

Stuart Fiske

Director

Overview

Stuart is a Founding Director with core skills in the area of systems specification and verification, coupled with deep knowledge of smartcards, both contact and contactless and mobile, NFC and HCE. These skills include business requirements gathering and specification, functional specification, and System and Acceptance Test Specification.

His role as Director at Consult Hyperion covers:

- The financial aspects of running the company and close supervision of projects and client relationships
- Analysis of new technologies, such as HCE, BLE and FIDO, as they emerge and how they can be applied within the Retail Payments and Transit/Ticketing sectors
- Developing new initiatives and new lines of business, including;
 - the establishment of a software development capability for prototyping new ideas and specification
 - the establishment of a certification service in conjunction with compliance testing of contactless smartcards and terminals.

Key Achievements / Skills

- Requirements Analysis, Systems Specification and Design
- Verification, Compliance and Certification services
- GSM Networks
- EMV Specifications
- ISO 7816 and ISO 14443 Standards
- Contactless payment technologies
- ICAO e Passports
- NFC and Mobile Telephony.

Consulting Assignments

Stuart's first four years at Consult Hyperion were spent consulting to the Financial Services sector (initially Base-24 software for ATM networks, then information distribution networks for the London Stock Exchange).

From 1990 until 1999 he worked primarily for digital mobile network operators, initially helping set up the systems to support the design, acquisition and rollout of network base stations for the One2One (now EE) network in the UK, then to assist Cellnet (now Telefónica O2) in the delivery of early prepay propositions to the UK market.

From 1999 to 2013 his primary role was as the lead consultant and relationship manager to American Express, where he led projects covering many aspect of the migration of American Express' card payment product to EMV, including the Amex Blue card launch in the US, development of the specification and then implementation of the American Express EMV application on the MULTOS platform, development of the American Express Expresspay contactless payment card based on ISO 14443, development of American Express Expresspay for Mobile specification as used on the ISIS platform in the USA.

From 2014 to 2020 he led several projects in developing dual interface card payment applications and in developing a combined EMV/DESFIRE smartcard application for support of legacy ticketing on bank cards. His mobile and contactless knowledge has come together in the development of prototype and proof of concept demonstrators for the use of NFC-enabled mobile payments, including the use of Host Card Emulation (HCE) for both payments and ticketing. He advised the Payment Schemes on the specification and certification of global payments applications for HCE-enabled mobile payments. He has also specified demonstrators for Internet of Things (IoT) connected car payments and downloadable payment terminals. Most recently he has carried out two technical due diligence studies of payment processing companies on behalf of potential inventors, both of which resulted in successful investments.

He also conducted a technical roadmap strategy study for and Australian public transport authority to assist them in the migration from their current closed loop contactless card to an account-based ticketing environment.

Most recently he acted as an Expert Witness for a law suit in the US.

In parallel with the above, Stuart has:-

- Led Consult Hyperion's Research and Development Activities, monitoring new technologies and solutions as they emerge, evaluating how they could be used within the Retail Payment industry and the potential information security risks that they introduce. The results of this analysis influences the payment schemes' technology and service strategies, whilst early adopters of those solutions make extensive use his experience during the design and implementation of their initial service. The latter includes Transport for London (Contactless Payments at the Transit Gate), Barclaycard (NFC Payments), ISIS (Expresspay for Mobile)
- Established Consult Hyperion's in-house smartcard testing service, which is used to:-
 - Certify third party vendor card and terminal products against American Express' contact (AEIPS), contactless (Expresspay) and mobile (Expresspay for Mobile) specifications.
 - Validate the functionality of third party services, such as the Barclaycard/Orange QuickTap NFC-enabled payment service, prior to launch.
 - Debug and penetration test card and mobile payment services prior to launch and during operation.

Education and Training

University of York – BSc (Honours; 2:1) in Physics; D.Phil in X-ray Crystallography.

*For more information, please contact Lindi Lion, Associate Manager, Consult Hyperion,
+44 7805 424 012 or lindi.lion@chyp.com*