Celebrating its 11th anniversary, the Contactless Intelligence Conference delivers the latest in contactless and mobile activity, providing participants with unparalleled access to the implementers themselves: transport operators, local councils, charities, banks and retailers. The Conference will once again mix presentations, panel discussions and workgroups to provide participants with an informative and interactive event. We will be reviewing different contactless, NFC and mobile applications in place and discussing how the technology can be implemented on a wider scale.

WE WOULD LIKE TO THANK OUR SPONSORS, SUPPORTING ORGANIZATIONS AND MEDIA PARTNERS
How Time Flies…

Time flies. This year will be our 11th year in which we bring our network together during the annual Contactless Intelligence Conference. I could reminisce telling tales from way back when… but I’ll spare you. Instead, let me tell you what the 2017 Conference is all about; businesses and institutions across all sectors are working endlessly on innovating the way consumers experience shopping, travel and data interaction – sometimes all at the same time. But at the very heart of all this remains one constant – Payment.

However the question that those involved in the next phase of payment should be asking is ‘What role does interoperability, security and standardization play in this transformation?’.

The agenda this year includes an innovative payment session where industry experts and analysts will share their insights on the trends to come – from biometrics to Internet of Things. Both topics are starting to play a major role in the future of payment and its amalgamation into other areas.

We are running two concurrent tracks based on transit and payment. The transit track will be covering contactless payment while travelling – both UK based projects and those happening abroad. German integrator INIT, Creditcall, Reading Buses, Vendorcom and HUB Company will be discussing implementations in the UK, while AFIMB, Translink Systems and TÜBİTAK will be sharing their experiences from France, the Netherlands and Turkey respectively.

Like in the last years, we have managed to bring you the Who’s Who of experts on standardisation and interoperability for contactless systems. Not the sexiest topic you may think, but it is incredibly important for any new implementations - be it mobile payment or transportation and ticketing. The UK Cards Association, Calypso, Visa, ITSO and OSPT Alliance are sending their executives to discuss this matter and share with the delegates their views on overcoming the barriers to interoperability in the transit sector.

In our payment session, we’re not shying away from a topical subject that everyone is concerned with; BREXIT. In a session we are calling ‘Will the UK Fintech market survive Brexit?’ the conversations should be interesting, with representatives from iZettle Capital, Startupbootcamp Fintech, Token UK, Consult Hyperion and PayKey. No contactless and mobile conference is complete without a session on mobile wallets. This year it’s application convergence – ID & Payment, Transit & Payment, Access & Transport and so on. Multi-App scenarios are enticing but the project challenges are also huge – data ownership and security are just some of the concerns that are coming to light when applications converge. The speakers are encouraged to talk candidly; the concerns are huge, the upsides are even greater.

We only bring you speakers that we think really have something new and interesting to say, because this industry of ours only moves forward if we embrace the future and are willing to transform our approach and our ideas.

We look forward to welcoming you.

Steve Atkins //
Contactless intelligence
FRIDAY 28TH APRIL 2017

CONFERENCE AGENDA

09.00 – 09.10
Welcome
Conference Moderator: Ram Banerjee (Transaxiom)

09.10 – 09.50
Keynotes
Speakers: Dennis Rocks, Director of Technology Services, Rail Delivery Group; Samee Zafar, Director, Edgar Dunn & Co

09.50 – 11.00
Latest Payment Innovations – From wearables, to biometrics, to wallets and beyond
Contactless technology has come a long way in 10 years – it is now an established and accepted payment solution in the UK. But where are we heading in the future? Will biometrics authentication become the norm? Are there markets that could really benefit from contactless/NFC technology? How will the Internet of Things impact the payment sector? In this session we review some of the latest trends and look to the future of payments.

Speakers:
> Global Technology Trends for Payment & Mobile Payment
  (Infineon: Bjoern Scharfen – Head of Payment and Wearables Product Line)
> The successful launch of Alipay in France
  (FAMOCO: Lionel Baraban – CEO)
> The Contactless experience explosion
  (Ingenico NER: Chris Harris – Sales and Marketing Director)

Panelists: Sthaler: Nick Dryden – CEO (Biometrics), Plutus: Danial Daychopan – CEO (Bitcoin)

11.00 – 11.30
Networking Break

11.30 – 12.50
Contactless Payment in Transit – From on-board upselling, to unattended ticketing, and on board ticket sales
Following the success of TfL’s contactless payment card rollout, there has been a real drive by the UK’s train and bus operators to enhance their ticketing solutions. With support from the government and The UK Cards Association, operators are joining together to work on interoperable solutions. In this session we hear from some of the key players involved in transit solutions, to find out what is required for regional rollouts, how payment is not just for ticketing and why contactless/NFC technology is proving to be so invaluable.

Speakers:
> Bringing Contactless Payment to Reading’s Buses
  (Reading Buses: Tony Pettitt – Chief Finance & Information Officer)
> Account based ticketing & contactless EMV in transit
  (INIT: Jens Mullack – Managing Director)
> Evolving Contactless in Transport – Progress on Pilots & Deployments
  (Creditcall: Liz Gibson – Head of Payment Services)


12.50 – 13.50
Lunch
13.50 – 14.50

Split into 2 Tracks

**Track One – Transit**
**Moderator:** Ram Banerjee, Transaxiom

Can open standards really lead to interoperability?
The Transport sector has led the way on innovative implementations of contactless solutions, but with operators competing to offer their customers the best travel experience, innovation has resulted in a fragmented marketplace. In this session we examine how working as one industry can benefit both the customer and operator. Could this be achieved by using open standards rather than proprietary solutions? Should operators work together on common models? Why are there different standards in the industry?

**Speakers:**
- Interoperability – It’s the grass that gets trampled when the elephants are fighting! (UKCA: Adrian Burholt)
- Interoperability: decades of debate and few results achieved! (Calypso: Dr. Ralph Gambetta – General Secretary)
- Interoperability through collaboration is win-win for transport, financial services, mobiles, technology…and users (ITSO: Steve Wakeland – General Manager)
- Standard implementation brings innovation to the end user (OSPT Alliance: Yannick Le Goff – President)
- Interoperability – from Babel to Nirvana (Visa: Steve Orelowitz – Senior Product Manager)

14.50 – 15.20

**Track Two – Payment**
**Moderator:** Kristian T. Sørensen, Norfico

Will the UK FinTech market survive after Brexit?
The UK has long been a hub for innovative companies in the technology and financial sectors, with a tradition of nurturing new talent – from contactless, to Bitcoin and beyond. But with Brexit on the table and other countries vying to offer attractive alternatives, will the UK be able to retain its FinTech players? In this session we hear from start ups, banks and innovation hubs from the UK and mainland Europe to understand the issues that are being faced.

**Panelists:** iZettle Capital: **Stewart Roberts** – Executive Chairman; Startupbootcamp Fintech: **Nektarios Liolios** – CEO & Co-founder; Token UK: **Adizah Tejani** – Technology Executive; Consult Hyperion: **Tim Richards** – Principal Consultant; PayKey: **Omer Paz** – COO
15.20 – 16.30

Split into 2 Tracks

Track One – Transit
Moderator: Ram Banerjee, Transaxiom

How are countries across Europe & beyond tackling contactless ticketing?
Contactless and NFC technology has revolutionised transit solutions around the world. In this session we hear from key implementers from a variety of countries to understand what issues they are facing and how they are using the technology to overcome them. How widespread are their solutions on a national level? Can operator collaboration really work? Should the industry be responsible for driving national/regional solutions or is governmental guidance more appropriate?

Speakers:
> An overview of French transit projects and ways to implement Open Payment (AFIMB (France): Jérôme Clauzure – Smart-Ticketing Official)
> A world without borders for contactless payment in Public Transport (Translink Systems (Netherlands): Arco Groothedde – CEO)
> Contactless Smartcard Applications in Turkey (TÜBITAK BILGEM (Turkey): Asst. Prof. Ercan Ölçer – Project Manager)

Panelists: Infineon: Katja Kienzl – Head of Marketing, Transport Ticketing Product Line; Masabi: Stuart McLay – Senior Account Manager; Vix Technology: Michael Hart – Director of Business Development

Track Two – Payment
Moderator: Kristian T. Sørensen, Norfico

Are Mobile wallet platforms now ripe for application convergence?
For many years now we have forecasted the coming of the digital wallet – where payment, loyalty and transport can all be combined into one solution. But the smartphone offers an ideal platform for even wider convergence, providing authentication services for the ID domain. In this session we examine how mobile wallets are no longer just for payment. How do they integrate with other applications and services? Can payment and ID be combined and if so, who is the issuer? How should security and “ownership” of data be handled?

Invited Speakers: Digital Transformation Group, Mastercard, Rambus

Panelists: Smartlink: Sébastien Piolat – Head of Business Development; Nok Nok Labs (FIDO): Michelle Salway – Senior Director of Sales (EMEA); Vodafone: Russell Gould – Product Manager, Mobile Wallet Services; MeaWallet: James Connelley – Global Sales Director

16.30 – 17.00

Drinks Reception (sponsored by Infineon)
Ram Banerjee
Ram has a passion for Smart Card technology especially when applied to Payments, Loyalty and ID. He has co-founded several companies including ACT (now part of Fujitsu) – the UK’s largest supplier of Transit ticketing systems. Since 2010 he has devoted much of his time to TransaXiom, a UK company dedicated to bringing true electronic cash to mobiles using novel and patented technologies.

Lionel Baraban
Lionel is a serial entrepreneur and started the adventure in France where he launched several successful start ups. He then went on to manage a technology incubator in Israel from 1995 to 1998. In 1998, Lionel founded Entopia, a company specialized in semantic analysis and raised $40 Million. He headed the company from Silicon Valley until 2006.
After France, Israel and the USA, Lionel moved to China where he developed Xanadu, a key player of online travel services, with Nicolas Berbigier. In 2010 they co-founded FAMOCO of which he is the CEO.

Adrian Burholt
Adrian specialises in delivering outstanding new payments and mobile products to market and has been instrumental to the success of several of the major telecoms and banking businesses including Vodafone, Mercury, NEC, Payments UK and the UK Cards Association. During his career he has led, managed and launched of a number of significant ‘game changing’ mobile and payments based products and services such as text messaging, 3G and the industry wide mobile payments service, Paym. Adrian is currently leading the delivery of the UK wide framework for the use of contactless bank and credit cards for public transport outside of London.

Jérôme Clauzure
Jérôme has worked as the Smart-Ticketing Official at the French Agency for Multimodal Information and Ticketing (AFIMB) – part of the Ministry for Transport – since 2011.
His principal role is to promote interoperability: providing citizens with a more compelling alternative to the car through seamless public transportation offerings. To this end, AFIMB supports several standardization efforts with French and European partners.
He cooperates with many stakeholders: from governments to transportation entities, technology companies to banks, MNOs to e-Ticketing schemes. He also manages the certification working group of the Smart Ticketing Alliance, which has produced the framework for a certification program.
In 2003-2007, he was responsible for the Digital Tachograph implementation in France, acting as Risk Manager and Contact Person for European authorities.

James Connelley
James has had a 20 year career in the financial services, payments and loyalty industries and joined the Seamless group management team in October of 2014 as Global Sales Director. Seamless acquired MeaWallet in July 2016, which is one of the world’s leading companies in the digital payment space, and one of few companies focusing 100 % on tokenization technologies. At Seamless James is responsible for growing the MeaWallet and Seqr Payments businesses globally, developing and forging new partnerships.
in both new and existing markets.
Prior to joining Seamless, James held a number of senior commercial and business development roles at General Electric (GE), Banco Santander and Affinion International.

Danial Daychopan
Danial is a fintech entrepreneur within the payments industry and is the Founder & CEO of Plutus.
Danial’s vision is to create the next generation payment system and he has been active in the groundbreaking blockchain and bitcoin ecosystem since 2013.

Nick Dryden
Nick has worked at the forefront of new multimedia and transmedia technologies for the past twenty years. He has recently expanded his professional portfolio from music industry technologies by creating social platforms for group fans and permission-based predictive marketing strategies into federated platforms capable of much greater business intelligence for retail clients with integrated payments tech to engage and commercialise ‘connected’ audiences.
In 2012 he formed the company Sthaler, the original name for the US Dollar and the $ symbol, to work with Hitachi to build, test and deliver a pay-by-finger system which solved all the problems and vulnerabilities that existed in the current payments system.

Dr. Ralph Gambetta
Managing Director of Temco GmbH, Ralph has a management and politics background with a Ph.D. as well as a strong involvement in the transportation sector. Before joining Temco GmbH in 1997, he was active in various transport companies such as German Railway, International Railway Union (UIC) and RATP (Paris metro and bus operator). Projects have included the successful smart card project CALYPSO and SINCE project.
Since 2005 he has been in charge of promotion at Calypso Networks Association (CNA) and the deployment of smart ticketing schemes. Recently his function at CNA was extended to General Secretary. He is also a member of the German standardisation committee of information technology and smart cards and vice chair of the Smart Ticketing Alliance.

Liz Gibson
Liz has a wealth of payments experience, having worked for Creditcall for over fifteen years and is now Head of Payment Services. Joining the company from a telecoms background in 2001 (having spent the first ten years of her working life in catering, which she refers to as ‘great training for handling ten impossible deadlines simultaneously while everyone’s yelling ’) she has led the company’s PSP sales for over a decade, during which time the company has grown from under a dozen people to almost a hundred.
Liz’s role includes direct sales working with larger clients with complex projects and a market lead approach helping to ensure Creditcall’s PSP solutions are available and suited to as many customers, integrators and manufacturers as possible.

Russell Gould
Russell is a highly experienced Product Manager at Vodafone specialising in digital innovation. With a background in apps and platforms, Russell moved into mCommerce 5 years ago, where he is part of the team which delivered the multi award winning Vodafone Wallet.
Responsible for designing PayPal’s first mobile contactless payment service, he is now tasked with productising Mifare services, and developing an Enterprise Wallet.
Arco Groothedde
Starting his career in the Payment Industry, Arco switched to work for the Dutch Vehicle Licence organization and the Dutch Kadaster (Land Registry & Mapping Agency). Since 2012 Arco has been CEO of Translink Systems B.V. where his 28 years of experience working in IT, Operations and General Management in public/private businesses has come together. Translink is the connecting force behind the OV-chipkaart.
Translink processes 2.4 billion transactions per year and about 14 million OV-chipkaarts are in ‘use’. We have built up a wealth of experience, data and knowledge on contactless payment in public transport and are developing a variety of innovative, well thought-out services for customers and passengers, with a clear vision of the future.

Chris Harris
Chris is the Director of Sales & Marketing for Ingenico Northern Europe. Prior to joining Ingenico Group he was Chief Commercial Officer at RS2 Software Plc, whose payment processing software and services are used by leading international banks and payment processors. Over the past decade he has held executive roles and been instrumental in developing online and mobile payments for a range of companies, most recently Barclays where he was Head of Strategic Development responsible for their e-Commerce platform replacement.

Katja Kienzl
Katja has been responsible for marketing Infineon's transport related products since 2010 and is currently Head of Transport Ticketing Product Line Marketing. In this role she is driving the overall product strategy on a worldwide basis. In 2016 Katja was elected as a member of the OSPT Alliance board. Before that she was driving RFID business development activities and was engaged in setting up Infineon’s Ident Solutions Group.
Prior to joining Infineon, Katja held various management positions such as head of segment marketing and international marketing management at NXP Semiconductors (formerly Philips Semiconductors) and Mikron GmbH.
As a business development and marketing professional Katja has been actively involved in the Smart Card & RFID industry for more than 15 years.

Yannick Le Goff
Yannick started his career in 1997, at CAP Gemini as a project manager. He continued to develop his skills during 14 years at Schlumberger/Parkeon in various management positions such as project manager, Key account manager, R&D manager and Marketing and business development director.
He has a strong background in the urban mobility ecosystem, based on transport and parking experiences. Since December 2012, he has been the Head of Transport in the Financial Services Institutions Business Unit to lead the transport business within Oberthur technologies. Yannick has been involved in the OSPT alliance since 2013 and has been elected as president of the OSPT Alliance board.

Nektarios Liolios
CEO & Co-founder of Startupbootcamp FinTech & InsurTech, the leading innovation program in the financial and insurance industries, providing funding, mentorship, office space in the heart of London, Singapore, New York, Mumbai and Mexico City as well as access to a global network of investors and VCs, for up to 10 selected FinTech startups per program.
Nearly 20 years in the business, previously with Clearstream and SWIFT, running the Innotribe Startup Challenge. Driven by entrepreneurship, collaboration and the desire to transform industries.
Global nomad, travel geek, sneaker freaker.
Stuart McLay
Stuart currently leads the account management/client relationships within the UK and EMEA for Masabi. Over the last 11 years Stuart has worked within the rail and transit sector, leading teams within customer services, operations, commercial and retail. Stuart’s vision is to ensure the provision of a customer centric proposition focused on delivering, simplicity, value and innovation. A key priority and area of responsibility for Stuart is working on the implementation and ongoing success of innovative digital ticketing solutions for transit organisations within the UK and Europe.

Jens Mullak
Jens graduated from the University of Munich in 1983 with a Master of Science Degree in Electrical Engineering, and has acquired a wide range of experience within the transport sector including software engineering, public transport CAD/AVL systems, communication systems, as well as account and project management during his subsequent career. Jens joined INIT GmbH in 2005, and after acting as UK branch manager, he is now Managing Director of INIT Innovations in Transportation Ltd in the United Kingdom. Jens is also currently the Chair of the Nottingham Means Business German Interest Group, which focuses on fostering the trade relationship between Nottingham and Germany.

Asst. Prof. Ercan Ölçer
Ercan is currently working as project manager for Smart Card Operating System (AKIS) in TUBITAK (The Scientific and Technological Research Council of Turkey). At the same time, he is still a specialist in Turkish Standards Institutions covering card access devices, lecturer at Istanbul Sehir University and chief researcher / advisory committee member at TUBITAK. He works on smart card systems, secure card readers, identification and authentication. He graduated ranking first in class from Yildiz Technical University in department of electronics and communication engineering in 1990. He completed an MSc at Istanbul Technical University, computer engineering department and he received his PhD in Kocaeli University, electronics and communication engineering. He has served as a lecturer at various universities.

Steve Orelowitz
Steven Orelowitz is based in the Visa London office and is a senior product manager. In this capacity he is responsible for the Visa transit solutions with particular focus on contactless bank cards solutions. Steven spends much of his time working with transit authorities and banks in the UK, Europe and beyond, to facilitate the migration of existing closed-loop ticketing systems to open-loop flexible, account based solutions.

Omer Paz
Omer is PayKey’s COO, leading cross-team projects and drives PayKey to run as smoothly as a customer-oriented fintech company should, including Finance, Operations and Next-Gen business planning. Omer’s experience includes leading projects in the financial sector and security fields. Omer brings vast experience in building strategic approaches to emerging markets, enabling new business capabilities and delivering ‘cost appropriate’ and innovative solutions to corporate organizations.
Tony Pettitt
Tony has been Chief Finance & Information Officer at Reading Buses for four years, with responsibility for finance, business support and IT systems and for major investment projects. He was previously an independent transport planning consultant with more than thirty years’ experience, gained in the UK and overseas, working with and for local authorities, transport operators and central government. He has particular expertise in public transport operations and promotion, having worked extensively on transport telematics, including urban traffic management and control systems, ticketing, card technology and traveller information systems.

Sébastien Piolat
Sébastien joined the FinTech company Smartlink SA in 2013 and has moved across the company contributing in technical and business roles. In his current role he leads innovation projects related to contactless, payment, and wearables. As part of this business development role, he represents Smartlink during exhibitions and among Smartlink’s partner organizations. Now, his main focus is driving the evolution of the Contactless Companion Platform (CCP) in order to make any contactless service accessible from any device.

Tim Richards
Tim is a technologist and psychologist with over 25 years experience in multinational transactional solutions in payments, identity and transit. He is a principal consultant at Consult Hyperion where he manages business development and consultancy programs around the new EU regulations on payments and data security.

Stewart Roberts
Stewart has 16 years’ experience in the payments and acceptance industry. Stewart joined iZettle over 5 years ago, and has served as both UK Managing Director, and Chief Financial Officer. Most recently he was appointed as Executive Vice President of the group and Executive Chairman of the iZettle Capital division. Before iZettle, Stewart worked at Barclaycard as Global Director of Innovation and also represented Barclaycard as Board Member of the NFC Forum. He joined Barclaycard as Business Development Director, in 2008, after four years at Royal Bank of Scotland and Worldpay, following their acquisition of Bibit Payment Services in 2004, where he had set up operations as UK Managing Director and worked as International Business Development Director.

Dennis Rocks
Dennis is the Managing Director of Technology Services within the Rail Delivery Group (RDG) and is also a member of the RDG Executive Team. He has worked in a number of sectors in senior roles, including Finance, Telecommunications, Finance Technology, Logistics and Rail Infrastructure. His directorate is responsible for the delivery of central rail industry settlement, Smart ticketing technology and a number of key applications used by UK train companies and third parties. This involves building and maintaining key relationships with customers and suppliers of rail retailing and rail information services.

Paul Rodgers
Paul is Chairman & Founder of European payments community, Vendorcom; Mentor at fintech accelerator, Level 39; Member of the UK Payments Systems
Regulator Panel; and provides the Secretariat to the All Party Parliamentary Group on Payment Systems.

Paul is passionate about the payments industry and the benefits to be gained by driving innovation through collaboration. His work with Vendorcom ensures that all stakeholders in the industry are connected and have access to authoritative, independent information on strategic developments, standards, regulation, innovation and market opportunities. Paul is recognised for his broad perspective on industry matters as well as his independence, authority and pragmatism in dealing with the increasingly complex change that both merchants and solutions suppliers face.

Sam Rudder
Sam founded The Hub Company in 95 as the first UK digital agency and has since had 23 years uninterrupted in the ‘digital transformation’ solutions business. Orchestrating a management buy-out in 2006, he then performed The Hub’s own transformation into an end2end digital solutions software provider. The Hub has now been involved in over 300 digital transformation programmes, many with a high ecommerce impact and they remain open to what comes next.

Sam originally trained as an accountant with PW, which was followed by 16 years, 12 on the boards, of global marketing services groups including Saatchi and Saatchi.

Michelle Salway
Michelle is Senior Director of Sales (EMEA) at Nok Nok Labs and has over 25 years experience in the IT industry, with the last 15 years focused on Information Security in high tech sales and products. Before joining Nok Nok Labs, Michelle spent the previous 5 years as sales and product specialist in Identity and Authentication services for Symantec, and has managed sales organisations in EMEA for PGP TrustCenter and TC TrustCenter.

Prior to that, she was Head of Government sales for Betrusted in the UK, and before moving to the UK was GM of Sales at 90East, a Managed Security Services company in Australia. She left her native New Zealand in 2000 after working with both Systems Integrators and Network Services Providers there.

Björn Scharfen
Björn has 20 years of experience in the electronic components industry and is currently heading the Payment and Wearables Product Line within the Smart Card Solutions Business Line at Infineon Technologies. He has worldwide responsibility for hardware based security solutions used in Financial Smart Cards and fast growing wearable Products.

Prior to this role he has worked for over 15 years in different positions within the Marketing of the Chip Card And Security ICs division, leading Product Marketing for Payment, Communication and Transport Ticketing for the last 5 years. Before joining Infineon in 2000, he started his professional career in 1997 with the Ceramic Components Division at Epcos AG as Product Marketing Engineer for automotive, industrial and consumer applications.

Kristian T. Sørensen
Kristian’s work within financial services has made him an acknowledged fintech thought leader. He is ranked on Rise Global’s “100 most influential people in fintech” and was shortlisted by PayExpo for the 2016 “Payments Power 10”.

Prior to joining Norfico, Kristian served four years in
various strategic positions within Nets, where he led the strategy development for Nets’ mobile services across the Nordics. Since 2010, Kristian has participated in Mobey Forum and has been an active contributor to the forum’s white papers. In 2016, Kristian was awarded honorary membership for “outstanding contribution” to the organisation.

Before Nets, he worked 10 years for the Danish bank Nykredit moving from managing online banking, over mobile banking to mobile payments.

Adizah Tejani
Adizah is a product focused technology executive having worked within the digital technologies space since 2009. She is currently the Director of Marketing EMEA at Token, an open banking fintech company from San Francisco. She was part of the founding team of Level39, a London based technology accelerator focused on fintech products.

Over the years Adizah has worked with a number of industry leaders such as Facebook, Google, Microsoft, IBM, JP Morgan, UBS, Thomson Reuters and Accenture. Adizah has spoken internationally about the impact of technology, business and finance at a number of industry events and conferences. In 2016 Adizah was named one of the top 100 women in London by City A.M.

Steve Wakeland
Steve has worked in technology risk management and information security at various industrial and financial services organisations for over 30 years.

He joined ITSO Limited late in 2011 as Governance Manager to lead compliance through the implementation of policies and procedures across the ITSO membership.

Since becoming General Manager of ITSO in January 2015 Steve has focussed on increasing the resilience of the organisation by strengthening the team, improving technology and supporting processes. More recently he has steered the company’s focus towards future-based technologies, including mobile and account-based ticketing.

Samee Zafar
Samee is a director in the London office of Edgar, Dunn and Company, a global management consulting firm. Samee has advised clients in North America, Europe, and Asia Pacific.

He focuses on advanced payments consulting advising banks, Fintech / technology companies, payment service providers, and other companies on internet and mobile commerce / payments. His expertise includes competitive strategy, operations improvement, financial management, and risk management. He has also advised clients on M & A transactions within the financial services sector.

Previously he worked at PricewaterhouseCoopers and Visa in New York and London. He has written widely on emerging trends in financial services, technologies, and related areas and also writes a regular blog.
Going mobile with open security standards

By Dr. Jörg Schmidt, Infineon Technologies

The digital lifestyle of today’s consumer is developing at an exponential rate, with many aspects of our daily routine influenced by the search for a more seamless and convenient user experience. From starting the day with curated newsletters on our tablets, to ordering and paying lunch online and then utilizing push services that remind us about the latest traffic delays and road works – digital services have become a growing influence on the flow of our day.

Mobile devices are key

At the heart of this development is the mobile device. It is the interface between the digital world and the consumer, the door to receiving and sharing information, accessing services and receiving benefits. So, in a world which is both rapidly developing and reliant on a mobile device infrastructure, that is entirely heterogeneous, with multiple OS, a wide variety of handsets and technology standards – which elements should service operators look out for? For gaining the maximum in personal mobility it is necessary to have mobile devices that offer barrier-free and cross-media-available support through their functionality offering.

Contactless enables convenience

Contactless technology is the answer to many requirements of today’s consumer and is considered one of the key enablers of our digital and mobile lifestyle. It usually refers to a family of wireless technologies that have extremely short range. Contactless technology typically takes the form of a small chip embedded in a phone, key fob, or smart card. Different contactless standards include Bluetooth, BLE, RFID, WiFi and NFC and contactless implementations allow for quick, secure and convenient communication exchange and transactions.

Near Field Communication (NFC)

In this segment, Near Field Communication (NFC) is the contactless technology that makes smart devices smarter. Because NFC is capable of secure two-way communication, it brings intelligence to physical objects. NFC-capable phones, tablets, wearables, and other devices enable convenience, information, and enhanced experiences at home, around town, or when travelling. As a result, virtually every mobile OS maker has their own apps that offer unique NFC functionality.

Personal mobility and public transport

But what about the applications which benefit from contactless technology? When looking at public transportation, there are some exciting trends, especially in the segment of ticketing and fare collection. Rapidly growing smart cities are already creating the need for new innovative approaches in regards to transportation. Personal mobility, in this context, is not only of generic relevance but also of crucial relevance for travel and transport experiences. It is for this reason, that public authorities are investing more and more in contactless infrastructures, such as Automatic Fare Collection (AFC) systems. And when it comes to the implementation of such systems, the key issues for transport agencies are interoperability, security and cost of implementation.

Need for greater flexibility and open standards

Current systems in public transportation are often still connected to one specific supplier and their hardware. The
maintenance and development of these closed systems is time-consuming and costly. Long-term reliance on only one supplier leads to a lack of flexibility, which, in turn, can prevent quick implementations of new technologies. The rapid spread of NFC-based ticketing systems and their associated schemes demonstrates the disadvantages of rather unwieldy proprietary systems. On top of that, the shrinking budgets of transport operators require an increase in efficiency. For many implementations, operators are faced with the decision of replacing their closed systems in the long term and choosing open technology that can be adapted more flexibly to individual needs.

Thanks to the open security standard developed by the OSPT Alliance, CIPURSE™, transport operators can draw on a pool of technology providers, experts, and system integrators to implement payment systems for local public transportation. Numerous providers, but above all the use of this open standard, supply a much more diverse range of product solutions and far more comprehensive functions than is possible with proprietary systems.

**The next step: going mobile**

More and more contactless applications, like transport ticketing but also payment, loyalty or access control, will be adapted to mobile devices over the next few years. This requires secure, open, flexible and standardized solutions for such mobile devices meeting the market requirements of trust and convenience. CIPURSE Mobile describes the use of the security standard CIPURSE in mobile eco-systems and is form factor independent.

According to Laurent Cremer, Executive Director of the OSPT Alliance, CIPURSE mobile has been developed in response to significant changes in the market. It forms a means of ensuring applications developed for NFC handsets are scalable and flexible to meet future industry demands. Additionally, because it is based on the CIPURSE standard that can be used on cards and other devices, card based applications can easily be migrated onto NFC handsets as and when required by the market. An example of CIPURSE usage on mobile can be found in Hungary, where Magyar Telekom PLC (a subsidiary of Deutsche Telekom) has become the first company worldwide to develop a mobile wallet application with an NFC SIM that is based on the CIPURSE open standard. According to Cremer, this shows that CIPURSE is now available across a full range of media and can be easily integrated into both mobile and card based systems.

**Summary**

Working on the basis of an open standard, such as CIPURSE Mobile, will help drive the sustainable adoption and spread of NFC. Infineon views Near Field Communication (NFC) as a key technology to enable the requirements that come with the need for personal mobility, such as interoperable, cross-mode, public transportation that is accessible through a user’s mobile device.
Liz Gibson, from the Bristol-based fintech company Creditcall, has spent the last few years turning the theoretical possibilities of contactless technology into real, day-to-day end customer solutions. From contactless payment schemes, contactless parking to tap-and-give fundraising, Creditcall and its partners have successfully brought solutions to market that add more convenience to these areas. We met up with Liz to talk about her latest quest for contactless–seamless, multi-mode travel.

CI: What is it that made you think about optimising traffic management and how does contactless technology come into this?

LG: It’s a matter close to my heart, especially with Bristol having been awarded the dubious honour of having the worst traffic of any city in the UK! We believe that traffic management in cities isn’t just about steadily increasing street parking charges to discourage drivers or to ‘manage demand’. It’s more about travel management as a whole. Nowadays consumers have extremely busy lives and demand convenience in every aspect of their day, including transport. For some people that is always going to mean that they want to park right outside their destination regardless of the cost or even in some instances the obvious ‘no parking’ signs, but for a growing number of others, it means wanting seamless journeys which may start or finish with a car, but also use other modes of transport to provide easy, inexpensive options for all or part of the journey.

Contactless technology is all about convenience and consumers in the UK are already aware of this. The UK Cards Association recently reported that 25% of all card payment transactions are now contactless. Consumers don’t just use this facility when they buy a drink or magazine, they use their contactless cards when shopping for groceries, on the high street and increasingly during their commute.

CI: What additional modes of transport do you think are relevant for a seamless travel experience?

LG: Park and Ride schemes like the ones operated in Creditcall’s home town of Bristol, and new ones including that recently announced by Bath City Council, offer an important option for many motorists who for whatever reason (likely unavailable routes or slow journey times) may not be able to take the bus for their whole journey but still prefer to avoid the nightmare that is city centre traffic and parking. Recently the Park and Ride in Bristol, operated by FirstGroup, started accepting contactless credit and debit cards. Tom King, Retail Innovation Delivery Manager from FirstGroup, is delighted with the results so far and...
told us “First Drivers have reported improved timing on their schedule, as it’s easier and quicker for people to pay now, leading to shorter queues and reduced waiting times. Going forward this could mean that fewer buses are needed to maintain the same frequency of service.” For me, that’s one step closer to providing real alternatives to driving into town. Reading Buses, as well as their mobile app for ticket purchase now offer EMV contactless card payment across the whole town, so if you haven’t remembered to have a few pound coins in your pocket now you can still take the bus rather than adding to the traffic in your own car or a taxi. Taxis accepting card payment is also a good thing as it saves people stopping at cashpoint machines…a small but real contribution to convenience and less problematic traffic!

Some councils are taking positive steps to provide alternatives to driving. Cycle lanes are essential to reduce the number of single occupancy vehicles effectively; and wouldn’t it be ideal if every city had a bike rental scheme like the ones in London? I noticed a folding-bike rental scheme at my local train station the other day - what a great idea to make sure people can complete the last part of their journey on two wheels not four. Next Bike and B-Cycle, for example, offer easy bike rental systems where all you need is a credit or debit card to hire a bike for the day and you don’t even have to drop it back to the same spot. I do wish all cities would provide such a system.

Where cars are still the best option, which it has to be said is still the case for some of us (particularly when travelling with children or lots of luggage), Electric Vehicle charging stations at strategic spots could help encourage people to drive cleaner cars. Perhaps they could also help promote car-sharing clubs; how much easier to have a dedicated parking spot to leave the car charging, than to fill up with fuel and then have to find somewhere to park.

Toll systems (congestion charging in cities) can also help encourage people to use alternative transport, although they certainly won’t be popular, but I remember the difference in London just after this scheme was introduced. Now, I know many people will argue that traffic is back up to previous levels, but from personal experience I know that there are often occasions when the congestion charge tips the balance in favour of taking the tube or bus in London. I suspect that with London the question may be how much worse would it be without the congestion charge?

**CI: You are mentioning private schemes. What is the role of public transportation?**

**LG:** Nice though bike lanes, multiple occupancy lanes, EV charging points and effective parking management are and however effective that even tolling may be in reducing the fumes, delays and frustration involved in travelling in a city, public transport still has to be the cornerstone of reducing traffic congestion. There is a big focus
“First Drivers have reported improved timing on their schedule, as it’s easier and quicker for people to pay now, leading to shorter queues and reduced waiting times. Going forward this could mean that fewer buses are needed to maintain the same frequency of service.”

Tom King
Retail Innovation Delivery Manager
FirstGroup

at the moment from some of the major transport operators to develop an ‘interoperable’ system where you can buy a single ticket to travel using several different operators’ services for different stages of your journey. We’re used to it with railways – nobody even considers buying several different tickets to cover each of the steps of a journey which may involve two or three different companies’ trains.

Delivering this model with buses strikes me as much more difficult, and also, to some extent, less important than simply making sure people can get on and off buses, trams and even ferries, without planning ahead. The common factor to enable this is a payment method which is accepted at every stage.

I confess that I find it strangely satisfying to know that it is possible (in theory, at least, if not geographically in practice yet) to know that I could drive my car to the station, park using a P&D machine, buy a train ticket from a ticket vending machine, arrive at my destination and then hop on and off buses throughout the day - all without carrying any cash.

CI: How real is the technical feasibility of combining these private and public systems into one seamless solution?

LG: It is very real. Creditcall already works with various partners delivering card payment for every single one of these stages. Along with a common back office comes the possibility of making life even more convenient for commuters by linking the data from each of these disparate forms of travel. There is also another key advantage to council’s offering a card payment on so many different systems. Provided they all use the same back end (so that the card ‘token’ associated with each payment is the same, regardless of the channel or card reader the system uses) it is possible to tie together the various elements of people’s journeys to get a picture of how they actually use the services on a daily basis.

CI: What are the benefits of seamless, multi-mode solutions for the transport operators?

LG: The core benefit is data. Whether you obtain information on customer behaviour patterns anonymously, knowing nothing more than customer A behaves like so, while customer B never seems to use the bus, or whether you identify individual customers, perhaps by encouraging them to register their card for discounts, loyalty, updates, or even just a web purchase with an email address on one mode of transport - there will be plenty of data available. If you identify who uses what, you can actively reach out to them with new routes, new initiatives, timetable changes, even roadworks near their usual car park.

The smart analysis of data doesn’t only benefit the operators, it is also of use to the customers. Whilst we may feel nervous of the Orwellian world implied by some aspects of ‘big data’, it could work in our favour to make life easier. If rather than discovering the suspension of a bus stop I use frequently just when I turn to find it gone, or learning of major roadworks near my usual car park only when I am in a three mile tailback of other hapless drivers in a similar situation, I were to receive a targeted message offering me a discounted bike rental at a (newly opened!) facility 0.2 miles away…I for one don’t think I would complain!
Global leader in seamless payment

Leading the way in the UK contactless payments explosion

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Digital Cash for everyone

HIGH SECURITY, HIGH INCLUSION, COST EFFICIENT – THE CONTACTLESS COMPANION PLATFORM IS A TRULY REVOLUTIONARY CONCEPT

By Sébastien Piolat, Smartlink

During this year’s Mobile World Congress together with Samsung Semiconductor and Ingenico, as well as additional ecosystem partners, Smartlink introduced a contactless concept that combines existing contactless services and aligns the needs of users, industries and governments with regards to an inclusive payment solution under the banner of “Digital Cash for Everyone”. The concept is called the Contactless Companion Platform (CCP).

Contactless payment for an untapped market

The global market for low value payments made with cash and checks accepted by micro, small and medium retailers (MSMRs) amounted to 19 trillion USD in 2015. It is this segment that Smartlink and their partners believe the CCP solution addresses. Within this segment, the service fees for EMV and other card providers are disproportionately high, requiring a sustainable solution that enables the financial inclusion of the unbanked and MSMRs to accept contactless payment without elevated transaction fees.

Digital Cash applications and beyond

Demonstrated for the first time at Mobile World Congress 2017, the Contactless Companion Platform (CCP) focuses on the migration of cash into digital cash. The move from cash to digital has, of course, been done before using different card or mobile schemes. However, the feeling is that this is where the CCP model differs: it enables full financial inclusion of audiences that currently have no access to payment cards.

One example for a core CCP application is the temporary transfer of digital cash from parents to children: With CCP, a parent can easily transfer a cash sum to a token or wearable. This transfer can be limited in time and scope, as for example, 50 € for a weekend excursion. Come Monday, the remaining cash funds are automatically transferred back to the parent’s credit card along with a transparent account of what amounts were used throughout the weekend.

Beyond the convenient cash application, another interesting use case is the cross-border transfer of digital cash, as, for example, by migrant workers sending back part of their wages to families in countries across the world.

CCP enables full control of payment by validity, location, time or day, and other parameters decided upon during remote top up of a secure token with the companion app on a smartphone.

CCP also has the ability to seamlessly combine payments with access control, loyalty points, vouchers, travel cards, ticketing, and more, allowing users to pool a variety of contactless services in a few inconspicuous devices of their choice.

The app supports both Android and iOS operating systems, and receives an immediate notification whenever a payment has been made with a managed CCP device.

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1 Source: World Bank Group report, June 2016; Samsung DSE Marketing analyses
CONTACTLESS INTELLIGENCE

Allows payments and ticketing from any form factor.

Managed through an Android/iOS application.

Cloud-based solution.

For more information, please visit: www.smartlink.ch
Easy set up, high security, low risk

Once set up and with CCP in place, a user can make contactless payments via any enabled device of their choice, whether it's a dedicated smart card, wristband, key fob, or even a mechanical watch or a smart ring, allowing them to leave both the handset and cash at home.

The set up is not at all complicated, entirely safe and compliant with local e-money regulations. The Smartlink-developed CCP App will take ID and credit card information; verifying it using facial biometric technology.

As a next step, multiple tokens and wearables are added to the application. Once the credit card information is linked to the smartphone, it will not be duplicated in the associated wearable. This means that if a token or wearable is lost, there is no credit card data at risk – a simple remote deactivation of the token is all that’s required.

Strong ecosystem partners

Already today, CCP is an entire ecosystem including strong partners from across the value chain: from security semiconductor (Samsung), to mobile wallet provider (Smartlink), card systems (Zeitcontrol), POS suppliers (Ingenico), processing (Carta Worldwide), e-money partner (CornercardUK), as well as highly innovative producers of wearable devices, such as Swiss watchmakers Montfort and WinWatch. These founding partners are working to make CCP a new standard in the world of contactless payment and are welcoming any company that can add value to this exciting new standard.

Digital cash for everyone

Introducing the Contactless Companion Platform

A completely new contactless approach to low value payments
- highly secured tokenized service
- enables financial inclusion of unbanked persons
- reduces transaction fees and handling costs for retailers

Secure digital cash for all
- fast, easy CCP user registration
- multiple transfer of funds to different wearables and tokens
- no replication of credit card data on wearables

Controlled and fast payment
- enables financial inclusion and full control
- eliminates handling cost and fraud
- increases security, parental control, transparency

“Our mobile payment solutions target cardholders, and CCP targets cash users by offering a digital alternative to cash. Rather than issuing prepaid cards for the wearables, CCP gives direct access to the funds. To summarize, Smartlink created a new use case for our existing mobile transaction platform to address a different market segment previously unreachable for existing digital cash solutions.”
Experts at the 2017 London Forum will be looking at the latest developments in the area of mobile ID as well as the exciting segment of multi-application ID schemes.

The migration from card to mobile, or the co-existence of complimentary mobile and card-based schemes for public sector applications is an ongoing challenge for government and system integrators alike. At the core of all considerations must be the added value for the citizen, be it in the form of more convenience, added security or additional day-to-day functionality.

The same goes for so-called multi-application schemes: adding a payment functionality to national ID cards can transform a verification scheme into a multi-purpose platform for citizens to carry out financial transactions as well as access government services.

More than one stakeholder in any card scheme makes data handling and other high security processes more complex. Therefore, from a standardization point, multi-application schemes should be designed to be as flexible and interoperable as possible when it comes to implementations.

Participants will debate the advantages of using open standard instead of closed-loop approaches for schemes, which combine ID with payment, social benefits or public transportation.

FOCUS IN 2017: SECURE ID - MOBILE, OPEN & INTEROPERABLE
Experience CIPURSE™ live
at UITP 2017, Montreal, Canada.
Visit us at booth 2C156.

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with security solutions solving future challenges

The future lies in flexibility. It needs a solid and open base for secured, successful transport ticketing and multi-application schemes that provide flexibility for consumers and infrastructures. That's whyInfineon has taken the lead in future-proof smart mobility solutions based on open standards.

Make your mobility concepts fit for the future and contact us:
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