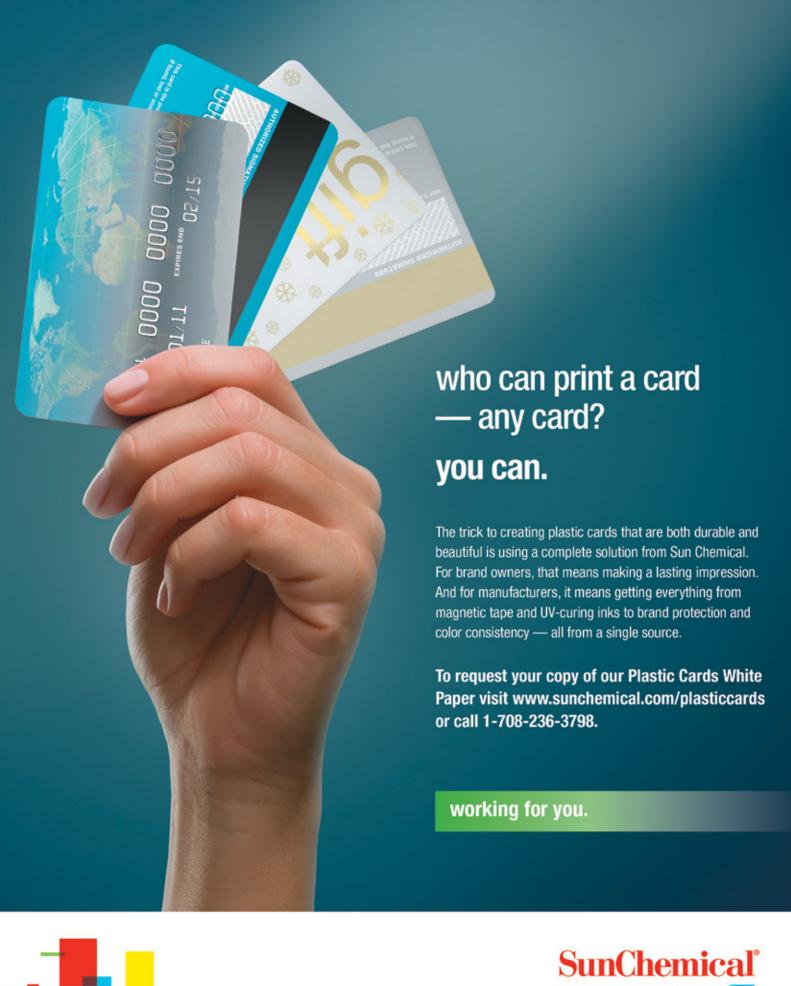


TOP SIX CARD MANUFACTURING TRENDS FOR 2017 AND BEYOND











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Derive More Value from ICMA in 2017

By Jeffrey E. Barnhart

ICMA is ushering in the new year with deep gratitude for our past, present and future. Our association is stronger than ever thanks to you, our members, and your continuing support.

The value we place on ICMA is directly proportionate to your involvement, which is why each year we strive to offer you more ways to participate.

We welcome your attendance at our annual events, where you can lecture, exhibit or simply network, listen and learn. We also offer opportunities for you to author educational articles for the magazine or present webinars to showcase the value you bring to the card manufacturing and personalization industry.

The greatest unification of our industry takes place at ICMA's Card Manufacturing and Personalization EXPO. We're looking forward to seeing everyone March 27-30 at the Renaissance Orlando at SeaWorld in Orlando, Florida. The theme of this year's event is "Adapting to the Wave of Technology" and we will explore both secure and non-secure topics to help you improve and grow your business into the future.

Whether it's through our educational or networking opportunities, this year we hope you resolve to step up your participation in ICMA. There's so much value for you and the association as a whole to gain.

from the ICMA staff



ICMA Offers New Online Training Portal

By Jennifer Kohlhepp

ICMA members now have access to an abundance of card industry information at their fingertips at our new online training portal at www.icmatraining.com.

ICMA encourages member companies to use this new educational resource hub to train their staff. Access is granted to any ICMA member company employee who enters their name, company and email address into the submission form portion of the website. Once verified, employees can train at their own pace and convenience.

The new website features card industry webinars, CITE training, card manufacturing and personalization tutorials, issuer-focused card procurement training, industry standards reports and the Advanced Card Education (ACE) certification program.

ICMA is currently seeking supplier tutorials about the main processes in card manufacturing, such as lamination, die-cutting and more. To propose a tutorial, email info@icma.com.

Otherwise, start learning at www.icmatraining.com.



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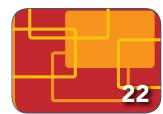
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FEBRUARY 2017

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| By Jennifer Kohlhepp, ICMA, Managing Editor

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While cost will always be an important driver of the card manufacturing and personalization process, making the card now more "personal" is becoming equally important as all issuers try for the "top-of-wallet" purchasing choice position.

| By Dave Tushie, Magellen Consulting, ICMA Standards and Technical Representative

22 CPI Card Group: World's Most ACE-Designated Company

ICMA's ACE designation program sets the bar for excellence in industry expertise among card manufacturing and personalization professionals. CPI Card Group has the most ACE designations in the world with a total of 92.

By Jennifer Kohlhepp, ICMA,
Managing Editor



These suppliers have committed the highest level of support to ICMA activities in 2017.

Diamond Level

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Platinum Level



Gold Level









6 Top Six Card Manufacturing Trends for 2017 and Beyond

Six of the industry's 12 vertical markets offer the most opportunities and growth potential in 2017 and beyond. These trends will directly affect how card manufacturers and personalizers conduct business today and will shape the future of the card industry.

By Al Vrancart, ICMA Founder Emeritus and Industry Advisor

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TOP SIX CARD MANUFACTURING TRENDS FOR 2017 AND REVINE



By Al Vrancart, Founder Emeritus and Industry Advisor, ICMA

The International Card Manufacturers Association (ICMA) serves the global card industry, which in 2016 manufactured an estimated 35.4 billion cards annually, deriving revenue of \$19.8 billion, and personalized and fulfilled many of these cards for an additional service value of almost \$7.6 billion for a combined card industry revenue value of \$27.4 billion.

The card manufacturing industry is constantly evolving. Six of the industry's 12 vertical markets offer the most opportunities and growth potential in 2017 and beyond. These trends will directly affect how card manufacturers and personalizers conduct business today and will shape the future of the card industry.

Consider these top six opportunity and growth trends:

GOVERNMENT/HEALTH: This market segment has a diverse array of card applications, including national IDs, driver licenses, passport cards, social benefits and public and private health care cards. New card technologies, government imposed ID standards and security and fraud issues and concerns are driving growth in this segment. These cards are becoming more technologically sophisticated and expensive. Globally, card manufacturers produced 3.2 billion cards, with \$3.2 billion revenue in this segment in 2016, exhibiting an 8.6 percent unit increase and a 17.1 percent revenue increase year-over-year (YOY), according to ICMA's 2016 Global Market Statistics Report.

SIM: The ubiquitous mobile phone is a saturated market with more than 7 billion mobile phones and billions of other devices in use today. However, unit growth continues with the global conversion to smart phones and proliferation of other SIM-enabled devices. This market is driven by consumer demand for frequent phone upgrades to receive new phone features and designer handset styles. There is growth in most global regions

and especially in the less developed countries where smart phones conveniently enable transactions by the large unbanked population. Also, declining chip prices have eroded SIM card prices. There were 5.4 billion SIM cards manufactured globally in 2016, creating \$6.5 billion in revenue. There was a 2.2 percent unit increase and a 7.3 percent revenue decrease YOY, according to ICMA's report.

FINANCIAL: This global market for secure financial cards, which includes debit, credit, prepaid and ATM, continues to experience moderate growth driven by EMV conversion, contactless and dual-interface technology, the shift to debit/prepaid. including open loop gift cards, rebranding from bank/issuer merger activity and stellar growth in the Asia Pacific region, particularly from India and China. The United States continues its massive launch of EMV chip cards. ICMA's report estimates that in 2016 there were 5.5 billion secure financial cards manufactured globally, deriving \$5.2 billion in revenue for card manufacturers, revealing a 2.8 percent unit increase and a 7.2 percent revenue increase YOY. The delay in launching other secure payment alternatives is fueling card growth, but will ultimately begin to impact growth in future years.

TRANSPORTATION: A global trend continues of transit systems moving away from paper-based magnetic tickets to contactless smart cards. These cards are manufactured for the transit system and issued as closed loop cards for frequent users. There is also a trend of using contactless secure financial cards like Visa and MasterCard in an open loop system, particularly to meet the needs of infrequent users. There are also transit systems that now offer mobile payment applications that could impact future card growth. ICMA's report estimates that globally there were 2.4 billion closed loop transportation cards manufactured in 2016, deriving \$1.2 billion in revenue, amounting to an 8.3 percent unit increase and 13.2 percent revenue increase YOY.

GIFT CARDS: This market continues with moderate growth as closed loop gift cards become more sophisticated in design and have become a traditional mainstay item for the gift giving holiday season. North America and the U.K. have become mature saturated regional markets and are beginning to see some slight unit declines while Europe and Asia Pacific are now embracing gift cards with exceptional growth. ICMA's report estimates that on a global

continued on page 8

Top Six Trends for 2017, continued from page 7

basis there were 4.3 billion closed loop gift cards manufactured in 2016, representing \$325 million in revenue for a 4.1 percent unit increase and a 0.9 percent revenue increase YOY. Virtual or digital gift cards are becoming more popular, particularly with millennials. However, they are not expected to dramatically curtail demand for plastic gift cards.

ACCESS CONTROL: This market segment has an array of applications, including cards for entry into secure or private areas like hotel rooms, employee entrances and gated communities. Increased market demand for more security is driving growth for contactless chip-enabled access control cards. There were 1.4 billion cards

manufactured in 2016, creating \$762 million in revenue for card manufacturers, representing an 8.6 percent unit increase and a 16.5 percent revenue increase YOY, according to ICMA's latest reports.

If you require any additional information, visit the ICMA website at www.icma.com where members have free access to the complete ICMA Global Card Manufacturing Report and/or the ICMA Personalization and Fulfillment Report. Non-members can purchase global reports, which exhibit statistical and trend information for 12 vertical markets across five regional geographic markets, including North America, Europe, Asia Pacific, Latin America and the Middle East and Africa.

About the Author: Al Vrancart founded ICMA in 1990 and previously served as president/CEO of NBS and Qualteq. His guidance and counsel have helped ICMA and other industry associations implement effective and successful growth initiatives. A frequent presenter/speaker at card manufacturing industry events, he particularly focuses on both regional and global industry market statistics and metrics. He is ICMA's founder emeritus and industry advisor.



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ADAPTING TO THE WAVE OF TECHNOLOGY



The Card Industry Will Once Again Unite at the 2017 ICMA EXPO

ICMA invites you to join leading card manufacturers, personalizers, suppliers and issuers in gaining regional and global perspectives on card industry trends, technological advances, growth opportunities and improving manufacturing and personalization at the 2017 Card Manufacturing and Personalization EXPO.

As the industry's only card production-focused event, the EXPO serves as the perfect place to learn more about and network with potential clients, customers and colleagues. This year, the EXPO will take place March 27-30 at the Renaissance Orlando at SeaWorld in Orlando, Florida.

The theme of this year's event is "Adapting to the Wave of Technology." ICMA's educational programming will explore both secure and non-secure topics to help you improve and grow your business into the future. The topics that will be covered include powered cards, wearables, laser marking, what issuers need to know, third-party gift card marketspace, using aluminum and other metals in financial and gift cards and much more.



2017 will mark the second time that ICMA will co-locate the EXPO with the Smart Card Alliance (SCA)'s Payments Summit. Co-locating these events provides attendees with a broader perspective and expanded opportunities in the payment industry. The combined educational content will range from technologies used in the core manufacturing and personalization of a card to the rapid evolution in secure payments involving EMV chip cards, mobile wallets and transportation payments. Although separately led, all educational tracks will be open to all attendees.

ICMA and SCA will come together for joint receptions in the exhibit hall Monday and Tuesday nights. ICMA will also host its own networking session on Tuesday.

We look forward to seeing you at the EXPO.

Register today for discounted rates. To register or for more information, visit www.icmaexpo.com.

2017 Keynote Speaker



ICMA is excited to announce its 2017 EXPO keynote speaker is Daniel Altman, an economist and internationally bestselling author who created the Baseline Profitability Index, a tool for assessing the attractiveness of investing in markets around the world that is published by Foreign Policy magazine. He will provide an overall look at the global economy and discuss how short-term events that seem disconnected (Trump, Brexit and nationalism) may have long-term impacts on it.

Altman serves as an adjunct associate professor of economics at New York University's Stern School of Business, where he teaches long-term macroeconomic forecasting and sports analytics. He is a member of the Council on Foreign Relations and the expert advisory board at Dalberg Global Development Advisors.

He previously wrote economic commentary on the staffs of The Economist, The International Herald Tribune and The New York Times, where he was also one of the youngest-ever members of the editorial board. In between stints as a journalist, he was an economic advisor in the British government. He now writes a global economics column as senior editor for economics at Foreign Policy magazine and he publishes articles on soccer analytics online for The New Yorker.

Born in Connecticut, Altman received his doctorate in economics from Harvard University. He has lived and worked on four continents and is a citizen of the United States, Canada and the United Kingdom.





Renaissance Orlando at SeaWorld Orlando, Florida, USA

The 2017 venue is located in Orlando, right across from SeaWorld Orlando. Enjoy the park across the street or take a trolley along I-Drive for more restaurants and shopping.

ICMA/SCA Group Rate: \$225

Book your room by Feb 27 by calling 800-327-6677 for the guaranteed group rate, or go to www.icmaexpo.com to book online.



PROGRAM & SCHEDULE OF EVENTS

MONDAY. MARCH 27

8:30am **ICMA Golf Outing**

(Seperate Registration Required)

12:00-6:00pm **ICMA ACE-M Training**

1:00-5:00pm **EXHIBIT SET-UP**

1:00-5:00pm REGISTRATION OPEN

JOINT WELCOME RECEPTION IN 5:00-6:30pm

EXHIBIT HALL.

TUESDAY, MARCH 28

7:30-8:30am **BREAKFAST IN EXHIBIT HALL**

8:30-10:30am **Keynote Session:**

Global Markets Outlook—What

You Need to Know to Plan Ahead

Dan Altman

10:30-11:00am Break

The State of the Card Industry... 11:00-12:15pm

Concerns & Opportunities

12:15-1:45pm LUNCH IN EXHIBIT HALL

Laser Marking for All Manufacturers 1:45-3:15pm

What Your Issuers Need to Know

about Card Manufacturing

3:15-4:00pm Break

Precious Metals and More...New 4:00-5:30pm

Materials in Card Manufacturing

What You Need to Know about the Third Party Gift Card Marketspace

5:30-6:30pm JOINT RECEPTION IN EXHIBIT HALL

7:00-9:00pm **ICMA Networking Reception**

WEDNESDAY, MARCH 29

8:00-8:45am BREAKFAST IN EXHIBIT HALL

8:45 - 10:15am The Élan Awards of Excellence

Updates in MasterCard's CQM

Requirements V2.16

10:15-10:45am **BREAK IN EXHIBIT HALL**

10:45am-12:00pm Gift Card Packaging-

Newest Trends and More

The 411 on Healthcare/ **Government ID Cards**

LUNCH IN EXHIBIT HALL 12:00-1:30pm

1:00-6:00pm **ICMA ACE-P TRAINING**

1:30-2:45pm Effectively Designing and

Introducing New Trends in

Card Design

Mastercard Rebrand:

A Perfect Storm

BREAK IN EXHIBIT HALL 2:45-3:30pm

3:30-5:30pm Powered Cards: Common Applications,

Status Component & Manufacturing

Technology Wearables-What You

Need to Know

6:30-9:00pm Optional Off-site Dinner

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Please visit www.icmaexpo.com for current details of topics. For more information on the SCA Payments Summit agenda, please visit www.scapayments.com. Both ICMA and SCA educational sessions are open to all attendees allowing you the ability to craft your experience.

Program & Schedule of Events, continued from page 11

THURSDAY, MARCH 30

8:00 - 8:45am **BREAKFAST**

8:45-10:15am **TECHNOLOGY SPOTLIGHT**

TRACK

10:15-10:45am **BREAK**

TECHNOLOGY SPOTLIGHT 10:45am-12:00pm

TRACK

ACE-A TRAINING 12:00-6:00pm

1:00-4:00pm ICMA ACE-M, -P Exam

FRIDAY, MARCH 31

8:00-11:00am ICMA ACE-A Exam





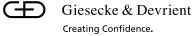


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AN AWARDS OF EXCELLENCE

Join ICMA on Wednesday, March 29 as we announce the winners of the 2017 Élan Awards of Excellence.

Every year, the prestigious ICMA Élan Awards cast a spotlight on the best of the best in the global card industry, honoring world-class achievements in both card design and technological innovation.

Widely acknowledged as the most renowned platform for card excellence, the coveted Élan Awards distinguish ICMA manufacturer, supplier and personalization/ fulfillment members before peers and customers as industry leaders. Winners receive high-profile recognition and visibility.

All entry forms and cards must be received at the ICMA office by March 8. See the June issue of Card Manufacturing for the announcement of this year's winners. For more information, contact Diane Webster-Sweeney at dwebster@icma.com or call 609-799-4900.



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EXPO Showcase: Meet the Exhibitors

The following companies have secured a booth as of press time:



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Apollo Colours NA Inc. is an industry leader in high quality screen and offset inks for the plastic card industry for over 30 years. These inks include the latest technology in water based pearls, metallic, special effects, coatings and adhesives along with UV and solvent products. We offer in-house colour matching and technical support for both offset and screen in our recently expanded facilities in Markham. Our experienced staff are here to provide you with superior support and products with expedited turnaround times. Contact us at apollona@bellnet.ca.



Atlantic Zeiser's PERSOMASTER is the ideal solution for EMV-based credit, debit and prepaid financial cards, leveraging field-proven technology now fully approved by all major payment schemes. It utilizes high-speed drop-on-demand (DoD) inkjet imaging to produce large volumes of durable personalized cards at low cost. PERSOMASTER also offers great flexibility for card design creativity and is modular and scalable to expand as your business grows. CARDLINE VERSA COLOR is a 4-color DoD production solution for personalizing cards with attention-getting creative elements, such as multiple colors, UV coatings, and other effects. It is available in customer-specific configurations for all personalization technologies, transport modules, magnetic encoding, inkjet systems, UV coating, cameras and labelers. www.atlanticzeiser.com



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Cardmatix designs and manufactures machines to produce and test smart cards of all types: contact, contact-less, and dual interface. GSM: Re-pluggable 2FF, 3FF, 4FF combi-SIM as well as Quarter-Card 4-in-1 SIM cards. Cardmatix is well known for milling, embedding, and punch machines to make all kinds of SIM card types. Dual-Interface Cards: Cardmatix's direct-solder method is patented and used to produce over 1 billion dual interface cards over the past 5 years. Test Equipment: Equip your quality lab with our extensive line of test equipment specifically designed for bank card certification requirements. www.cardmatix.com



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CPI Card Group is a leading provider in payment card production and related services, offering a single source for credit, debit and prepaid debit cards including EMV chip, personalization, instant issuance, fulfillment and mobile payment services. With more than 20 years of experience in the payments market and as a trusted partner to financial institutions, CPI's solid reputation of product consistency, quality and outstanding customer service supports our position as a leader in the market. Serving our customers from ten locations throughout the United States, Canada and the United Kingdom, we have the largest network of high security facilities in North America, each of which is certified by one or more of the payment brands: Visa, MasterCard, American Express, Discover and Interac in Canada. Learn more at www.cpicardgroup.com.



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Since 1995 Emperor Technology has specialized in smart card personalization equipment design and manufacture in Shenzhen (China). Current product offering includes Thermal, Laser, Inkjet and LED-cured high speed DOD card and passport graphic and data personalization equipment. Markets served are government, banking, access control, healthcare, mass transit and the promotional industry. Recently released products include 3D desktop card printer, eID & ePassport desktop printers and laminators, self-service kiosks for eID, ePassport and banking cards. EmperorTech serves the global card and passport printing industry with a complete range of card and passport counters and is currently looking for additional resellers. EmperorTech Americas is based in Dallas, Texas. http://emperortech.com, http://emperortech.us



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Folienwerk Wolfen



Folienwerk Wolfen GmbH has been producing smart-ecofilms for all kind of smart cards and security documents since 1994. The company's success is based on the fact that its team of engineers and employees all have years of experience in research and development, contributing their technical know-how in the manufacturing of films as Tritan'" PETG, PEC, PC and PLA. This wealth of experience enables the company to develop and produce individual customized films for most different exigencies. FWG's films are high-value materials with optimum product parameters, which are used in an increasing number of security projects. www.smart-ecofilms.com



Gans Ink and Supply Company was founded by Bob Gans in 1950. Gans Ink is a family-owned American business. We have a reputation for fast service, quality products, taking on difficult projects, and pioneering specialty products and services. We carry a full line of conventional and UV inks for plastic substrates, UV LED inks for plastic substrates, security inks, clean-up solvents and fountain solutions, conventional and UV-compatible blankets, environmentally-friendly formulas, and UV coatings. We also offer inkjet printing solutions, a full line of media, printers, and tech support. www.gansink.com



Giesecke & Devrient

Creating Confidence.

Giesecke & Devrient works behind the screens to secure today's connected society and envision the needs of tomorrow. We design, build and operate innovative solutions that secure mobile life. As a worldwide leader in Mobile Security solutions, we have unparalleled experience in the emerging mobile payment market and offer the full range of payment options from card to cloud. We leverage decades of experience to deliver best-in-class Secure Elements and remote credential lifecycle management, plus OTA, HCE, digital wallets, tokenization, EMV and TSM services. In the emerging IoT and Smart Wearables market, G&D partners with both established enterprise players and innovative start-ups to incorporate the highest level of security in IoT communications and transactions. Get to know us at www.gi-de.com.



Graph-Tech USA (GTUS®) is a leader in card personalization and packaging with solutions for all of your needs, from entry-level to high-end commercial production. GTUS® provides powerful and versatile System Controllers and Digital Printing Solutions for product tracking, verification, magnetic encoding, RFID encoding and high-speed Drop-on-Demand printing on cards, labels, packaging, mail, fulfillment, lottery and many other turnkey solutions. GTUS® leads the way with our flagship products including: TotalMag, Roadrunner II, eZ-Inkjet® 600 dpi high-resolution DOD printers, eZ-Mag Magnetic Encoding, Foil+Jet – Inline Cold Foil Printing in Gold and Silver; and eZID – RFID Encoding. GTUS®'s number one priority is to provide our customers with outstanding customer service by providing the best support for your inkjet and processes. Visit www.graphtech.us or call 772-569-0066 for more information.



Guangzhou Mingsen Technologies Co., Ltd, established in 1998, is engaged in the development of smart card making equipment and related solution. A complete range of new industry equipment and personalized service for financial IC card, banking card, social security card, GSM card as well as other smart card can be provided. In over a decade of development, Mingsen has built up a hardware and software system for financial card equipment, www.mingsen.com.cn



HP is reinventing print to keep it relevant, profitable and growing for the graphics industry. HP Indigo and HP Inkjet technologies enable this with digital solutions for virtually any print job or application. HP believes printing is not just a task, but a way of creating something unique so that brands can reinvent their own offering and the way they engage with their own audiences. This is made possible with the industry's widest digital portfolio of presses, printers, workflow solutions and services across HP Indigo, HP PageWide Web Press, HP PageWide XL, HP DesignJet, HP Latex, HP Scitex and HP Services. HP products open up a world of possibilities for commercial printing, photo, labels and packaging, corrugated, publishing, high-volume production, sign & display, merchandising and all types of large format printing.

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HPE SECURITY - Data Security drives leadership in data-centric security and encryption solutions. With over 80 patents and 51 years of expertise we protect the world's largest brands and neutralize breach impact by securing sensitive data at rest, in use and in motion. Our solutions provide advanced encryption, tokenization and key management that protect sensitive data across enterprise applications, data processing IT, cloud, payments ecosystems, mission critical transactions, storage, and big data platforms. HPE SECURITY - Data Security solves one of the industry's biggest challenges: simplifying the protection of sensitive data in even the most complex use cases, www.hpe.com/software/DataSecurity



ICC Solutions Limited is a global leader in the provision of EMV test tools and services and offers the complete set of qualified test suites for payment brand accreditation of contact and contactless EMV terminals. Our tools are used worldwide enabling development, quality assurance and regression testing addition to formal merchant certifications. Working with Vantiv in the USA, ICC Solutions developed VIABLE — an innovative and highly efficient closed-loop solution designed to simplify the EMV enablement, testing and validation process. VIABLE places merchants in full control of their EMV certification activities. Please visit www.iccsolutions.com or email info@iccsolutions.com for more information.

IIPENTIV

Identiv, Inc. is the leading global player in physical security and secure identification. Identiv's products, software, systems, and services address the markets for physical and logical access control and a wide range of RFID-enabled applications. Customers in the government, enterprise, consumer, education, healthcare, and transportation sectors rely on Identiv's access and identification solutions. Identiv's mission is to secure the connected physical world: from perimeter to desktop access, and from the world of physical things to the Internet of Everything. Find out more at identiv.com.

Information Packaging

Information Packaging is a US manufacturer of specialty sleeves and envelopes for hotel key cards, Identification Cards, credit/debit cards, and retail/gift/loyalty cards. Envelopes can be custom printed and manufactured using paper, Tyvek, and ArmorShield®. ArmorShield® is a proprietary alloy-based material, developed by Information Packaging to provide a barrier to the radio frequency signals necessary to communicate with contactless cards. ArmorShield® sleeves complement electronic security measures by providing an additional layer of protection against skimming and unauthorized or unknown access. Stop by ICMA Expo Booth 207 for your free Identity Theft Protection kit and discuss your card packaging requirements. www.infopkg.com



Innovative Card Systems is a world leading manufacturer of modular card mailing / inserting and card personalization systems. All our systems are self-developed and manufactured in Germany. Innovative Card Systems is serving government agencies, card manufacturers, mobile phone operators and service bureaus around the globe. Our proven, patented technologies with its unique and individual solutions helps our customers to improve their workflow. With our outstanding price performance ratio we are able to offer systems for all kind of budgets. All our machines offer a full industrial production process and are able to keep pace with future technologies. www.innovative-card.de



ITW Brand Identity Division's HoloLam Plus® full-face metallic and holographic laminates are featured in some of the world's most distinctive and prestigious financial transaction cards. HoloLam Plus is available on colored and white cores, and in a range of formats, including Classic for EMV chip cards; Premium for contactless and dual interface cards; and Advantage for contactless, dual interface and EMV chip cards that require an ESD solution. For assistance designing cards with HoloLam Plus, try our proprietary Card Design Suite™ of tools, created especially for card manufacturers, issuers, banks and designers. Contact us today at info@itwbi.com to learn more.



Klöckner Pentaplast is a global leader in providing packaging, printing and specialty solutions serving the card, pharmaceutical, medical device, food and beverage markets, among others. Klöckner Pentaplast offers the most complete range of vinyl, polyester, ABS, HIPS, and foil films for core, split core, overlay, foil sheets, heat stable, extreme environment, dual interface and magnetic stripe films card applications. Pentacard® films are ideal for laminated and unlaminated secure, non-secure, GSM and ID and e-government cards. kp offers several unique added-value products for the card industry including magnetic stripe to overlay. www.kpfilms.com

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KURZ is a leading manufacturer of stamping and security foils and supplies a wide range of products, including standard and customized magnetic tape, signature panel, personalization and stamping foils, holographic and enhanced optically variable devices (OVD's). KURZ foils are also used widely used for primary and secondary packaging, such as electronic devices, appliances, cosmetics, and automotive. KURZ's application technology, magnetic foils, and holograms provide effective and attractive brand name protection, as well as increased security for businesses everywhere. In addition to foils, KURZ offers a wide range of other products such as stamping tools and machines. www.kurzusa.com



Lake Image Systems is a world leader in the design, development and manufacture of imaging and scanning technologies for the world's printing, labelling and packaging industries. By reading and processing the variable data now commonplace on many printed items our systems inspect, verify, track and report on millions of documents, printed pieces, plastic cards and packages daily using codes such as OCR, barcodes, 2D codes, QR codes and many more. With over 3000 installations worldwide, our products have given data traceability and variable print integrity confidence to our customers for 20 years, optimizing their processes, enhancing their product quality and increasing their profitability. With manufacturing in Europe and the USA, Lake Image Systems provides turnkey integrity solutions which identify defective print, generate detailed audit trail reports and feeds MIS systems with realtime production information. www.lakeimage.com



LAUFFER is a global leader in the development, manufacture and sale of hydraulic presses for the following applications: Presses for the processing of plastic materials. Presses for the processing of thermosetting materials and rotary table machines. Laminating presses and systems incl. peripheral equipment for the laminating of multilayer PC-Boards, plastic cards and other laminates. Hydraulic presses and fully automatic systems for the metalworking industry (punching and sizing presses). Presses and automated press systems with peripheral equipment for powder compacting. Presses and systems for molding systems for the encapsulation of electronic and electro-technical parts and components. www.lauffer.de



Mathias Die Company/Qualitek, located in South St. Paul, MN, continues to be an industry leading tooling and converting solutions provider after nearly 50 years. Mathias Die's tooling experts provide engineering and consulting support for all plastic, paper, and metal card cutting applications. Our full spectrum of card tooling ranks among the best on the market and can be designed for any press options available. In addition, our full-service tool shop sharpens and repairs any manufacturers card dies, www.mathias-die.com



Matica Technologies is a global vendor of card personalization solutions, marketed and supported through fully-owned subsidiaries in Italy, Germany, France, Mexico, Singapore, China, the USA and the UAE. The Group offers a full range of products including high performance, midrange and mailing systems, retransfer and direct to card desktop printers, laser solutions, which are used around the world for card applications in bank-ing, government, access control, ID and transportation. The Group develops and manufactures its own IP and products at the main R&D and manufacturing locations in Italy. www.maticatech.com

MOLECULUM

For over 20 years, MOLECULUM's team members have been researching, developing and manufacturing light management solutions for advanced products in a variety of high reliability markets. We have the capability to develop solutions at the molecular level, guaranteeing the most efficient performance without relying on currently available technology. Our research and development center is located in Southern California. MOLECULUM offers a broad range of products and services from molecular development, organic and inor-ganic synthesis, dye formulations, inks, raw and finished materials. The technologies we offer are generally used in specialized markets such as Military and Defense, Security, Medical and Automotive/Industrial www.moleculum.com



The Mühlbauer Group is introducing its new all-in-one system for the production of long-life dual interface cards as well as standard ID-1 smart cards. Mühlbauer is a global leader for the supply of high efficient production technologies for the smart card, ePassport, semiconductor and RFID industries. With more than 80,000 systems in the market, Mühlbauer has the best proven reputation and performance history in these market segments. As an owner-driven and German-based company, the fulfillment of our clients' needs is our 1st priority and motivation. Our more than 30 own locations and service hubs guarantee excellent local support and customer care. www.muehlbauer.de



Oasys Technologies is a leading manufacturer of highly innovative plastic card and secure ID document production machinery. All equipment being designed and manufactured in our purpose built UK facility. The company provides equipment for the 'Primary' production stages of: tapelaying, collation, lamination, card punching, guillotining, not stamping and card testing. Recent developments include a compact range of col-lation machines, an efficient single sheet lamination unit, and a small scale Polycarbonate Punching facility. The extensive Oasys machinery range caters for low-volume, minimum-investment startup activities through to high speed fully automated production lines. Oasys machines incorporate the latest in technology, are built to match the needs of modern production techniques, and are fully supported globally, by a first-class team through Europe, USA and Asia. www.oasys.uk.com



OpSec is a global leader in securing, protecting and enhancing our customers' brands, service and revenue. Our Transaction Security Hologram business serves major payment brands including Visa, American Express. Diners Club, Discover and MasterCard. With multiple approved manufacturing locations, OpSec provides unparalleled quality, lead times, service, and support. Our product range has been recently enhanced with our OpSec Precision™ DeMet holograms for the Visa hologram market. OpSec is also a leading integrator of solutions to governments for ID documents such as driver licenses and passports. We now support a variety of applications including holograms for polycarbonate documents. Learn more: www.opsecsecurity.com



Pittsburgh Embossing Services (PES) has been in business for over 27 years and is considered the leading global expert in refurbishment and support services for Datacard card personalization equipment. PES offers refurbished Datacard systems (9000, MX6000, Maxsys etc.), individual modules, security consulting, service, training and EMV Software. PES has developed an extensive parts program to provide a new PES brand of parts for the Datacard 9000 / MX6000 systems. PES brand parts will keep the Datacard 9000/7000 systems running beyond their "End of Life." PES is also a USA dealer for Matica Technologies new card personalization equipment and services. www.PittsburghEmbossing.com



Plockmatic short run card inserting system - the Reflex Card Mailing System is the first system to automate hand insertion of card mailing and short run jobs. The system has the only feeder capable of feeding inter-mixed carriers with 1 to 4 cards affixed with no thickness adjustments. The system is easy to use, provides fast job change over and high integrity piece tracking. The system has been proven with a top card issuer and has demonstrated reduced cost per piece, improved quality & integrity and a less than 24 month ROI. Contact - Mark Van Gorp (919) 730-8687.



Printcolor is your Swiss partner for innovative security inks and solutions for financial cards and government documents. Our spectraCARD product portfolio contains IR blocking inks for transparent card design, solvent and UV based printing inks for polycarbonate and PVC as well as various security elements such as optical shifting inks and anti-scratch coatings. With nearly 85 years of practical knowledge, Printcolor is a highly experienced partner when it comes to developing new product concepts, from the initial prototype to serial production with uniform quality. For more information visit our website at: www.printcolor.swiss

Pure Metal Cards

Pure Metal Cards provides the finest quality metal business cards and metal membership cards tailored to meet the specific and ever-changing needs of our customers. We help you make an impact. Our design team can also assist you to create your unique metal business cards, membership cards, gift or loyalty cards, NFC/ RFID chips or VIP cards. We are here to help you create unforgettable metal cards. Pure Metal Cards offers one of the fastest production times available anywhere. Orders typically take 7-9 working days to produce and 2 days to ship. Based in Asia's business hub, Hong Kong, Pure Metal Cards sells safely and securely worldwide, offering simple, all-inclusive pricing coupled with great customer service. www.PureMetalCards.com



Q-Card Company is one of the most trusted names in the transaction and ID markets. Our broad range of expertise in EMV, chip and magstripe ensure your products and systems are reliable. Q-Card products include EMV tools and hardware; magstripe analyzers; CQM and ISO test tools such as dynamic bend and torsion, impact and opacity testers; and accessories such as magstripe test cards, secondary reference cards and magnetic developers. Q-Card Laboratories is also a leading resource for third-party independent laboratory testing for EMV, smart card, NFC for mobile, durability testing, product development, training and consulting. Visit us online at www.q-card.com



Safran Identity & Security is a global leader in identity and security solutions for an increasingly digital and connected world. Deploying solutions in more than 100 countries, the company employs more than 8,700 people in 57 countries and generated revenues of nearly €1.9 billion in 2015. Backed by more than 40 years of experience in biometrics. Safran develops innovative technologies for a wide range of markets and applications for people, governments and business. Our solutions manage identities, secure transactions and contribute to public security protecting borders, for safer and easier everyday lives. As a leading player in the North American payment market, we offer financial institutions an innovative portfolio ranging from classic smart card technologies to cutting-edge mobile payment and e-banking services as well as online payment security. For more information: www.safran-identity-security.com.



Schreiner PrinTrust product highingnts are nign security rin protection labels for card mailings and MasterCard® PayPass™ certified NFC-Stickers. PIN Safe Labels protect secret codes from unauthorized access: heat, cold, solvents, or strongly focused light beams stand no chance. A double-layered high security label system with integrated die-cutting, void-effect, and individual brand hologram ensure maximum security for card mailers. Our NFC-Sticker is extremely flat and flexible and can be easily attached to any mobile phone. It combines the advantages of contactless cards with comfort of full mobile NFC-implementations for applications like payment, loyalty programs and access control. Additionally, we offer a broad range of security labels and RFID products. www.schreiner-printrust.com



SES RFID Solutions is an industry leader in ultra-thin RFID and LED technology for use in card manufacturing. Utilizing patented technology the company is able to offer solutions for innovative card designs that incorporate multi-colored lighting and energy harvesting circuitry, as well as RFID circuitry for loyalty, gift and membership cards. For more details please visit www.sesrfid.com



Shanghai RSID Solutions aims to be a world-class supplier from China for card manufacturing machines. We provide turnkey solutions for smart card and RFID product manufacturing, personalization and related ID projects. These solutions serve in various applications: Plastic/contact/contact/tess/dual interface card production plants, personalization bureaus, banks, public transportation, ID card and security projects, etc. This year at the 2016 ICMA EXPO, we will present our star products including: card counter, lamination machine, inlay tester, hologram hot stamping machine, auto card punching machine, card issuance machine, magnetic card encoding & UV printing perso system, card sorting machine, chip module initialization and pre-perso machine, card surface inspection. www.RSID-solutions.com



SICPA, a leading global provider of ink-based security solutions and integrated systems, provides anti-counterfeiting, anti-alteration and authentication technologies. SICPA works with card manufacturers/printers to develop a range of customized solutions, offering multi-level authentication and protection in response to specific needs of various card segments and card applications. SICPA inks offer a variety of colors and unique properties, adaptable to all card substrates. They are highly resistant, offering excellent adhesion and lamination compatibility. For cards with basic security demands to those requiring high-level security, SICPA inks add a new dimension to anti-fraud and anti-tampering protection. Contact us: securityinks@sicpa.com

SMARTRAC connect things

SMARTRAC is the global leader of RFID technology in the production of both ready-made and customized products and services. The company's portfolio is used in a wide array of applications such as contactless payment, access control, electronic identification (eID) documents, public transport, and many more. Being a certified manufacturer for the most important credit card companies, SMARTRAC delivers highest quality products and best-in-class solutions for contactless payment to its international customer base. www.smartrac-group.com



Spartanics, founded in 1963, is a manufacturer of registration die cutting equipment located in Rolling Meadows, Illinois, USA. Over the years, Spartanics has developed a solid reputation of leadership in the insurance, financial, loyalty and identification card manufacturing industry. Spartics products are amongst the top quality card manufacturing equipment in the world, including: card counters, card inspection systems, card punching systems, hot stamping machines and lamination systems. In addition to their card manufacturing expertise, Spartanics specializes in building custom laser cutting systems, hard tool and steel rule die cutting systems, digital and screen printing lines. www.spartanics.com.



Sun Chemical and its parent company, DIC, can provide a complete solution for credit and laminated card printing with a full line of inks, coatings, magnetic tapes and adhesives, in addition to color-matching solutions, anti-counterfeiting brand protection products and silver/graphite conductive inks for the growing EMV market. Sun Chemical's solutions offer multiple customization options while still maintaining the high level of quality for which Sun Chemical is known. By taking advantage of all the solutions Sun Chemical and DIC can offer together, customers can gain extra value. To learn more about Sun Chemical's full range of solutions for plastic cards, call 708-236-3798 or visit www.sunchemical.com/plasticcards.



Superior Tape & Label Inc. (STL) provides high-quality, customized tape and label solutions to the card printing and personalization industries. From their industry leading scratch-off labels to their superior performing activation and attaching labels, STL delivers fully customized label solutions. STL also provides Design, Engineering, R&D, testing and tracking services. Their team of professionals can solve virtually any issue, and their adhesive, coatings and substrates can be modified to meet your specific needs. If you have a hard to please customer, a unique label or adhesive need, or you simply require a label that works the way you want it to. you can rely on STL to deliver, www.superlabel.com



Tianjin Boyuan New Materials Co., Ltd was established in 1997. We are the first high-tech company who professionally engaged in card making materials research, development and industralization in China. "Being professional and reliable supplier for all card manufacturers" is our tenet. Our main products include: Coated Digital Press PVC for HP Indigo, MGI and Xerox; PVC/PC/PETG Coated Overlay; Coated PET for Offset Printing and HP Indigo Digital Printing; PVC Core Stock and Film; Water Base Laminating Varnish; Hot Melt Adhesive Tape for Chip Cards. Boyuan in China, Boyuan for the World! www.boyuanmaterials.com



Verisoft is an agile software company with 30 years on experience on EMV card personalization and Self Service Kiosks with offices in USA, Canada, UK, UAE and Turkey. Verisoft have solutions from Card Issuance of plastic magstripe and chip cards to EFT/POS and ATM Switching systems, Gift Cards and Loyalty systems to Prepaid, Debit and Credit Card Management Systems, EFT/POS software development to Apple IOS and Android mobile Apps. Verisoft is always adapting to the evolving requirements of this dynamic sector which started with magnetic stripe cards and evolved to EMV contact and contactless cards and now NFC HCE solutions. www.verisoft.com



With 40 years of experience in development, manufacturing and distribution of screen printing inks, VFP lnk Technologies provides many technological solutions worldwide with products specifically made for the laminated plastic card market including AQUACARD, UVICARD and IR BLOCKER. UVICARD, our UV screen ink, VOC free, accepts overprinting, lamination process (peel test ISO 10373) and embossing operation. AQUACARD our UV water-based ink allows to reduce the ink deposit, to increase the peel test value and make easier the color matching as an alternative to the water based ink. BR3001 IR Blocking ink is the perfect solution for designers and manufacturers to produce a transparent transaction card. VFP IR Blocking ink is a result of years of Research and Development to create an innovative formula, with components strictly selected to be the most transparent and efficient ink of this market. VFP Ink Technologies' constant striving for complete customer satisfaction led it to obtain ISO 9001-2000 certification. Committed to saving and protecting the environment, we refuse to use glycol ethers and heavy metal based pigments in our ink formulation. www.vfp-ink.com



YMJ main products include: Contact, Contactless and Dual Interface Smart Card Production Line, as well Non-standard Automatic Equipment, etc. Lots of our equipment has won state patents, CE certification and software certification, which reached the national advanced levels. Our company provides affordable and satisfactory products to customers with innovative technology and high-quality efficient service. Gain the international competition with outstanding cost performance. Visit our website: www.ymjkj.com



NEW TRENDS IN CARD PERSONALIZATION



David Tushie - Magellan Consulting, Inc., ICMA Standards and Technical Representative

Just a few years ago, all of the financial cards in our wallets looked very similar, with the account and personal information embossed on the front and a security code (CVV2) indented on the rear of the cards. Transactions were completed using the data on the machine-readable chip and magnetic stripe. Gift and loyalty cards had encoded magnetic stripes and sometimes barcodes to register the cards at the point of sale. Secure ID cards were often printed using dye-sublimation technology that accommodated instant issuance and enabled the addition of the cardholder's photo on the card.

At least three driving forces can be identified that caused card personalizers to look in other directions:

- Marketing operations at the card issuers wanted more options on the "look" of the card.
- New card technologies and applications had an impact on the kind and location of the personalization data on the card.
- New card personalization data that can be better arranged to support the use of cards for online and telephone purchases.

One of the first indicators of change was the agreement by the major brands that embossing on financial cards was no longer a requirement. Eye-catching reflective foil layers, more commonly used for gift cards, added sparkle to the front of the financial cards without the distraction of the embossed data.

The financial card brands' counterfeit fraud liability shift and the Target hack ignited the deployment of the EMV payment application in the U.S. Card personalization now included the encoding of the EMV chip, a significant increase in the complexity of the card issuance process. After the first round of EMV cards were issued, a new initiative that stresses speed and convenience at the point of sale (POS) is spurring an additional, long-term transition to contactless cards. With a reduced emphasis on embossing, the use of thermal or Drop on Demand (DoD) printing technology greatly adds flexibility to the look of these new cards. Machine readability for transaction automation now includes electronic components even though magnetic stripes will remain active on cards for the foreseeable future.

For secure ID cards, including driver licenses, laser technology and the inclusion of polycarbonate card materials for some applications have further diverged the personalization landscape. Lasers enable ghost photo images, embossinglike tactile feel, MLI and CLI lenticular images, all serving as anti-fraud features to the card. Some issues of polycarbonate's susceptibility to fracture from contact with finger print oils are being discussed in the ISO standards organizations. Other plastic materials have been developed to provide increased card service life through the use of composite layers. Contactless and "interactive" cards, discussed below, all require multi-layer constructions. Often these layers will be made from dissimilar card materials. It will be necessary to account for the differing characteristics of these materials as these new card products are personalized.

Online transactions require cardholders to enter their account number, expiration date and security code into the merchant's form to complete the transaction. Visa's new Quick Read data layout places these three data elements on the upper right corner of the card front when it is held in the vertical orientation. Similarly, Discover's new IT card format has all the cardholder information printed on the back of the card.

While the industry absorbs these card personalization changes, two new initiatives are also underway. First is the "interactive card" that contains batteries, displays and electronic components. This is a totally new card construction where multiple layers are required to perform the functions needed by the multiple applications. Applications, for instance, include one-time passwords for improved cardholder security in card-not-present transactions. Handling these cards requires additional care during the personalization process so not to endanger the internal electronic components. These cards can also be viewed as alternatives or backup cards to the mobile wallets being developed as the next major payment vehicle. It provides a view of the features likely to survive the development process and become important production quantity financial cards.

Second, thermal or DoD digital print technology has enabled cards printed on sheets to have different card images printed on them. This on-demand printing can produce these cards efficiently in small quantities that were not possible using large-scale litho or screen printers. A new generation of digital printers can print up to 48 cards

per sheet for improved throughput. It is also possible to print the personalization data on the card while still in sheets and after the card graphic is completed. Magnetic stripe and chip encoding would be a post-printing process, either as an add-on to the digital printer or as a separate pre-mailing step in the overall card manufacturing process.

While cost will always be an important driver of the card manufacturing and personalization process, making the card now more "personal" is becoming equally important as all issuers try for the "top-of-wallet" purchasing choice position. Binding the card to the cardholder through new features that stress convenience can help issuers achieve that goal in their cardholder's purchase

selection process.

CPI Card Group: World's Most ACE-Designated Company

ICMA's Advanced Card Education (ACE) designation program sets the bar for excellence in industry expertise among card manufacturing and personalization professionals.

ICMA offers three types of ACE designations—ACE-Advanced Technologies (A), ACE-Manufacturing (M) and ACE-Personalization (P). The ACE designation is achieved through a test requiring in-depth knowledge of credit card manufacturing, design and processes. ACE designations are available to professionals who work for an ICMA member and have at least two years of industry experience.

CPI Card Group has the most ACE designations in the world, with a total of 92 designations. The company's dedication to serving its customers and meeting the highest standards in card manufacturing for all of its locations is reflected not only in the total number of ACE designations among its employees, but particularly in the recent round of designations earned by its UK-based employees.

"We will continue to encourage our team members to challenge themselves, grow their skills and knowledge and achieve industry recognition moving forward," said Barry Mosteller, CPI's director of engineering and quality. Mosteller was recently appointed vice president of ICMA's board of directors, expanding his leadership role in the organization after serving on the board for five years.

"As shifting dynamics continue to impact all corners of our industry—including card manufacturers, personalizers, issuers and suppliers—we're seeing increased demand for advanced education from both professionals and their employers," added Mosteller. "I am honored to be serving the industry and supporting ICMA's efforts as vice president of the board as we navigate this changing environment."

In 2016, ICMA launched the ACE-A designation, which evaluates skills and knowledge in advanced materials and card construction, card technologies, security technologies and environmental initiatives.

The ACE-M designation requires skills and knowledge of card manufacturing professionals in areas including PVC/plastics, inks, adhesives, printing, collation, lamination, die-cutting, and standards/testing.

The ACE-P designation evaluates the skills and knowledge of card personalization and fulfillment professionals in eight major categories: printing and barcodes, magnetic stripe encoding, embossing, laser engraving, smart card encoding, financial transaction card data, fulfillment and standards/testing.

Mosteller, who has earned all three ACE designations, said receiving those recognitions has been a validating experience.

"It's nice to have independent validation of your personal knowledge in the card industry," Mosteller said. "When taking the exams, you can also identify holes or weaknesses in your personal knowledge to focus on."

ACE designations also strengthen a company's reputation.

"The ACE designations show that a company is knowledgeable and has a dedicated staff, which creates pride in a company," Mosteller said.

Megan Anthony Bogard, CPI's senior designer, has achieved ACE-M designation.

"With ACE-M you have a really good understanding about the finished product," Bogard said. "Design is not just graphics, it's how the entire card is put together. It's about inks and lamination coming together into a finished product. ACE-M gives you a full understanding of what can go right and what can go wrong, which is really important in card design."

Achieving ACE-M designation has helped Bogard's career in several ways.

"It is important to be aware of what cards go through to be created and what impact that has on the end card design, the finished product and how it's used in the field," Bogard said. "ACE is a great thing that opened my eyes to areas other than card design and it's always beneficial to learn more."

When asked about her advice for others considering taking the ACE exams, Bogard said, "It's definitely something, if you have opportunity to do it, that you shouldn't miss out on."

Working for the most ACE-designated company in the world feels "awesome," Bogard said.

"CPI has such focus and I feel grateful to work for a company that has been able to support me with educational opportunities like ACE," Bogard said.

"When ICMA started offering dedicated on-site ACE training and exams, it eliminated the need to fly people around to ICMA events and opened the door for CPI to participate in a group environment," Mosteller said. "When experienced people in the industry come on-site and do the training, it's more economical for a company."

When asked how CPI feels about being the world's most ACEdesignated company, Mosteller said, "It's not something we strived for in the beginning, but it happened because CPI is always looking for ways to enhance employee knowledge and give them the opportunity for advancement. When the opportunity arose for the training and exams to come on-site, it just happened because of the value it brings."

ICMA offers ACE training seminars at its various events, as well as on-site for members who desire a more tailored approach for their employees.

Each ACE designation is developed as a standalone designation and does not build upon, nor require, other designations as a precedent designation. Consequently, card professionals can build upon their ACE-M designation with the ACE-P designation, as well as the ACE-A designation. Or alternatively, those who specialize in personalization and fulfillment segments of the industry can seek ACE-P designation separately.

ICMA ACE enrollees are 95 percent more likely to pass the ACE exam if they have taken Dave Tushie's interactive training session. He uses the ACE exam manual to teach and answer questions. As demand for experts in the card manufacturing industry grows, continual training and expertise remain crucial for individuals and companies to stay ahead of the competition.

For more information about ACE designation and registering for a training session or exam, visit www.icma.com.

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Thank you to all our vendors and suppliers for their continued partnership and support.



ACE News, continued from page 23

ICMA Announces New ACE Designees

ICMA is excited to announce that eight individuals from CPI Card Group-Indiana recently passed the ACE-Manufacturing (M) exam. Through hard work and dedication, the individuals below are now ACE-M designees.



Iennifer Nieno



Tanya Householder



Kim Anderson



Tanya Topp



Heather Bischoff



Scott Thomas



Christine Angel



Tyler Mills



For more information about the ACE training sessions and exams, visit icma.com or call 609-799-4900.

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- · Strong ROI Payback as short as 8 months
- · Based on the mailing industry's top selling short run inserter



Come see us at ICMA Expo Booth 217 Or contact Mark Van Gorp mark.vangorp@plockmatic.se (919) 730-8687



Bürkle Transfers CBM to Otto Künnecke

Bürkle GmbH and Otto Künnecke GmbH announced that they have entered into a transfer of manufacturing of the Bürkle Card Body Fabrication line, which includes card blanking (punch), tape laying and collation equipment, from Bürkle to Otto Künnecke. The two firms have confirmed that Otto Künnecke will take over the design, production and development of tape laying, collation, card punching and strip cutting technology, allowing Bürkle to concentrate on its core business of lamination systems.

For more information, visit www.burkleamerica.com or www.kuennecke.com.

Cardtek, DC Payments Partner to **Introduce Mobile Services Manager**

Cardtek, a payment technologies provider, will launch Mobile Services Manager, a secure mobile payments platform, in partnership with DC Payments, a fullservice provider of payment processing and ATM managed solutions. This contactless payment solution, integrated with leading open wallets, enables Canadian residents to make debit expenditures from a mobile phone without presenting a bank payment card and will be available by the end of the year.

For more information, visit www.cardtek.com.

CIM Introduces New Desktop Card Printer

CIM now offers the Sunlight Saturn card printer, a fast, versatile, yet affordable card printer that can be configured with



a variety of available options, such as magnetic stripe encoding, smart chip encoding, contactless encoding to enable personalization of any type of card, from the simplest to the most complex. Its compact footprint and optional two input hoppers makes it one of the most versatile card printers in the market.

Sunlight Saturn prints in high 300 dpi resolution, edge-to-edge. As a result of extensive research and development, as well as attention to detail in the manufacturing process, the image reproduction is crisp and vivid both in color and monochrome

For more information, visit www.cimitaly.com.

CPI Card Group Sees Adoption of Card@Once Instant Issuance

CPI Card Group announced that more than 1,100 banks and credit unions are actively leveraging its SaaS-based Card@Once instant issuance solution to successfully provide in-branch, instant issuance of EMV-enabled debit and credit cards to their cardholders. This year alone, Card@Once users have printed more than 2.6 million cards through more than 5,100 printers operating within 4,888 individual branch locations. Through its network of Card@Once printers, CPI Card Group is seeing increased industry adoption of EMV and half of all cards printed on-demand are EMVenabled

For more information, visit www.cpicardgroup.com.

Discover Extends U.S. Automated Fuel Dispenser EMV Fraud Liability Shift Date

Discover Global Network, which includes Discover Network, PULSE and Diners Club International, announced that it is extending the U.S. EMV fraud

liability shift date for automated fuel dispensers to be chip-enabled from October 2017 to October 2020.

For more information, visit www.discovernetwork.com.

DuPont Teijin Films Introduces Clear UV Stable Polyester Films

DuPont Teijin Films (DTF) is introducing several super clear Ultra Violet (UV) stable polyester films that are designed to retain mechanical and optical properties in applications involving UV exposure. These films are specifically designed to block UV transmission and they are the most recent additions to the MELINEX TCH family of low haze and low oligomer bloom films that are designed for the flexible electronics, displays, photovoltaic, lighting and label markets.

For more information, visit www.dupontteijinfilms.com.

Entrust Datacard Offers Label Printing and Affixing Module

Entrust Datacard has released the Color Label Printing Module for the Datacard MX8100, MX6100 Card Issuance Systems and the Datacard DX5100 Card Delivery System. The all-in-one label printing and affixing module, powered by Memjet inkjet technology, prints full-color, edgeto-edge, high resolution images, text and graphics on blank white label stock and affixes customized labels to cards inline. In addition to allowing flexibility in marketing messages, the module helps to increase operational efficiency by removing the need for pre-printed labels. Labels are personalized based on cardholder information and an integrated vision tracking system ensures cardto-label integrity.

For more information, visit www.entrustdatacard.com.

First Data Rolls Out Clover in the U.K.

First Data has launched Clover Mini and Clover Mobile in the U.K. The devices use cutting-edge technology that enables consumers to enter their PIN on a tabletbased touchscreen device that is EMVcompliant.

For more information, visit www.firstdata.com.

Folienwerk Wolfen Manufactures Smart Foils

Folienwerk Wolfen manufactures highperformance foils from Eastman Tritan copolyester, which makes it possible to produce especially durable smart cards of high quality for governments, public transport authorities, banks and other clients. The utilization of Tritan is sustainable and brings financial benefits because of the above-average durability of the foils that are produced from this copolyester. Sustainability is certainly given when a smart card maintains its full functionality for 10 years and does not have to be replaced a second or a third time, due to premature wear and tear.

For more information, visit www.folienwerk-wolfen.de.

Gemalto to Acquire 3M's Identity **Management Business**

Gemalto has entered into agreements to acquire 3M's Identity Management Business for \$850 million. 3M's Identity Management Business is comprised of 3M Cogent Inc., which provides a full spectrum of biometric solutions with a focus in civil identification, border control and law enforcement, and 3M's Document Reader and Secure Materials Businesses.

For more information, visit www.gemalto.com.

Giesecke & Devrient Delivers Solution for BMW Group

Giesecke & Devrient (G&D) is supplying the German premium manufacturer BMW Group with eSIM management solutions for its "Connected Drive Services." The new generation of SIM cards is no longer tied to a specific country or mobile network operator. Instead of installing various SIM cards in the communications electronics of every vehicle, the G&D solution offers the flexibility of supporting multiple countries and mobile network operators with a single SIM.

The eSIM management system is based on a secure virtual identity that is only activated after the vehicle is shipped. The SIM is now securely soldered into the vehicle's communications electronics in the form of an M2M SIM module. G&D's eSIM management solution allows a local subscription to be downloaded if required.

For more information, visit www.gi-de.com.

Air Show Selects Goldpac as Ticketing **Solution Provider**

China's payment solutions provider, Goldpac Group Limited, announced that Goldpac has been chosen as the exclusive anti-counterfeiting ticketing solution supplier by the 2016 China International Aviation and Aerospace Exhibition. Tackling fraud and ticket counterfeiting via smart chip and encryption technologies, this customized solution provides a safer and stronger information safeguard for the China Air Show. Additionally, this solution shortens the waiting time for visitors and improves service levels and efficiency, delivering a better visitor experience for thousands of participants.

For more information, visit www.goldpac.com.

Information Packaging Expands Equipment Base

Information Packaging Corp. (IPC) continues to experience growth of its plastic card sleeve line. IPC recently installed additional die cutting and folding equipment increasing its monthly manufacturing capacity to more than 20 million sleeves/envelopes/carriers per month. The new equipment also has the functionality to tip a card sleeve onto carrier, as well as insert a card into a holder during manufacturing.

For more information, visit www.infopkg.com.

Matica Adds Standalone Engraving System

Matica Technologies AG has a new standalone laser engraving system, the LES8000, which brings an industrial-style power to the desktop. Matica's LES8000 laser engraving system supports government security professionals responsible for safeguarding national identity management. LES8000 starts with 400dpi printing, but goes up to a 1600dpi high resolution and generates clear gray scale for ID pictures. LES8000 is compact, light and scalable. Its single wire IP connectivity allows easy installation and operation. For those needing to manage several types of card stock or uninterrupted production, Matica's LES8000 laser engraver can be configured with up to four card feeders, increasing the capacity to 1,400 cards. Its parallel card processing maximizes production throughput (encoding, engraving and laminating).

For more information, visit www.maticatech.com.

Q-Card Offers New Verification Gauges

Q-Card's Card Feature Verification Gauges are designed for fast and accurate

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verification of card features and are made of virtually unbreakable Lexan material. They are precision-etched and tinted for maximum readability. With stainless card locator pins, they are serialized and include a protective storage case. Custom versions available.

For more information, visit www.q-card.com.

Safran and IDEX Partner for First Mass **Deployable Biometric Smart Cards**

Safran Identity & Security and IDEX ASA, announced significant progress toward commercializing the world's first ISO standard form factor smart cards with a touch fingerprint sensor. A pilot card series has successfully passed testing. Safran provides the biometric card

software, security expertise and manufacturing capabilities. IDEX supplies the customized fingerprint sensor. The result is a significant breakthrough for the smart card industry in the form of a polymer touch sensor integrated into a standard thickness card that can be replicated efficiently in existing card production facilities. Moreover, the cards work with all existing standard POS (point of sales) terminals, foregoing the need of merchants to upgrade their systems.

For more information, visit www.safran-group.com.

SMARTRAC Unveils Dual Frequency Prelam

Smartrac is launching Dual Frequency PRELAM, its latest RFID inlay ideally suited for convenient public transport applications. The new product combines one pre-laminated inlay (PRELAM) with two secure contactless chips, one working in high frequency (HF) and the other in ultra-high frequency (UHF), in a single card.

For more information, visit www.smartrac-group.com.

TSYS Inks Contract with Largest Credit Card Issuer in Luxembourg

The largest credit card issuer in the European nation of Luxembourg has renewed its contract with card and payments processor TSYS. TSYS said Advanzia Bank wants it to continue handling its consumer credit cards. It will also offer various other services to include fraud, risk management, verification and contactless card support.

For more information, visit www.tsys.com.



EARN MORE WITH ICMA'S WEBINARS

Gain industry knowledge and expertise by exploring ICMA's live webinars and webinar archives.

As a member benefit, ICMA hosts virtual lectures and training sessions featuring industry leaders live on the internet. During these web seminars, participants listen via a conference call portal, watch an online PowerPoint presentation and have the opportunity to post questions.

See the latest webinar featuring Al Vrancart, ICMA founder emeritus and industry advisor by logging into icma.com. He offers a synopsis of

his 2016 Global Card Market and Personalization and Fulfilment Statistics Reports, which outline the trends, opportunities, growth and forecast in the global card manufacturing and personalization and fulfilment markets.

Members can download the reports for free by logging into www.icma.com. Non-members can purchase the reports for \$1,500.

For more information about upcoming and archived webinars, visit www.icma.com/educationresources/webinar-archives/.



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1 AMAZING KEYNOTES



Ben Milne CEO Dwolla



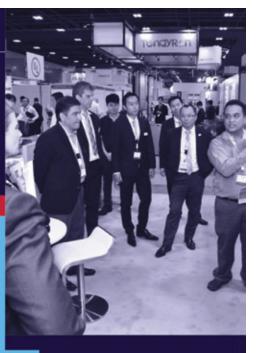
Panit Peleg
Fashion Designer
Danit Peleg 3D
Printed Fashion



CEO
APAC Internet Group



Sandhya Devanathar Country Director, Singapore Facebook



2 300 SPEAKERS

3 1,000 CONFERENCE ATTENDEES

6 MEET BANKS, TELCOS, GOVT, RETAILERS & ETAILERS

7 250 EXHIBITORS 10,000 SQM

4 43% C-SUITE 5 60% EXECUTIVES ATTE



5 60% ATTENDEES FROM APAC



80 ATTENDEES

WWW.SEAMLESS-EXPO.COM

Multi-Modal Biometrics to Ease ID Authentication

Nearly 80 percent of businesses reported a data breach last year. As the digital workforce expands, with data extended to external stakeholders and across numerous types of devices and systems, the need for high-assurance, enterprisewide protection has intensified. The traditional security perimeters have changed and executives are being held accountable for safeguarding data against potentially devastating breaches that can tarnish a brand's reputation. Armed with GoVerifyID Enterprise Suite, corporations have access to a scalable and affordable solution that works with their existing Microsoft infrastructure.

User authentication logins are possible for a tablet or laptop even when disconnected from the corporate network. The solution is linked from the cloud to an enterprise's Microsoft infrastructure and is backward compatible with Windows 7, 8 and 10. Additionally, because the solution is SaaS-based it can easily scale to process hundreds of millions of transactions and store just as many biometrics. ImageWare boasts to have extensive relationships with leading biometric algorithm vendors, and its Biometric Engine is specifically designed to easily add and support new biometric algorithms, future proofing a corporation's investment in GoVerifyID Enterprise Suite.

Smart Card Might Save Lives, Make CAC Obsolete

The Army recently invented a device that could one day replace the current Common Access Card (CAC), according to engineers from the Communications-Electronics Research, Development and Engineering Center (CERDEC). But the device, which might take the form of a card or something else such as a dog tag, could do much more than provide access and authentication for getting inside buildings, installations, computers and securely store data. It could possibly help save lives as well.

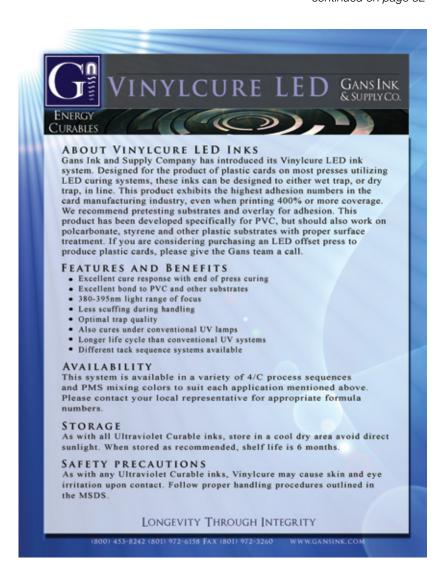
The card may be used to act as a "security token" to access various levels of sensitive and non-sensitive information." That means that the information contained in the card can be shared with other soldiers, Army contractors and civilians who have been granted access to its contents. The information contained in the card can be compartmentalized in a "need-to-know" manner. For instance,

a medic could access medical data, but a contractor might not for privacy concerns, depending on who the Army deems has a "need to know." Access is controlled by the credentials presented by the person attempting to write to or retrieve data from within the card.

Indian Banks Start Replacing Normal Debit Cards with Chip Cards

Recently State Bank of India (SBI) had confirmed that it had blocked and recalled six lakh debit cards after a security breach had come to notice.

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Reports said that as many as 32 lakh cards were affected and thus, blocked across India.

Following the reports, almost all bank users started receiving messages and mail telling them to change their PINs or have their cards replaced if blocked. Several did. still most didn't follow the instructions. Now several banks have started sending new EMV cards to replace the old cards with magnetic stripes.

EMV Migration Delay Doesn't Let Gas Stations Off Hook

Visa, MasterCard and American Express delayed the EMV migration deadline for gas stations from October 2017 to October 2020, but that doesn't mean that gas stations can now relax their EMV upgrade plans.

According to Gray Taylor, executive director at Alexandria, Virginia-based Conexxus, an industry association for the petroleum industry, gas stations need to continue to stay on top of their upgrade plans. Gas stations that have the older magnetic-stripe card readers will become liable for fraud losses even before the deadline, if their fraud grows beyond a certain level.

Payment Method Trends: Canada Edition

Canadian national payments provider Payments Canada released its Canadian Payment Methods and Trends report for the past year.

The report compares, among other things, the relative distribution of payments methods for the nation of more than 35 million between 2011 and 2015.

In 2015, the Canadian payments market saw a total of 20.9 billion transactions collectively worth more than \$6.59 trillion. Of those 20.9 billion transactions. cash continues to account for the most transactions by volume at 32.4 percent.

Since 2011, the use of checks decreased by 25 percent in terms of volume. Cash transaction and ATM withdrawal volumes both decreased 20 percent during this period.

However, its use is trending downward overall. Cash accounted for 41.8 percent of payments by volume in 2011—a net decrease in volume of 20 percent.

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Meanwhile, online transfers and contactless payments have soared in popularity—they are the fastest-growing payment methods in Canada. They reached an estimated 120 million transactions in 2015, worth \$33.3 billion.

In 2015, contactless payments grew by 70 percent in volume and value. There were 125 million contactless payments in 2011 and 1.2 billion in 2015, with total values of \$4.4 billion and \$25 billion, respectively.

Oman to Launch New Smart ID Cards

Middle Eastern state Oman launched smart ID cards with enhanced security features in December. According to a report in the Oman Daily, the General Directorate for Civil Affairs at the Royal Police of Oman said that the highly-secure ID cards would make forgery difficult. The updated card features high security features and an additional photo of the holder in the middle. The smart card has also been fitted with an updated electronic chip with more capacity to use new e-applications.

New York MTA Extends MetroCard Contract

Cubic Transportation Systems (CTS), a business unit of Cubic, announced the extension of its contract with the Metropolitan Transportation Authority (MTA) New York City Transit (NYCT) worth \$40.3 million.

CTS will continue to provide software programming and maintenance support for the MetroCard Automated Fare Collection (AFC) system until it is decommissioned in 2022. In place of the MetroCard, MTA will launch the New Fare Payment System, featuring mobile ticketing and open payments via contactless bankcards. The two systems will operate in parallel until MetroCard is retired.

First Virtual Prepaid Card for Online Payments in the Netherlands

Wirecard is now issuing the pay2d Visa card, which is the first virtual prepaid card for online payments in the Netherlands, in cooperation with 3V Benelux B.V. With this new prepaid card solution, users in the Netherlands can pay online everywhere where Visa is accepted.

The benefits of the purely online prepaid card are: consumers can top-up their accounts with iDeal or bank transfer, they get a free IBAN, users can redeem to their bank account and they can do card to card transfers.

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Mike Mitchell www.arrowinks.com

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members on the move

Travel Tags Inc. Appoints Chris Shimek, VP Global Operations

Travel Tags Inc. announced the appointment Chris Shimek as vice president of global operations. Shimek is succeeding Ken Dishno, who will be retiring after a career of 11 years of continuous service to the company and its employees.

Shimek has more than 25 years of experience in business strategy and execution and has a passion for continuous improvement and excellent experience with the tools, techniques and methodologies that focus on waste reduction and elimination.

For more information, visit www.traveltags.com.

marketplace



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2017

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19-20 April, 2017 Singapore

May

Seamless Middle East

1-2 May, 2017 Dubai, UAE

CardWare

May 1-3, 2017 Niagara Falls, Canada

June

CardTREX North America

June 13-14, 2017 Richmond, Virginia

October

CardTREX Europe

October, 2017 Milan, Italy

November

Trustech (CARTES)

29-30 November, 2017 Cannes, France





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Join fellow industry experts to experience expanded education, exhibits and networking. ICMA's 2017 Card Manufacturing & Personalization EXPO offers a platform for abundant knowledge-sharing as it continues its tradition of being the industry's only card production focused event. From secure to non-secure and everything in between, we'll have topics you'll need to grow your business and stay focused on what's ahead in the card industry.

ICMA and Smart Card Alliance (SCA) Co-locate Events Again for 2017



The 2017 ICMA Card Manufacturing & Personalization EXPO will again join the Smart Card Alliance Payments Summit, featuring a joint exhibition and giving attendees the opportunity to customize their education on both card manufacturing and personalization as well as smart, secure payment technology, implementation and markets.

www.icma.com

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