoken by Ting. "There are numerous business units in Delta; it is a great challenge to understand the business and provide services. In my previous work experience in legal affairs, I mostly dealt with individual cases (transaction-based), but in Delta, I also learn and think about the required workflow, guidelines and strategic planning for the Legal Team. I see that supervisors and colleagues here all work very hard and have very strong executing power, which is a core value of Delta."

Within this one and a half year, Ting grew with the team. She respects the independence and professionalism of colleagues and offers adequate space for them to put their talent to good use. Looking to the future, she looks forward to the increasing updates of the team, which may also open up a new horizon within the company.
Listen to the voices in the community to understand customers' needs

The brand marketing experience of Innergie and IBM

In order to comply with the surge of social media in Taiwan and to get closer to the customers of portable devices, the Taiwan team of Innergie, a brand of Delta, founded a fan community on the world’s most popular social media site “Facebook” this past April. It attracted fans to join at the 2014 Computex, VieShow Brazil World Cup Football Carnival. A netizen can enter a draw for pocket cell or discount vouchers by becoming a Facebook fan of Innergie. The community has aroused an enthusiastic response since its launching. It will be followed by the next round of marketing to ensure the effective interaction between Innergie and its fans.

Besides attracting 40,000 viewers during 2014 Computex and 45,000 during the VieShow, Innergie further targets itself at users of mobile devices, gets double exposition to the audience and attracts 40,000 clicks on the internet. Moreover, by collecting the community information in interaction, Innergie can judge the sex and age of those who favor Innergie products and thus develop products, which are more connected to users.

Community marketing has become an effective tool to promote brands in this mobile digital age. This May, Global Views’ annual brand forum was focused on the influence of community and mobile business on brands. For this volume of <Brand Academy>, we specially recorded the lecture given by the forum’s honored guest, Chief Consultant of IBM global electronics and communication Mr. Andy Kim, to share the brand marketing experience of IBM.

The following passages are cited from Global Views Magazine (368), from Page 185 to 186: To Win in Brand 3.0, You Shall Start from Listening and Answering:

Recent research into IBM’s digital marketing data shows that 81% customers search the internet to see comments and 74%
of them say that these comments do determine their purchase decisions. Moreover, up to 90% users will share their unfavorable experiences and 59 of them spread their dissatisfaction through social community or blogs.

The customers also prefer multi-channel shopping. For example, if they want to buy a pair of shoes, they will try them in physical stores, and then go to the internet to search the cheapest seller. The problem is, many companies separate their work too much in detail, so the physical stores and the online sales departments do not have the mechanism of sharing the customers’ shopping process. How to solve this problem is the biggest challenge for many enterprises.

Facing such challenge, enterprises should remember four things. Firstly, they should be customer-oriented. They cannot purely do marketing in this community era. Instead, they should create proper purchasing experience and offer good feedback channels. Secondly, every customer should be regarded as independent. Collecting their purchasing channels and doing the analysis will benefit future marketing and the management of customer relations. Thirdly, Omni-Channel sales, which aim to break the boundaries between the online and physical stores, should replace the Multi-Channel sales, so that the possibility of losing business can be lowered. Lastly, all the previous points should be based on good analysis.

Integrate the power of community to maximize the benefits

In the social networking world, there are usually more threats than benefits. Chinese say, “Bad things spread far away”. People like talking about bad news instead of good news. A customer with a bad experience will spread it to 53 persons. Under such circumstances, good social network marketing requires several key strategies:

Firstly, listen to the voices of the community. Social network behaviors will produce a large amount of data, which also changes rapidly. Enterprises also need to have good equipment to timely detect the threats or opportunities online, and the data collected in the community will make complicated research to understand customers unnecessary.

Once enterprises understand customers' needs and timely detect problems and opportunities, they can go to the next step and build a social network response mechanism. Response mechanisms have long been regarded as the key to enterprises' successful business. Without a good response mechanism, enterprises will be very easily influenced by community effects. So the response should be carefully handled.

Lastly, integrate social networking. Social networking is more than a marketing tool. It is also a useful way to attract talents and increase sales. Only by integrating the functions of social networks, can enterprises maximize profits. Taking Xiaomi cell phones as an example, they take orders online, and ask the customer whether they like the colors, the accessories or not, then they produce the products. This is a business method that makes good use of social networking.

The next new trend of social network platform is the "community shop", which is the developing direction of e-commerce. Its basic concept is to ensure that users can finish various interactive activities, such as clicking
'Like', sharing and shopping on one same platform. However, the current method adopted by many enterprises requires users to log in many times, and click on many links to finish the purchasing procedure. Enterprises lose many customers at each link.

Walmart has cooperated with Pinterest, so that customers can directly buy Walmart products on Pinterest platforms; Facebook also opened the special pages for community shops, so that users can open business on the platform and people who like this product can buy it directly by one click, without going to any external websites.

**Delta GreenTech's official WeChat ID to get closer to the customers**

In China, the most popular current social networking platform is WeChat. DGC has officially opened its WeChat ID. The most special feature of WeChat is the ability to send customers regular messages. Through this platform, DGC can directly present its important news, brand concepts, corporation culture and so on to customers' phones, so that they can quickly scan them when they are eating, waiting for buses or lining up. WeChat can send different contents according to the identity or hobbies of users and the users can interact with the official ID by leaving messages.

Additionally, DGC can carefully select its news, activities, important products and solutions on its official website, then present them on this official WeChat ID, as if the customers get a portable mini-database of DGC. This "Delta on the fingers" will bring the customers better experiences and add more values.
Inductive charging for EVs to gain traction transforming infrastructure

Intensive research has boosted the profile of the nascent electric vehicles (EVs) inductive charging market globally. As various verticals such as telecom, industrial automation, and utilities establish their presence in this domain, market participants will increasingly partner with original equipment manufacturers (OEMs) at the testing phase to enhance the value of their products. OEMs such as Renault, Nissan, Daimler, Volvo, BMW and Toyota are working on the development of inductive charging for future EVs, and more than 10 automakers have announced trial tests," said Frost & Sullivan. As a result, inductive charging will soon be available in cars either as an additional feature or as an inbuilt feature.

Currently, inductive charging is offered as an aftermarket solution with attractive financing options. Yet, the cost of purchasing and installing an inductive charging solution is approximately 30 percent higher than that of conductive charging. The time taken to charge is also longer. To overcome these challenges, market participants from across the value chain are partnering with OEMs to gain further opportunities for research and development.

New analysis from Frost & Sullivan, finds that the total market for inductive charging is expected to experience a compound annual growth rate of 126.6 percent from 2012 to 2020, with approximately 351,900 units likely to be sold. Inductive charging will account for 1.2 percent of both public and residential charging in North America and more than 2.6 percent in Europe. Residential charging will be the most popular method, accounting for more than 70 percent of the overall charging.

MOOC providers begin to enter B2B market with offering corporate education solutions

The major application of MOOC has been known for academic purpose so far. However, we can learn that MOOC providers begin to enter B2B market with offering corporate education solutions.

In the field of corporate application, according to a recent survey by Future Workplace, there are approximately 70 percent of business executives will put MOOC applied to existing corporate training programs. Since MOOC has massive, open, online and other characteristics, not only for internal training of enterprises, also suitable as with customers, partners and community communication channels to help build enterprise value chain development and business ecosystem, as well as corporate brand and marketing.

Rise of Smart Grid: A hundred billion US dollar business in 2030

Obama wanted his economic stimulus package to include some futuristic legacy projects, such as the "Smart Grid" to advance his long-term agenda, which raised broad attention from the world society. He suggested pouring in US$100 billion. The Big Plan is in 2030, the U.S. can sustain full power supply to critical power infrastructure anytime. Besides, smart grid not only provides two-way communication between the demand and supply side, but realizes the decentralized power system, with the benefits of renewable energy.

In terms of "smart grid" supply chain in Taiwan market, the Taiwan manufacturers grasp the meter technologies, which are identified as key competitive advantages in building utility infrastructure such as smart meter and transmission equipment. According to Taiwan's research house, Topology, smart meters could be popularized among general public in 2015, which would generate a market with revenues up to NT$ 36 billion. Moreover, Mainland China Authority plans to install 0.3 billion smart meters in 2020. With the integration of smart meters with Internet of Things, a $RMB 200 billion market will be formed.

2014 Physical Security Information Management trend

IHS reveals that the world market for PSIM (Physical Security Information Management) software is estimated to have been worth $160.3 million in 2013. The PSIM market, while being a small segment of the larger security & fire market, continues to enjoy 20 percent and higher growth rates, and will do so until at least 2018. This growth is being driven in part by end-users utilizing PSIM software platforms as a tool to enforce compliance of both internal policies and external legislative requirements.

EMEA is forecast to remain the largest PSIM market (in revenue) from 2013 to 2018. However, the Asian PSIM market is predicted to grow fastest, driven by South East Asia and India. The transportation market is the most saturated end-user industry. Opportunities in emerging PSIM market, such as Healthcare and education, as well as continued investment in government, utilities and public safety surveillance will drive growth in the PSIM market.
Enjoying the summer of Europe with low-carbon travel

<Text by Judy Wu/ MCISBU >

To utilizing the incentive tour vacation at the end of June, I have planned a family trip to southern Germany and Austria to enjoy the wonderful summer time in Europe. From the start of the Romantic Road-Würzburg, we have traveled to historic cities such as Rothenburg ob der Tauber, München, Salzburg, to attractions which has amazing nature views, such as Füssen, Königssee and Hallstatt.

Connect each attraction by public transportations

For the fact that we’re not familiar with the traffic situation in Europe, also taking into consideration of the physical tiredness we might get from the trip, we have decided to take public transportation instead of driving. With the comprehensive railway system, as well as its decent connections via buses, trams and ferries, it is very easy to get around even as a foreigner. To encourage people to utilize the public transportations, they have also launched a wide range of travel tickets (Rail Pass, Länder-Ticket, one-day ticket, weekend ticket... etc.). Compared to the tickets with normal price, these tickets are with a much better value. By encouraging people to take public transportation, they have also reduced the carbon emissions. During the whole trip, we have met many local tourists as well as school groups who have all utilized the convenience of the European transportation network.

We have found that a lot of efforts had been made to ensure the environmental sustainability during our trip in Europe. For instance, the Königssee in Berchtesgaden, Germany, is advertised as the cleanest lake in Germany. In order to maintain this quality, only electric-powered passenger ships, rowing, and pedal boats have been permitted...
on the lake since 1909. With this policy, we are able to enjoy the beauty of the lake view and listen to crew's trumpet sound echoed in the valley even in the 21st century!

Enjoy local and seasonal delicacies to reduce the food carbon footprint

Other than enjoying the comfortable temperature and long hours of daytime, many seasonal fruits and vegetables are only available during the summertime in Europe. We have visited local supermarkets and outdoor markets to shop for fresh produce. Enjoying seasonal fruits and vegetables can not only reduce the food carbon footprint, the price is also surprisingly cheap. A large box of strawberries only costs approximately US$ 3.5 and a big box of apricot is only US$2.7! Of course, the biggest fun during traveling is to try the local authentic cuisines. In Munich, we had visited one of their oldest beer houses, Hofbräuhaus, to enjoy the famous roasted pork knuckles, white sausages, and also a glass of one-liter-local-brewed-beer.

They also had a band singing Bavarian music, and the joyous atmosphere made everyone sing along, clapping and shouting. Even strangers would hold their glasses up to have a toast with you!

When we visited the UNESCO world heritage-Hallstatt, in addition to enjoying its stunning scenery, the local restaurants also serve fish cuisines with the fish directly caught from the lake. Nothing is better that enjoying the delicious cuisines with a cup of coffee by the lake with a gentle breeze!

During the ten-day trip, we have fully enjoyed the culture, the scenery, the food and the great weather. Looking forward to the next visit in Europe!
Thousands of children educated by DEF's 6th Energy Educational Volunteer Camp

< Text by Pamela Huang/ Delta Electronics Foundation >

During DEF's 6th Energy Educational Volunteer Camp, there were 84 colleagues in attendance to teach 55 classes in a year, for total of nearly 1,600 elementary school students.

Among the volunteers, 70% of them were repeat volunteers from previous years. Hsu-mei Huang, a colleague from the Chungli factory, who has also been a volunteer 6 years in a row, mentioned that the Foundation's development of volunteers' knowledge concerning up-to-date energy information not only allows students to learn from each other, it also encourages colleagues to apply energy efficiency together with their own families.

The 7th Energy Educational Volunteer Camp will start recruiting volunteers in July. The training contents will include the newest report by The United Nations on the trend of carbon reduction due to climate change. It will help broaden students' international perspective on implementing energy efficiency. This project will be extended and duplicated at the Shanghai factory to welcome more colleagues to join in.

Young architects DIY making energy-saving teaching tools

< Text by Pamela Huang/ Delta Electronics Foundation >

Students of Tainan's Yong-An Elementary School, an energy school of DEF, drew up blueprints and used what was readily available to them to make various energy-saving building models. It was the first time DEF had led students from understanding to implementing, and finally explaining in this autonomous operation. It allowed every child to become a green-collar architect.

Among the 12 energy schools of DEF, Yong-An Elementary School was the earliest to set their sights on developing sustainable architecture. In the beginning, the school had a limited budget in remodeling their dormitory. DEF gave advice to remodel using energy conserving methods. It allowed the school not only to conserve energy, but also to have lighting, ventilation, and water conservation.

Recently, Yong-An Elementary School teachers spent half a year, leading a team of 6th graders in creating various sustainable architectures of the future. The top ten were chosen to become teaching tool samples and participated in an exhibition at National Cheng Kung University.