

MyAdvantech

The Magazine for Global Advantechers and Partners

Spring 2016 No.18

Intelligent Digital Signage Boosts Customer Engagement

Taiwan Digital Signage Excels at Integration

Maker Movement Inspires Innovation

Fashion and Technology Turn Digital Signage into Eye-catching Marketing

Glasses-free 3D Holography for Immersive Advertising

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Published by
Advantech Co., Ltd.

Publisher
K.C. Liu

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Initial Issue 2007.09.15
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Innovation as an Attitude

The Maker Movement is an emerging global trend. Many governments and renowned enterprises recognize “maker culture” as a critical concept with the potential to spark significant innovation in the future. In recent years, maker culture has swept across Taiwan, motivating younger generations to join the Maker Movement and take action to change Taiwan.

Maker culture is garnering increasing attention and investment because of the important challenges facing industry and manufacturers. The rise of the Internet of Things (IoT) has precipitated a global industrial transformation that impacts all industrial processes and operations. Maker culture is set to be a key driver of the next industrial revolution - a revolution that will take place not in a laboratory or company, but in the houses of millions of ordinary people.

The Maker Movement constitutes a quantum leap in the history of industry. In the past, most innovation and R&D programs required sizable enterprise investment combined with a touch of genius from inspirational inventors. By contrast, nowadays, with technology eliminating the barriers to market entry, any person with a 3D printer, 3D scanner, CAD design and engineering software, and laser cutting machine can become an industrialist. Leveraging a solid foundation in IT manufacturing, industries in Taiwan can assist and inspire more makers to develop innovations and start businesses. This innovation momentum is vital for driving industrial upgrades and transformation that can lead Taiwan toward a brighter future.

Despite the current groundswell of interest, maker culture is not a recent idea or trend. The well-known fact that Steve Jobs, founder of Apple Inc., built the first generation of desktop computers in a garage illustrates the concept behind the Maker Movement. However, maker culture is nothing new for Advantech. Indeed, at Advantech, innovation is understood as an attitude rather than a system. All businesses, especially those in the ICT industry, which typically experiences a paradigm shift every 15 years, risk becoming

obsolete if they do not remain attuned to industry shifts and adapt accordingly.

Since its founding in 1983, Advantech has focused on embedded and automation solutions instead of personal computers and mobile devices, and on branding instead of original equipment manufacturing. Advantech has established numerous independent marketing and research teams for specific products, regardless of market size. At Advantech, innovation is the engine that drives the company’s consistent internal evolution in response to external market changes. Advantech has also invested substantial resources into encouraging innovation through learning and talent cultivation. Corporate initiatives that include establishing the TiC100 Technology Innovation Competition, building the IMAX innovation platform, and promoting maker culture demonstrate Advantech’s commitment to innovation.

Advantech also inspires further innovation in diverse sectors by forming strategic alliances and collaborating with business partners worldwide. The digital signage application story on page 20 of this MyAdvantech issue provides a great example of cross-industry innovation inspiration. The world-renowned hair and beauty brand L’Oréal adopted Advantech’s digital signage solutions and professional centralized monitoring systems in an effort to establish an efficient digital communication channel. Through that application project, Advantech discovered that demands for digital signage are no longer restricted to any specific industry or trade. Instead, rapid advancements in cloud computing have transformed digital signage into intelligent platforms for customer interaction.

In 2016, what strategies should be adopted for the upcoming year? As industry undergoes unprecedented change, what challenges might emerge amid the maker revolution? Although the future is unpredictable, every opportunity that arises should be seized. As Steve Jobs once said, “The people who are crazy enough to think they can change the world, are the ones who do.”

Business Growth Through a Successful Channel Partnership

By Pearl Wright with images provided by OG Medical
Interview with Sandro Pinto, Business Manager of OG Medical

Based in Portugal, OG Medical is a systems integrator with expertise in device engineering, process management, logistics, marketing, and customized solutions for the digital healthcare market. OG Medical distributes Advantech's medical computer platforms (AMIS, POC, HIT, MICA, MIT) as well as other medical-grade devices, mobile EMR platforms, medical registry systems technologies, and value-added solutions with the aim of assisting diverse customers with modernizing their IT infrastructure and optimizing efficiency.

The company's beginnings date back to 2011. At that time, F.Fonseca, OG Medical's parent company and a leading provider of industrial automation solutions for more than 35 years, was serving as Advantech's sole representative in Portugal. Since their partnership with Advantech in 2001, F.Fonseca had experienced remarkable success in the industrial automation market, eventually establishing OG Medical as a subsidiary business unit to manage their industrial healthcare/medical instrumentation business.

As the 2011 economic crisis began impacting markets worldwide, F.Fonseca saw an opportunity in the digital healthcare sector. While many industries flailed amid the economic downturn and ongoing uncertainty, F.Fonseca found that the digital healthcare sector showed consistent growth, with hospital investments in IT hardware and software infrastructure increasing in both the private and public sectors. By realigning their efforts towards the digital healthcare market, F.Fonseca not only negated the negative economic conditions, but also established the market foundations for OG Medical's current success. OG Medical was officially established as a separate company and an Advantech channel partner in 2013.

Responding to Industry Needs

As a channel partner, OG Medical can leverage Advantech's technical knowledge, industry experience, brand recognition, and more, to flexibly address market needs and customize innovative solutions that respond to emerging healthcare trends. Recent technological advances are changing the existing treatment paradigm and delivery of healthcare. Devices that offer constant connectivity and flexible use at the point of care are attracting considerable attention in Portugal and around the world as important tools for providing more patient-centric care.

The introduction of portable workstations at a private hospital located in the north of Portugal was part of



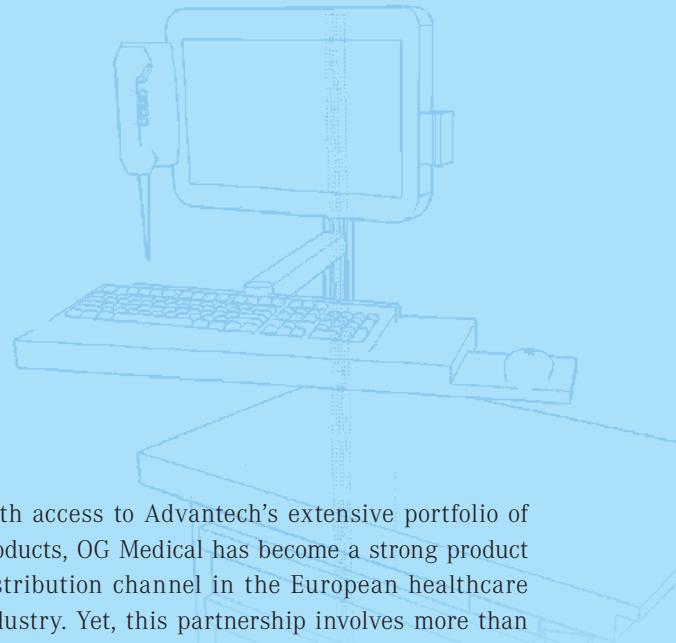


a recent effort to bring doctors and nurses to patient besides by facilitating the delivery of healthcare services at the time and place of patient care. The project was realized by OG Medical using Advantech's HIT-W182 terminals specifically customized to the hospital's usage needs.

The hospital required a portable workstation solution that could be integrated with existing hospital information systems, including a picture archiving and communication system (PACS), computerized physician order entry (CPOE) system, access to electronic medical records (EMRs) and medication prescription & Medication Schedule Administration, to provide medical personnel with real-time access to patient data, laboratory test results, and diagnosis/treatment information when at any location within the hospital. Advantech's HIT-W182 information terminal is specifically designed for the healthcare sector and certified to EN 60950 and EN 60601-1 standards to ensure clinical safety and advanced infection control. The fanless design and IP65-rated front panel ensure quiet operation and prevent the accumulation of dust and other contaminants. The benefits for the hospital included the digitalization of hospital processes, improved resource allocation, reduced medication errors and data duplication, streamlined workflows, and enhanced patient care. Beyond these initial benefits, the solution also offers additional long-term value. The flexibility of the hardware and software ensure the solution is future-proof and can be adapted to new applications.

More than Just Products

Advantech produces products of the highest quality that are specifically designed for medical applications. This means they are certified to the highest medical standards for hygiene and safety.



With access to Advantech's extensive portfolio of products, OG Medical has become a strong product distribution channel in the European healthcare industry. Yet, this partnership involves more than just products. Sandro Pinto, Business Manager of OG Medical, commented "Our privileged relationship with the market leader, Advantech Digital Healthcare, has given us the ability to grow faster and differentiate ourselves from other established competitors."

Advantech is an integral part of OG Medical's business. As a trusted brand with years of experience providing intelligent scalable computing solutions, Advantech offers OG Medical not only extensive technical knowledge, after-sales support, industry contacts/sales leads, and expanded market coverage, but also opportunities to interact with industry leaders for knowledge sharing and greater innovation.

A Bright Future Built on a Solid Partnership

The potential for growth and innovation in healthcare industry remains high, and OG Medical is optimistic about future growth opportunities. In addition to seeking partnerships with OEMs and other system integrators to generate new business, OG Medical plans to establish a maintenance department for promoting an industry-wide transition from standard PC-based platforms to medical-grade solutions.

Furthermore, OG Medical has ambitions to expand into other Portuguese-speaking markets throughout Africa and South America. Supported by Advantech's global presence, OG Medical's understanding of the language and local culture makes them well-equipped to navigate the various distribution challenges. Partnerships that maximize resources by combining the strengths of each partner have the ability to yield substantial mutual benefits and drastically advance business growth. ■

President of Digital Signage Multimedia Alliance Taiwan (DSMA Taiwan) Nick Cheng

Taiwan Digital Signage Excels at Integration

By Liao Pei-Jun with images provided by Advantech and DSMA

Digital signage has come a long way. As the technology becomes more and more mature, digital signage in enterprises and organizations gets better and better with more interactive content, diverse monitor shapes, and now, the linking of personal intelligent data which opens up a whole new world of possibilities. The implementation of bigger digital signage projects in recent years seems to only strengthen the interaction with the live audiences. These days, it's quite common to see huge displays comprised of many independent monitors acting as a single unit.

Easy to Use Content

Larger monitors undoubtedly attract the public's attention but this kind of attention is short lived and it is the quality of content rather than the size of the display that is the key to making people linger—and that is what retailers want potential customers to do.

Digital signage content usually consists of either static pictures with text-based information, or these days, dynamic videos and audio. But today's digital signage not only combines these common media types but includes functions for touchscreen monitors to interact with audiences and peripheral devices that trigger interactive responses. Take sensing techniques for example, sensing devices can detect potential customers walking by a digital signage display which can then trigger displays to switch on, or if combined with face recognition software, can play custom content targeting different social groups such as men or woman.

With the popularization of smartphones, 3G/4G



The Digital Signage Multimedia Alliance in Taiwan (DSMA Taiwan) was founded to encourage and promote the industry throughout the world.

mobile networks allow people to access the internet anytime and anywhere. Some businesses take advantage of this technology and link digital signage to passing smartphones. For instance, a customer could access the latest offers and promotions by simply scanning the QR code in the digital signage with their smartphone App. Digital signage systems could also invite audiences to take "selfie" photos and upload them to the digital signage to create a sense of community and fun.

Retail businesses also have lots of new creative solutions in terms of the design and shape of monitors. In a recent example, a luxury goods company designed a video wall comprising of several

digital signage displays linked together to display a constant slideshow of huge landscape photos which dramatically changed the ambiance of the store. Other examples like the Kaohsiung arena in 2014, introduced electronic floating vehicles bearing two 55-inch vertical touchscreen monitors on both sides of the arena to display marketing messages. Controllers could move and steer the vehicles by remote control or they could even use an App on their phone. The use of digital signage to deliver advertising to mass audiences opens up so many new opportunities for marketers to better target their customers.

Keeping Industry Competitive

Changes in display technologies reflect the demand in the market year by year. These demands inspire and require more creative



applications. Today, digital signage has become one of the most popular digital media outlets and reflects the strengths of the ICT business and Taiwan's tech industry.

The Digital Signage Multimedia Alliance in Taiwan (DSMA Taiwan) was founded to encourage and promote the industry throughout the world. Looking at, and comparing Taiwan's digital signage industry with that of other countries, it can be shown that Taiwan has a clear advantage because of its higher cost-performance ratio, consistent product quality, and reasonable price; but because of the lack of well-known brands, it is not always easy to compare their relative strengths. But if manufacturers can align with each other to create digital signage solutions which surpass customer demands, then the overall competitiveness of the Taiwanese digital signage industry will be endorsed since the industry has excellent product quality, competitive prices, and comprehensive solutions.

The Digital Signage Special Interest Group (DS SIG), the predecessor of DSMA Taiwan, is an organization which was co-founded by several Taiwanese manufacturers at the request of the Industrial Development Bureau in 2008. For organizational flexibility, DS SIG was renamed as DSMA Taiwan in 2012. The number of the registered members of DSMA Taiwan is now over 160 manufacturers and continues to grow year by year. The knowledge background of the members covers

fields like panels and monitors, industrial computers, digital content, system integration, advertising media channels, and more. The cross-collaboration integration between manufacturers in different fields also helps create new interactive applications in digital signage such as image analysis for face recognition, business to signage applications, and new programs designed to interact with digital signage and other devices.

In the past, digital signage was simply hardware that was designed, manufactured and sold to customers, but now, companies have to creatively market their products and focus their sales performance through digital signage. Marketing planning can now include digital signage in the mix. Current developments are expected to include new innovative operating modes and content delivery. As a result, digital signage is being transformed from just hardware that simply displays media, to a focused marketing delivery platform for all kinds of channels.

With 3D image processing offering a whole new range of applications, SME enterprises should focus on developing specific digital signage techniques, while larger enterprises develop their own brands and take on large projects to demonstrate Taiwan's strength in display technology. Taiwan's display manufacturers should work together to offer the best choice displays for digital signage applications. ■



Mentor of Makers, Terry Cheng

Maker Movement Inspires Innovation

By Fu Wei-Zhi with images provided by shutterstock and Terry Cheng

The Maker Movement is a growing trend throughout the world. The Maker Movement, which can also be called the Creator Movement or Producer Movement, refers to the spirit of innovation and technology based DIY, from thinking to doing, but it also relates to business startups and influences the way we innovate and design new products.

Chris Anderson, the former editor-in-chief of *Wired* magazine, is a promoter for the global Maker Movement. He said in an interview with the media, “The influence of the Maker Movement is going to surpass the Internet’s global impact. Right now, dozens of creative maker startups have an annual revenue of more than one hundred million dollars. At the same time, other related movements are equally flourishing around the world too.”

Maker Movement Goes Global

Interestingly, the Maker Movement is not a new concept. It dates back to the 20th century (and before) when the garage startup culture blossomed in the United States. Today, as the waves of the movement sweep across the rest of the world and S.E. Asia in particular, many organizations and businesses have joined in, as well as many governments that have dedicated themselves to it.

Terry Cheng used to be the CEO of international companies HP and Texas Instruments but now lives in retirement. He has devoted himself to the Maker Movement after knowing several young and promising makers who have created some unexpected opportunities. Today, Terry has guided and assisted thousands of makers and more than 400 startups. He believes

that globalization facilitated by the Internet transforms technological competitiveness to pure innovation, and it is the reason why makers play a key role in innovating future products.

Terry also points out that the spirit of the Maker Movement is all about learning, building and sharing. The two founders of HP, William Hewlett and David Packard, and the late Steve Jobs of Apple, all started their careers in the last century as garage startups. In recent years, thanks to the contribution of crowd-funding websites, creative makers have become influential business startups or innovators. Many creative makers have taken this opportunity to successfully start their own businesses or use it as a springboard for their own careers. For this reason, the term "maker" is more than just about a lifestyle; it is more of a broad cultural movement which goes back to basics and encourages self-learning and personal development in a spirit of free enterprise.

New Opportunities for Manufacturing

Chaney Ho, the president of Advantech agrees with Mr. Terry Cheng, "According to the overall trends in recent global economic development, the 'Maker Movement' is definitely worth noting other than Industry 4.0. Benefiting from the fully developed techniques of the

According to the overall trends in recent global economic development, the "Maker Movement" is definitely worth noting other than Industry 4.0.

Internet of Things (IoT), as well as a more public understanding of the movement, the future design and production of new products will center around three crucial factors: intelligent design, the maker movement, and mass customization", Chaney suggested.

Chaney said that innovation develops slowly in a mature enterprise and those creative ideas could be easily overruled in any layer of management. But for the creative makers, techniques in IoT and 3D printing enable them to design and produce their products efficiently. In addition, emerging maker centers such as FAST Lab and FutureWard will integrate 3D printing businesses, application service providers, and creative maker communities to co-create new potential applications. All of these developments will be beneficial to Taiwan's industries which are primarily based on OEM (Original Equipment Manufacturer).

What are the possible influences that the Maker Movement will bring to our industries? Chaney believes that innovative ideas for future products will subvert the conventional methods of product design. Meanwhile, the combination of technologies such as IoT, wireless networks, as well as the cloud systems might create some interesting manufactured products like virtual keyboards, intelligent thermometers, wireless passive sensors, intelligent brewing devices, intelligent Segways, intelligent coffee cups, tables, chairs, and so on. The tendency of manufacturing will go from mass production to mass customization, which could herald a new opportunity for the development of Taiwan's industries.





Maker Startups Face Challenges in Four Stages

The path from being a maker to starting a business, is never as easy as imagined. According to Terry Cheng's observation, the new generation of creative makers have many ideas but little experience in industry and in the process of manufacturing. Makers face many hard challenges as they go from handy crafting to manufacturing. That's why creative makers will always need help and guidance. For this reason, maker mentors with practical experience will form a vital part of maker startups.

Terry believes that there are four stages of progression for maker startups. The bottom stage is about the maker space and hacker space; the second is about crowd-funding and pilot runs; the third phase is about business incubation and venture capital funding, and the last stage is about mass production and sales. Every stage is an important lesson to learn. For example, the maker space could take the form of club in which every person is encouraged to create products and start a business. This is the stage that focuses on innovation and creation. Pilot runs follow on the heels of that stage whereby makers create the prototypes of their products and get involved in product commercialization, and in the last stage of business incubation they seek venture capital funding. Most of the maker members involved in business growth are accustomed to a certain way of thinking because of their financial knowledge, but only have scant knowledge of the hardware involved in

manufacturing or supply chains. This makes the task of persuading them into another direction of thinking difficult. But with assistance, these creative makers can overcome the challenges of production and go on to make positive sales.

There are many enterprises such as Advantech that are beginning to help and invest in creative maker startups. Advantech's TiC100 Innovation & Entrepreneurship Competition was an event that Advantech held to aid creative makers in intelligent industries experience actual business practice on campus as well as under the guidance of business mentors.

Driving Bottom-Up Business Grassroots Innovation

In general, the goals that creative makers and business startups try to attain are quite different. The former emphasizes free spirit and self-fulfillment, while the latter focus on intense business competition. Business startups require some inspiration but the spirit of creative makers can be enjoyed by everyone.

Promoting creative maker innovation in a large enterprise is not very easy. Because of the need to make a profit, most of the products that are researched and developed are those products looking for developed markets. Certainly, the more business burdens an enterprise carries, the less creative are the products that get launched. Innovation is more like an attitude than anything and where there is a will there is a way. Thereby, as long as an enterprise is willing to adopt the right attitude, it still can nurture the creative maker spirit within it.

Mr. Cheng points out that innovation in most enterprises usually goes from top to bottom. "Innovation in large enterprises often starts from senior managers' projects; having said that, there are many great ideas which don't originate from the top, but come from innovative ideas at the grassroots. That's why it's not crucial for creative makers to start a business, instead their influence alone could encourage creativity within an enterprise, and that's why I was very glad to see my old friend Chaney providing space for creative makers at Advantech. As an engineer, after work I often talk with my good old friends who share similar interests and we chat about the things we're passionate about like how creative makers can influence an enterprise and increase the strength of its bottom-up innovation", said Terry. ■



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Intelligent Digital Signage Boosts Customer Engagement



The development of multi-panel technology and expansion of digital signage applications have become industry trends. This is because advancements in panel technology, combined with the rapid development of cloud technology in recent years, have transformed and extended digital signage capabilities. Much like the transition from black-and-white to color televisions, digital signage is evolving into immersive and adaptive platforms, ubiquitous in everyday life. Nowadays, digital signage can be seen everywhere, from MRT/train stations, museums, schools, hotels, banks, convenience and department stores, to public meeting places.

"The trend is unstoppable," said Heidy Chang, Vice President of Wimart Technology Inc. Heidy asserts that with the rise of IoT, digital signage applications are transforming into intelligent interactive platforms. "Integrated digital signage provides a sophisticated promotion platform that enhances creative interaction and overall marketing." For example, the well-known clothing brand Ralph Lauren fitted its store windows with digital signage displays for presenting product information. Customers can also use the in-store displays to conveniently purchase products and place orders for home delivery via the touchscreen. With the ongoing innovation and development of IoT applications, digital signage is increasingly deployed by a range of diverse industries. In the future, digital signage will be widely deployed throughout shopping malls, public transportation, businesses, campuses, and other public spaces. Consequently, the integration and customization of applications are expected to become key issues for customer support. ■



Fashion and Technology Turn Digital Signage into Eye-catching Marketing

By Long Lin with images provided by Advantech and shutterstock
Interview with Heidy Chang, Vice President of WiMart Technology

Employing digital signage for advertising or marketing is a growing trend across many industries. The luxury goods market in particular has in recent years introduced huge amounts of digital signage, building video walls that play many kinds of eye-catching videos and photos.

For instance, in order to show the spirit of the brand, one luxury goods business put many digital signage display units together to build a three-story high video wall that played a classic image simulating the founder of the brand walking downstairs. Some businesses use interactive digital signage to enhance communication with their customers by allowing them to click the screen directly and view new products and other information. Others play seasonal fashion shows on digital signage to attract in-store customer attention.

Heidy Chang, the vice president of WiMart Technology Inc., which provides system integration services, points out that the luxury goods business practice of combining fashion and technology is becoming more and more popular. Businesses very carefully choose the form and content for digital signage according to the size and the orientation of each branch store, tailoring specifically for a flagship store, a general outlet, or a boutique. For example, the flagship store of a world-renowned suitcase brand in Taipei 101 recently erected a 2 x 2 digital signage display behind a checkout counter and employed an Advantech media player to manage and play a variety of advertising materials.

Flexible Schedule Management Deemed Best Choice
In today's market, there are many digital signage

solutions in different configurations. Some are high end, some use general commercial computers rather than professional equipment, and others stack television sets on top of each other instead of integrating multiple digital signage units together—businesses choose the most suitable solutions according to their needs. But because of the full function software, industrial-grade hardware, and support for resolutions up to 4K2K, the suitcase manufacturer chose Advantech's digital signage solution.

Heidy further said that the most important thing for a luxury goods business is consistency of brand image, "From the interior decoration, the display of the products, to the advertising videos and posters, everything within and without a retail store should be unified and standardized by the global headquarters. Even product display stands are shipped via international air freight to make sure that customer expectations for the brand image are fulfilled. Digital signage is one of the few exceptions. Considering the challenges of maintenance and management for digital signage, luxury goods businesses usually list only the essential functions of the system and leave the decisions about hardware and software specifics to the overseas retail stores."

This suitcase manufacturer is no exception. Since the headquarters of the manufacturer attaches great importance to schedule management, the Advantech signage player with built-in management software WebAccess/IMM for Signage was ideal because WebAccess/IMM is specifically designed to handle content editing and broadcast scheduling in real time.

Humanized Interface Is More Convenient

Advantech states that WebAccess/IMM for Signage with the user-friendly interface enables managers to edit layouts, add videos, photos, web pages, or scrolling texts, all through a simple click and drag process. Managers can also arrange the playing sequence with the calendar application and the timeline scheduling program. WebAccess/IMM for Signage also offers group management of screen images and allows each screen to have a different playlist. These functions make the managers' work easier and more convenient.

WebAccess/IMM for Signage supports multiple displays. While the traditional device requires a built-in video wall controller or the import of a matrixer/distributor-based

player to create a video wall effect, WebAccess/IMM for Signage enables Advantech digital signage solution to build a video wall from four screens without struggling with configuration and the high cost of integration of hardware and software.

Heidy states that the most important mission of the system integration business is to find the best solutions to the customers' problems. Currently there are many 2 x 2 video wall controllers that cover lots of functions, including the basic function of connecting to many different displays, supporting multiple output formats, editing layouts, managing schedules, remote updating, as well as advanced functions. But the problem here was that none of these functions met the needs of the premium suitcase manufacturer. What they needed in terms of the digital signage application was 4K2K high resolution and good schedule management, rather than the immediate input of HDMI or VGA messages. Of course, the grade and price of a server goes up as a digital signage controller has more and more functions. "It is the professional choices and advice provided by the system integration business that makes every customer penny count", said Heidy.

WebAccess/IMM for Signage carried by the Advantech professional digital signage solution was the obvious best choice for this retail store because it not only met the requirements for a well-designed industrial-grade digital signage player, with associated consistency and quality assurance, but was also offered at a reasonable price. ■





Glasses-free 3D Holography for Immersive Advertising

By Yu Xiao-Jing with images provided by Advantech

Interview with Curt Thornton, President and CEO of Provision Interactive Technologies ; Jason Zhang, Product Supervisor of Advantech

Following the success of James Cameron's movie Avatar, which gripped the attention of legions of enthusiastic moviegoers around the world with its astounding 3D special effects, 3D visuals and holograms have been widely applied in concerts, fashion shows, and press conferences for new product releases. These visuals not only play a crucial role in creating riveting a powerful visual impact, but have also become widely discussed in the media.

Engineers have been actively working to develop related 3D effects that can let people experience 3D visuals without cumbersome 3D glasses and without

being limited to projector screens. One of America's top three pharmacy chains, for example, has employed glasses-free 3D holography to set up digital signage kiosks in its stores, providing customers with full, three-dimensional product views along with fun animations that seem to float in midair. They also connected their kiosks to printers so that customers can print out coupons directly using the kiosk touchscreens. This has proven to be an effective marketing method that combines the virtual and the tangible, requiring neither 3D glasses nor projector screens, and has been well-received both by consumers and the advertising community.

Glasses-free 3D Holography—Eye-catchingly Cool

Glasses-free 3D holography is currently one of the hottest new technologies, and one in which Provision Interactive Technologies, based in Los Angeles California, USA, specializes.

Provision, which was awarded the 3D Holographic Product of the Year award by marketing research organization Frost & Sullivan in 2010, owns a large number of related patents and offers its services to many of the top 500 enterprises worldwide. Curt Thornton, CEO, stated that any place that requires digital displays for ads or data transmission is a potential market for their 3D holographic displays.

Thornton pointed out, “We specialize in innovating retail and public spaces. Compared to traditional printed media, posters, or flat 2D displays, Provision’s Glasses-free 3D Holography is quite a cool gadget. Retailers, for example, can use it to attract more customer attention to the information that is displayed, and further stimulate the desire to purchase the advertised products.” He is proven right by the steadily rising number of Provision’s 3D display products installed all over North America.

Reliable Players, Customized Images and BIOS

Early this year, Provision’s success continued as its Glasses-free 3D Holography solution, with embedded Advantech DS-061 players, was widely installed in branches of a very popular American pharmacy chain, in the form of digital signage kiosks.

Why Advantech? Thornton explained. “There will always be cheaper built-in computers or hardware for those who need them, but our system requires SSDs with higher capacities, and we want the supplier to be able to customize the BIOS according to our needs so that it will fit well with our self-developed software and optical components. Of course, what’s most important is that Advantech’s DS-061 has passed our strict testing and inspections, and so far no problems have been reported in any of the kiosks we’ve installed in any of those retail locations around the continent, which proves that this is the kind of product that Provision needs—dependable, reliable, and trustworthy.”

Jason Zhang, product supervisor at Advantech, added that DS-061 is an ultra-slim and simple-to-install multi-

display that consumes little space in digital bulletin boards and interactive multimedia stations. It can be installed in various configurations, giving developers freedom to set up systems just the way they want. DS-061 comes with a double-core processor with HD image processing abilities and extra memory space as well as a speedy SSD, which means smoother and clearer image displays and better execution of interactive multimedia. As for the customized images and BIOS, Advantech caters to the demands of clients by adjusting BIOS functions beforehand, such as setting up a customized startup screen, making the system turn on by itself as soon as the power goes on, deleting unneeded functions, and optimizing the operating system.

Speedy Delivery and Comprehensive Services

Besides offering hardware and software that met the needs of Provision, rapid delivery was also a key point. Thornton explained, “Every time we sign a contract with a retailer, we are pledging to complete the installation of a certain number of devices within a specified time, which is why the delivery speed of upstream suppliers must be fast enough for us to meet our orders. Advantech does quite well in this respect.” As Jason told us, the products Provision ordered included lots of customized components, but the delivery time they allowed was less than half the time of the normal workflow. Therefore, without comprehensive preparation beforehand and an optimized operation process, it would definitely have been difficult for Advantech to have met such tight deadlines—yet they made it, and on time.

Advantech’s service is also a point that greatly pleased Thornton. “The Advantech technical team and local support are both proactively helping us. When the product was still in the development stage, no matter when we had questions, Advantech would reply straight away, and even sent its members to Provision headquarters in Chatsworth, California to facilitate discussion with us. This is why we feel collaboration with Advantech is so valuable.” He hoped that in the future such a collaborative relationship will continue, with Advantech providing its excellent products and wholehearted support. ■



L'Oréal Reinvigorates Brand Image with Digital Signage

By Long Lin with images provided by Unicross MSP
Interview with Jian Li, Marketing and Sales Director of Shanghai Unicross MSP Co., Ltd

The development of new digital signage technology and expansion of signage applications have transformed advertising methods in the retail industry. Consider the L'Oréal store in Shanghai, China, for example. Thirty-six 55-inch monitors were used to build a digital signage wall for presenting product advertisements, messages from the spokesperson, and landscape photographs that transform the wall into a picturesque view of bright green grass or a small bridge over a flowing stream. The provision of several tables and chairs in front of the wall creates a pleasant shopping environment that brings clerks and customers together and offers a positive shopping experience.

From Manual Advertising to Digitized Interaction

L'Oréal set complete digitalization, including the expansion of online channels, implementation of digital

marketing (i.e., advertisements on websites and social media), and introduction of digital signage digitalization strategy, as its development strategy.

Jian Li, marketing and sales director at Shanghai Unicross MSP Co., pointed out that L'Oréal previously used traditional poster light boxes to promote its brand image. However, with light boxes, changing the content of advertisements is extremely time-consuming. L'Oréal has hundreds of sales outlets in various cities throughout China. Manually updating every light box at every sales outlet each time an advertisement is updated would incur significant print, distribution, and logistic costs and hinder efficient management. Consequently, digital signage was adopted in an effort to enhance the operational efficiency of multi-channel communication.

L'Oréal began its digital signage deployment project in 2015. Currently, 30 to 40 brand counters, one sales

outlet, and the company's headquarters have all been equipped with digital signage.

Designing Unique and Targeted Digital Signage

The primary viewers of digital signage content at L'Oréal headquarters are employees and visitors. Thus, the content there typically introduces the facilities, products, advertisements, network evaluation information, and forum content. According to Li, the reason L'Oréal broadcasts network evaluation and forum content information is to provide employees with a clear understanding of the company's current and future development, and market valuation.

By contrast, the content broadcast at brand counters and sales outlets are aimed at consumers and typically comprise of product and shopping information. Decisions regarding monitor size and whether to deploy one or two displays, or build a video wall comprising several displays, must take the installation environment and conditions into account. For example, L'Oréal used several digital signage displays to decorate an unsightly column at one of its brand counters. The video wall comprised of several signage displays which necessitated the integration of multiple monitors. This not only smartened the counter space, but also enhanced brand image and message. Li explained that L'Oréal develops digital signage applications step by step, first establishing a communication platform with a single display, then integrating another monitor, before finally deploying several monitors as a video wall. This strategy reduces the risks and difficulties of implementation while also inspiring more innovative applications.

Overall, the greatest benefit of implementing digital signage for L'Oréal is the increased ability to attract and hold the attention of customers. Digital signage enables L'Oréal to promote its image as a fresh, energetic, and technologically advanced brand, distinguishing it from

other brands. Additionally, and more importantly, with digital signage, the broadcasted content can be updated promptly and simultaneously.

Efficient Digital Communication

Li also mentioned that actually several other consumer brand manufacturers have implemented similar digital signage systems. However, most of these systems comprise only hardware and lack a suitable management platform for integrating computers with media players. This means that any advertisements created at company headquarters may need to be resized and technicians may be required to update the display content, taking much longer time to complete. By contrast, L'Oréal's digital signage solution features professional digital signage monitors and players, as well as management software for system control. L'Oréal only needs to upload to the centralized management platform developed by Unicross. The content is then automatically adjusted to the monitor size, and then distributed using the centralized management platform.

Furthermore, L'Oréal has also replaced traditional computers and televisions with Advantech hardware specifically designed for digital signage. Li commented that the industrial-grade features of Advantech products, such as their fanless design, dust-resistant housing, and low noise operation, are particularly suitable for digital signage applications. L'Oréal aims to continue implementing digital signage at its brand counters and sales outlets around the world, using Advantech's sophisticated digital signage solution and Unicross centralized management platform to establish efficient digital communication channels. ■



Intelligent Fleet System for Precision Management

By M.D. Wang with images provided by Advantech

Interview with Angus Shih, Business Development Manager of Advantech Digital Logistics and Fleet Management

The Australian continent comprises 7.69 million square kilometers; its east-west width is four thousand kilometers. It takes 40 hours for a freight truck averaging 100 kilometers per hour to cross the continent. Such a vast area makes fleet management one of the primary tasks facing Australian surface shipping enterprises.

The requirements for fleet management are very different from those of general applications. Industrial grade hardware is just the first step; the real task is in providing design services suited to the customers' demands. Advantech started its cooperation with Sprightly Transport Solutions the Australian system service provider, who helped its customer introduce a fleet management system in 2014.

People-oriented Platform Design Puts Safety First

The customer for this project is the second-largest road freight enterprise in Australia. It has over 15 thousand vehicles, with 5 thousand in Australia. Because of their high need for logistics management, shipping companies introduced IT systems earlier than many other businesses.

This particular enterprise had introduced a logistics solution from another large IT manufacturer. But though that IT manufacturer offered full equipment, its products



and services provided little flexibility. The in-vehicle units were all independent rather than integrated. Moreover, because the back-end control system was located with the IT provider, the freight company had to apply for, and pay for, data retrieval every time it wanted to access it. Considering information

control, time and cost, the freight hauler started to build itself a new-generation fleet management system.

The customer specified that for their new fleet management system, safety must be a priority. They pointed out that even though every truck carried insurance, this only provided partial relief after an accident. Once an accident took place, losses typically exceeded insurance payouts, so if the IT system could help prevent accidents, insurance premiums would go down.

Building and Controlling Driving Behavior

In this case, Advantech and Sprightly Transport Solutions divided the workflow as follows. Sprightly Transport Solutions was in charge of front-end and back-end control systems and the design of software, while Advantech provided a suitable in-vehicle hardware solution. Advantech pointed out that most shipping enterprises install general-purpose fleet management equipment but in fact, general-purpose



devices do not fully meet customers' requirements since each logistics enterprise encounters unique challenges that are quite different. Customization is an important aspect in the design of any new-generation fleet management system and Advantech leveraged its years of experience to maximize the effectiveness for this Australian freight enterprise.

For this fleet management system, Advantech selected TREK-570 in-vehicle system particularly designed for fleet management, mated with either a 7-inch PWS-490 handheld terminal or TREK-303 in-vehicle smart display. The TREK-570 combines GPS, 4G, and Wi-Fi which reduces the in-vehicle device footprint, but also replaces the need for several separate units. So costs on the hardware end and the communication end are much improved.

TREK-570 helps manage driving behavior to assure driving safety, as well as recording journey and driving data while the vehicle is in motion. This helps management keep tabs on and control the working behavior of its drivers. For example, a high frequency of emergency braking, high speed sharp turns or vehicles idling for too long are indicators of poor driving practices. If and when such situations occur, the control center can remind drivers through 4G voice prompts and can record issues through an in-vehicle camera for later review.

The TREK-570 CAN Bus port connects with engine and brake sensors, as well as tire and body sensors, and the data is transmitted through 4G, giving the control center a full picture of vehicle operations. For example,

as the in-vehicle G-sensor sends vehicle tilt signals, the control center is alerted in case of an overturn and can contact the driver to report; and with GPS locations on its vehicles, dispatchers can send in any needed support.

For cargo management, two things are most important: one is punctuality; the other is protecting cargo from damage. Punctuality depends on the arrangement and dispatch of vehicle traffic flows. The traffic recording function of TREK-570 can accumulate data that back-end managers can use to program optimized traffic flows. GPS signals allow dispatchers to understand vehicle deployment at any time and control traffic risk factors; they also allow the enterprise to maintain the quality of operations by flexibly dispatching other vehicles to assist and support if an accident occurs.

In addition to supplying a tailored fleet management system, Advantech is also working on an integrated WMS (Warehouse Management System) for this same customer that will achieve seamless integration of logistics for fleets as well as warehouses. Advantech pointed out that the purpose of these systems is safety—safety for people, vehicles, and cargo. The TREK-570 IoT framework links people data, vehicle data, and cargo data together, for dynamic management and control via real-time displays. The data saved at the back end can then be analyzed to reduce risks before trouble occurs, and to program the best strategy including routes, maintenance, and fuel consumption. In other words, through safety, cost reduction, and improved efficiency, competitiveness is enhanced. ■

Stability, Flexibility, Ease of Use

Evolution of Austrian
In-Vehicle Management &
Logistics System





SPAR of Austria is one of the leading manufacturers in the European logistics industry. In recent years, SPAR started to establish a new generation of in-vehicle management systems with three main features: stability, wireless communication, and ease of use. Advantech-DLoG with its professional expertise in this field helped build the required high-quality in-vehicle management systems for SPAR.

By M.D. Wang with images provided by Advantech-DLoG and SPAR
Interview with Brian Hsieh, Business Development Manager of Advantech Digital Logistics and Fleet Management

In the past, logistics companies had little control over vehicles in the field due to the lack of communication equipment, but as technology has developed we now have IoT, Cloud Computing, and Big Data to assist us. Fleet management systems have also undergone huge changes in both depth of technology and breath of application, allowing companies like Austrian SPAR to introduce state of the art in-vehicle management and logistics systems.

Industrial Grade Design with Stability and Flexibility

SPAR is a world-renown logistics enterprise focused mainly on Europe. It owns several meat processing factories in Europe which deliver products throughout the European union using its own freight dispatching fleet. SPAR logistics vehicles have had IT devices installed for a long time. Initially, they used an in-car driving recorder similar to a flight recorder which was required in Europe by statute and these provided basic information for estimating a vehicle's state if accidents occur.

The hardware for the driving recorder adopted by SPAR used a consumer brand product integrated with Android software. However, the consumer product wasn't able to take into account the entire vehicle's usage. Conditions such as wide temperature between summer and winter meant the lack of air conditioning put the cargo at risk of damage. Considering the fact that equipment stability and reliability was a priority for SPAR, and that breakdowns happen frequently, SPAR had to again consider replacing the equipment with another in-vehicle system.

The main function of this replacement system was recording in-vehicle operations. Compared with the former setup, the new system performed better but still lacked networking features. Consequently, all of the inputs for dispatching tasks and software updates needed to be uploaded



and downloaded first through the company's computers, then manually back to the devices in the vehicles. This process was not ideal and caused scheduling problems. So eventually, SPAR approached Styletronic, an Austrian system integrator, and asked them for a third system; a new in-vehicle management and logistics system that was 100% reliable and stable, had wireless communication, and had user friendly interfaces.

SPAR's new in-vehicle management system was a customized solution which was co-developed by Styletronic and Advantech-DLoG. Styletronic took charge of the Windows interface software and system integration, while Advantech-DLoG provided the industrial grade in-vehicle devices plus hardware in interface integration.

Before starting the design, Advantech-DLoG studied SPAR's fleet characteristics and demands beforehand. Due to the size of Europe, and the large amounts of cargo in transit, trailers towed by trucks caused huge vibration problems for moving vehicles. Advantech-DLoG thus adopted its PWS-770 products to solve the problem and meet SPAR's demand for wireless transmitters and vehicle location trackers. Along with docking stations designed by its partner, RAM Mount, Advantech-DLoG built a solution that suited SPAR's 10-inch tablet computer for its in-vehicle system.

The new in-vehicle systems provided high stability. The vibration-proof features were particularly enhanced and designed for heavy vehicle usage authenticated to military grade MIL-STD-810G specification. This saved the devices from breakdowns caused by persistent jolting of the vehicles. For wireless communication, there was GPS, 3G, Wi-Fi, and GPS that served to locate the vehicles and the received location data could then be transmitted to the back-end operation control center via 3G. And if there were any dispatching

problems or accidents, the control center would have instant communication with the driver. The update of assigned tasks and operations before vehicles were dispatched was transmitted automatically through Wi-Fi. In order to meet SPAR's demands for an easy-to-use interface, Advantech-DLoG started with designs for common functions using a touchscreen monitor which could be operated instinctively and shortened the drivers' learning curve.

Seamless System Fully Controls Driving Behaviors

All vans and trucks in Europe are regulated by strict laws. For example, components like engines and brakes need to be installed with in-car sensors before the vehicles leave the factory. The data received by these sensors has to be transmitted and fully recorded by the in-vehicle system. If an accident happens, the company and the police can retrieve the data to clarify the situation and resolve any issues.

The new system needed to connect with the sensing network of the original devices so SPAR's new version in-vehicle system was retrofitted to all existing vehicles, and the linking and integration of the new and the original components was carefully implemented. Currently, the mainstream communication standard on the vehicles is CAN Bus. Advantech-DLoG PWS-770 also has such ports which can rapidly connect to the in-vehicle sensing system and show the recorded information on the in-vehicle display. The data not only allows the control center and the drivers to fully control and supervise the vehicles but also produces big data which can analyze driving behaviors, thereby fulfilling the function of driving behavior management, which in turn decreases the chances of risks and accidents.

Advantech-DLoG finished the installation of all 165 in-vehicle management and logistics systems for all of SPAR's ten-ton trucks early in 2014. These have been successfully operating for over a year and they not only operate well, but their stable and adaptable system also improves SPAR's operating efficiency, as well as reducing fuel cost by 15%. Next, SPAR's fleets at their two factories in Hungary and Italy will also gradually introduce the same in-vehicle management solution established by Advantech-DLoG and Styletronic to help give SPAR a competitive advantage. ■



TREK-688 Premium In-Vehicle Surveillance Platform 3.0

Powerful Performance for Enhanced Safety and Fleet Management



ADVANTECH

Enabling an Intelligent Planet

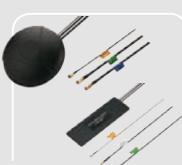
Superb CPU Performance Enables Intelligent Vehicle Management

TREK-688 features an Intel® Core™ i7-4650U processor, 8GB of DDR3L memory, and dual external HDD/SSD trays with key lock protection, reaching up to 200% computing power and 200% storage space that gives it the capabilities to handle complex, computation-intensive applications. From a management perspective, TREK-688 offers an intelligent platform for collecting vehicle diagnostics and driving data, such as engine speed, braking, and fuel level, allowing fleet managers to assess the vehicle status and conduct real-time driver behavior management.

Real-Time Monitoring and Video Surveillance Capabilities Enhance Driving Safety

TREK-688 is equipped with an embedded Stretch S7 video encoding chip for 30% performance upgrading that supports up to 16 analog camera channels and 8 audio inputs. With the inclusion of intelligent video analytics capabilities, TREK-688 can also be integrated with the following advanced driver assistance systems (ADAS) to provide valuable alerts and ensure driving safety at all times:

- Lane departure warning system
- Forward collision warning system
- Pedestrian detection system



3G/4G RP-SMA
Antenna



In-Vehicle Analog/
IP Camera



Tire Pressure
Monitoring System



MRM SDK
Mobile Resource Management
Software Development Kit



Voice Recognition
Technology



Configure to Order Services

Providing High-Quality IPC Products and Services

The 21st century is the age when e-business goes global. Advantech CTOS, which integrates products and services, allows the system integration business or the end customer to respond to the changing market demands through networked and convenient e-shopping, standardized assembly and manufacture, specialized integration testing, and globalized local delivery.

By Xiao-Jin Yu with images provided by Advantech

Interview with David Jen, Product Manager of Advantech Intelligent Systems Group;

Weiche Hung, Manager of Advantech CTOS ; Kiphone Lin, Business Director of Advantech Taiwan

Years ago, the founder of Microsoft, Bill Gates, said, “There will be the electronic commerce or no business in 21st century.” There might have been many people with reservations about his prediction back then, but the surprising online shopping record set by the Alibaba Group during last year’s November 11th Day of Singles adds weight to the fact that the 21st century is an age of e-business. With the popularity of the Internet, people from all walks of life are starting to provide customers or enterprises with a wide variety of e-business services by using information technology. And Advantech, the world’s leading manufacturer of industrial personal computers (IPCs), launched its Configure To Order Services (CTOS) ten years ago which features online ordering via e-shops, traceable assembly and manufacture, and global service locations.

Providing Fast, Full Support Services

David Jen, product manager of Advantech Intelligent Systems Group, stated, “Even though we have achieved market-share leadership of the global IPC and customers’ acknowledgement of product quality around the world, a good product requires good support services to consistently increase its market penetration. Accordingly, CTOS which integrates products and services, forms the cornerstone of Advantech’s high-quality IPC.”

David illustrated what he meant by service with four main points: customized specifications, assembly compatibility, short delivery time, and international recognition. “Based on the rich diversity of reference standards, Advantech can produce an IPC according to the specifications that its customers ask for and provide related tests that assure compatibility between the computer cases, printed circuit boards, electrical power supplies and components. The completed systems that Advantech produces meet the certification specifications of different countries such as BSMI in Taiwan, CCC in Mainland China, and CE in Europe. The whole process, from acknowledging orders to delivery, only takes three to five days, which allows customers to achieve fast time-to-market under conditions of reduced inventory or even zero inventory,” David said.

Rigorous SOP Satisfies Customer Needs

In order to provide the best possible services, Advantech takes the customer’s viewpoint to lay down rigorous but considerate Standard Operating Procedures (SOPs). For example, an exclusive web portal allows users to easily configure their required system specifications

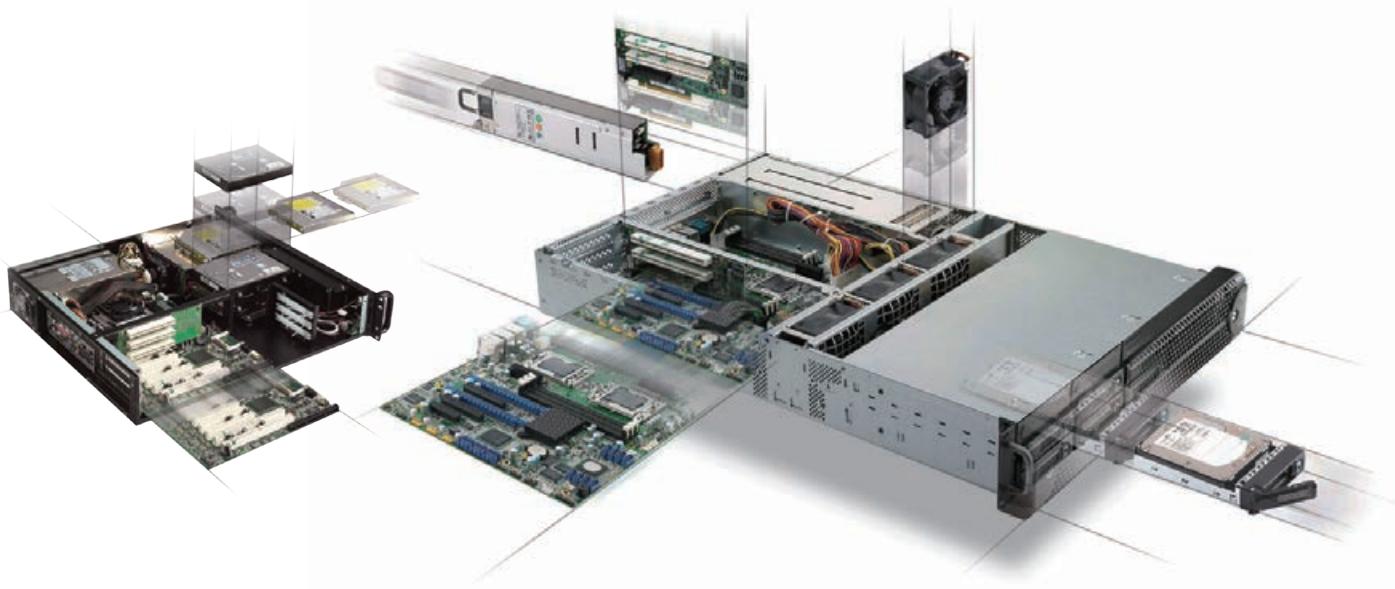
with drop-down menus. David points out, “It is hard to see a consumer or industrial computer manufacturer, even a world-renowned one, providing customized service like Advantech does. The main reason here is that we have enough product items for customers to freely pick and match while the customer needs are also satisfied.” At the same time, this website specially screens out unavailable and unsuitable products. So on the one hand, the website is more convenient for the customer to pick and match a wide variety of items, while on the other hand, it assures that selected chosen computer cases, printed circuit boards, electrical power supplies, and components can be integrated into systems that customers require.

Advantech has a wealth of research and development experience that goes back for years. It has transformed this professional knowledge into design guidelines and has established checklists for 140 large projects and 110 small items that clearly regulate details like connectors, connecting pins, slots, cable routing, and even such things as the height and placement of a capacitor. David also mentioned that the guidelines will continue to evolve and will be updated along with the launch of new products. He said, “Mechanical interference and cable routing are two important thresholds in assembling an IPC. Our guidelines and SOPs mean components and systems are the best they can be so that customers can get the utmost out of our products.”

Assembly Management and Rapid Delivery

In addition to maintaining the best IPC quality and consistency through a standardized assembly procedure, the manager of Advantech CTOS, Weiche Hung, further explained, “Because of the high-complexity of IPC configurations, Advantech has introduced all kinds of software and hardware on its production lines so as to establish the most rigorous procedure management. For example, we record information like materials used, assemblers, time of product assembly, and more, by scanning barcodes that enable every product to have a complete production resume. These full assembly records help Advantech to find related data from its production system in case the client end has problems in the future. And with these records, Advantech can clarify the causes and solve customer problems as soon as possible.”

In addition to quality, Advantech also provides a solution to delivery time, which customers care most about. Because most products that Advantech CTOS provides are reference standards, those products



required in small quantity but great variety can be assembled and finished within a week. Even for mass production, CTOS allows Advantech to shorten delivery times more than other manufacturers do. David said, "Take an order for 500 IPCs for example. The delivery of 500 IPCs for iPhone testing systems would usually take most manufacturers eight weeks to finish, but we normally fulfill this task within two weeks. Such a short delivery time is definitely unmatchable." Moreover, with ten CTOS service centers around the world, Advantech saves the customer trouble of producing at place A and then delivering to place B. Customers save on time and cost as well as having localized professional services.

Kiphone Lin, business director of Advantech Taiwan, explained the importance of CTOS in view of the overall economic situation, "After the global financial tsunami in 2008, there were many uncertainties hidden beneath the surface of the global economy. It made quick reactions the key for a system development manufacturer setting up its foothold in the market. Accordingly, the number of cases of reduced inventory and urgent purchases increased. But it is never easy to implement fast delivery and maintain the necessary product quality at the same time." Kiphone also pointed out that in a misguided attempt to cut costs, some integrators self-assemble products, resulting in product quality and performance failures. They not only disappoint their customers, but also ultimately ruin their own reputations. Instead, Advantech CTOS provides assured assembly and testing services at the production end to save integrators from the trouble of repeatedly testing and ensuring that product quality is maintained.

In fact, Advantech tests not only its own products, but also provides testing services that examine the compatibility and stability of attached interfaces cards and accessories. Kiphone gave an example, "There was a European system integrator/manufacturer that sold Advantech IPCs with its own I/O cards installed. Unfortunately the resulting system was much troubled by serious static interference between the IPC and the card. After Advantech CTOS tested and analyzed the product, not only was the problem of static interference solved, but assembly costs in Europe were saved as well, since Advantech took over the task of assembling systems."

CTOS Activates Business Competitiveness

Kiphone continued, "Providing CTOS actually means that Advantech needs to earn a reputation for offering excellent product quality as well as establishing a good brand image in service. I am confident in saying that most customers who have tried Advantech CTOS service never turn back to self-assembly." The sales figures confirm what Kiphone said. Currently, Advantech IPC sales acquired through CTOS are going up by 80% year on year.

Finally, Kiphone emphasized that technology with sustained development and renovation has changed work modes. He believes that Advantech CTOS enables the system integration business to better respond to changing market demands, and enhances global competitiveness through convenient networked e-shopping, standardized assembly and manufacture, specialized integration tests, and globalized local delivery. ■

Customize What You See with the WebAccess 8.1 Intelligent Dashboard



ADVANTECH

Enabling an Intelligent Planet

Advantech WebAccess

Browser-based HMI/SCADA Software

Advantech WebAccess is a 100% web-based HMI/SCADA software with excellent networking capability. It is also a HTML5 Business Intelligent Dashboard which can be viewed from anywhere on any HTML5 compatible browser and provides developers with the tools to design their own widgets without programming. WebAccess 8.1 has an integrated video system which can be used to perform real time monitoring, track video playback and check video with alarm mechanism and SignalR open interface that is used to push data to the dashboard from the WebAccess core the moment that changes on the system occur, thereby speeding up the time it takes to respond to an issue.

Feature Highlights



Widget Builder



Dashboard Management



Integration with
WebAccess/IVS



Open Interface



Sandy Chen

Director of Embedded Stackable Board Computer & Embedded Box Computer, Advantech Taiwan

Around 9+ years ago, I joined ECG and started as an EBX embedded board PM, then a SOM PM for 1 year, and now I'm in charge of ESBC and ARK product lines. A PM in Advantech is very challenging but also a very exciting experience. PMs needs to think comprehensively from inside out and outside in. You need to open your mind to learn new things, with the flexibility to overcome unexpected issues; but the biggest lesson I've learnt is that solid execution is necessary because, "the devil is in the detail". Best of all, can always discover your true talent here such as in sales, marketing, or as a strategy planning expert for example. I've learned such a lot here and really appreciate Advantech for this opportunity. I'm proud that Advantech is a leading global brand and that I work here, and considering the long term competition we face, my team and I try our best to deliver the most innovative products to service our clients and grow with the company. This year alone, my team generated around \$USD 100M – and with our passion for work, we expect to contribute even more in the future!

In my private life I practice yoga and do aerobic exercise regularly to release the pressure because it's a little bit high!

Hi all, my name is Israel Lopez, I'm a Computer System Analyst at the Advantech Milpitas office. I started in the Mexico office at the beginning of 2012 and have been working for the company for almost 4 years now. I was actually part of the team who started that office. I remember back then we didn't even have any chairs, desks, or any other office supplies. I remember very vividly that there was a big earthquake the first day we opened the office, that was the beginning of many more to come! I recently moved to the US to work at the Milpitas office and I have been working here for the last year. Even though it has been tough for me to adjust and get acquainted to a different country, culture, and language, I've met so many great people here in California who have helped me to make this process much easier, thank you so much Candace, Noel, Jennifer, Dustin, and Gladys, the list goes on...

I love to spend time with one of the most important people in my life, her name is Veronica and she also works for Advantech. We have been together for almost three years now. We love to travel and discover new places and things together but we also like to chill out, watch a movie or even go to the supermarket. Overall my journey with Advantech has been great fun. Thanks for taking the time to read this.



Israel Lopez

**Computer System Analyst
Advantech America**



Rajiv Doolub

Embedded FAE
Advantech Europe

Hello, my name is Rajiv, and I help the UK sales team with their technical enquiries such that they can make the best use of their time dealing with problems and building their relationship with customers. I joined Advantech in 2015 as the UK FAE in the Embedded Core Division. Working with the R&D on a pro-active basis helps me to broaden my knowledge and expertise in different areas.

I am very grateful for everything that Advantech has given me so far. Moreover, I am constantly learning and continue to increase my knowledge, trying to keep pace with the rapidly evolving IoT era.

Advantech having recently acquired companies like GPEG, D-Log and B+B SmartWorx, is showing its commitment and vision in enabling and investing in our intelligent planet. We believe that 50 billion devices will be connected to the Internet by 2020, these are staggering numbers and our integrated IoT cloud based software services and hardware will need to meet these future requirements.

I am originally from Mauritius. I came to the UK to pursue my further studies. After completing my master degree from University of Greenwich, I worked for Intel Corporation for nearly 7 years where I developed my skills across different Intel products and technologies. My research interests include IoT, cloud computing, intelligent systems, industrial connectivity and wireless sensing applications.

In order to be a more efficient colleague, I look forward working with every team member. Advantech is an avenue for me to meet many people. I wish you all loads of success and keep on delivering good work. If you are in the UK, it will be a pleasure to get to know you.

‘Design is not just what it looks like and feels like. Design is how it works. – Steve Jobs’

Hello, my name is Tommy and I'm in charge of China iSys Sales force PSM team. I joined Advantech in July 2004, and over the past 12 years of my Advantech career, we've sold \$USD 170M worth of IPC products. We only had two PSMs and one IPC product line in the year 2004, but that has grown to 12 PSMs who handle over 10 product lines today. We sell IPCs and solutions to all major sectors in transportation such as: Flight Information Display Systems (FIDS) in airports, and control systems for high speed rail, military and more. With over 50% IPC market share in China, followed our “IPC+N” strategy to hit new targets. IPC means general purpose platform like servers, boards and box computers. “N” means customers can leverage our branding to order other Advantech components and peripherals, like monitors, flash modules and add on cards, cloud services and much more.

Our goal for new the Industrial IoT organization is to bundle I/O and Comm. cards to create new demand for our customers who have very specific I/O demands.



Tommy Chen

Intelligent System PSM
Advantech China



Advantech Wins 7th Best Taiwan Global Brand with a 19% Increase in Brand Value



Advantech was ranked 7th place in the 2015 Best Taiwan Global Brand Award with a combined brand value of USD\$386 million and a 19% growth in brand value compared to the previous year (the highest growth rate among all Taiwanese brands).

Research for the Best Taiwan Global Brand Award is conducted by Taiwan's Ministry of Economic Affairs and Interbrand, the world's leading brand consultancy. Over the years, Advantech has promoted its brand globally and received several Taiwan Global Brand Awards; this is the first time that Advantech has ranked among the top 7.

Advantech focuses on IoT industry development and embraces the statement, "Enabling an Intelligent Planet" as its corporate vision. To realize this vision, Advantech developed its WISE-PaaS (Platform as a Service) integrated platform solution that provides partners with the infrastructure for building, deploying, and managing IoT applications and services. Advantech utilizes Taiwan's advanced ICT background and continues collaborating with worldwide partners to create more innovative value-added solutions to enhance Taiwan's reputation around the world. ■



Revolutionary Industrial PC for IoT Era



ADVANTECH

Enabling an Intelligent Planet

New Generation of Industrial PC With Innovative i-Modules for Flexible Expansion

The MIC-7000 Series comprises compact modularized systems that support the innovative i-Module for flexible expansion to satisfy diverse application requirements. The MIC-7000 Series can be widely employed for factory and machine automation. The fanless and ruggedized design ensures that these systems can withstand the demands of harsh industrial environments. Furthermore, comprehensive modularized options and the ease of configuration effectively reduce lead times for Advantech's configure-to-order service (CTOS).



Modularized

- i-Module support for flexible expansion
- CTOS service to shorten lead times



Ruggedized

- Compact and fanless design
- Wide-range DC voltage and temperature support



Customized

- 20 standard PCIe lanes for custom IO and expansion
- Fast development cycles and simple validation process



Performance maximized

- Various processor support to meet your requirements

Partnering for Smart City & IoT Solutions

驅動智慧城市創新 共建物聯產業典範

Industrial Cloud
& Cloud Networks

Private Cloud

iConnectivity

Transportation IoT Devices Computer On Modules Video and RFID

Power & Energy Environmental & Facility Monitoring Embedded Software

iBuilding/BEMS

Industrial HMI

Embedded Design-in Services

Intelligent Display

Intelligent Systems

iRetail & Hospitality

iHospital

Image & Video Processing

Machine Automation WebAccess+ Digital Healthcare Digital Logistics Industrial PCs

ADVANTECH

Enabling an Intelligent Planet

Partnering for Smart City and IoT Solutions

Advantech holds “Enabling an Intelligent Planet” as our corporate vision, and “Partnering for Smart City & IoT Solutions” is our concrete goal; we will continue collaborating with various partners to build new paradigms in each vertical field. Advantech will consistently follow our LITA (Altruistic) spirit, positively cooperating with partners and engaging in innovation to develop every Smart City opportunities.

研華科技 推動智慧城市創新 共建物聯產業典範

研華以「智能地球的推手」作為企業願景，將「驅動智慧城市創新」作為具體目標，並與各產業夥伴協同合作深耕各垂直領域，共建各式物聯產業典範，期望能持續以利他的精神，積極創新並與夥伴共創智慧城市的每一個可能。