PROTECTING THE DIGITAL DOLLAR

An ecommerce security solutions pioneer demonstrating business growth of almost 600 per cent per annum, Allied Wallet is an innovator that has flourished as society digitises its consumer behaviours worldwide. The firm's Founder and CEO, Mr Andy Khawaja, describes his journey in conceiving and successfully marketing a business that today secures millions of online transactions worldwide, and introduces the means by which Allied Wallet now plans to transfer its leading knowledge to emergent mobile payment platforms. Tony White reports.

Ecommerce has revolutionised the means by which consumers access commodities and content, and in so doing, has compelled intelligent businesses to match consumers' desires with easily accessible online platforms, through which their trades can be plied. However, the pervasive embrace of cyberspace has not always been the most consistently safe zone in which to securely transfer data – yet millions of online transactions are being conducted across the globe every day in the modern world, and many customers and businesses owe the peace of mind that they enjoy through such exchanges to Allied Wallet. An international technological titan in its own right, the organisation has historically spearheaded countless innovations that have made ecommerce a safe, dependable and convenient reality to SMEs and multinationals the world over. Furthermore, Allied Wallet is continuing to develop new solutions, in part driven by the radical shift in technological usage today from the traditional desktop and laptop computer to the handheld smartphones and tablets defining work and play worldwide.

Internet ingenuity

Helming Allied Wallet's indefatigable innovation is its CEO and founder, Mr Andy Khawaja – who relates his insight into the

ecommerce sector to Euroasia Industry from the company's Los Angeles office. "Allied Wallet was generated on the basis of a recognised need to secure online credit card transactions," he explains. "When the internet first began to penetrate mainstream culture, transactions rapidly followed, yet we foresaw that problems could arise through those processes." Although cybercrime is a pervasive shadow in international business today, its roots rest in more traditional avenues – and in a similar vein, Mr Khawaja's background provided the perfect canvas against which his knowledge of online security could manifest. "My vocational background entails the retail sector, within which we identified much credit card fraud," he reveals. "Our observations were that ecommerce, particularly in its infancy, presented an enormous opportunity for criminals intending to engage in credit

Mr Khawaja's retail chain background was among the United States' largest, with a presence in almost every state and an annual turnover exceeding US\$100 million. Such an expansive enterprise saw Allied Wallet launch in 2002 with an innate understanding of the nature of the merchant-consumer dynamic, and the need to ensure that transactions in ecommerce prevail without incident. "I banded together with some

leading technicians and software engineers, and together we embarked on creating a gateway that fully secures online credit card transactions," Mr Khawaja recounts. "We conceived the means by which both the merchant and the consumer would be protected from fraudulent transactions. Technology has come a long way in the interim between Allied Wallet's foundation and the active ecommerce landscape of today - yet much of that progress would not have been possible without the company's positive influence. "At the advent of ecommerce, around 20 years ago, it was possible to execute a transaction online for goods, and the only details requested of the prospective customer were their given and last names," Mr Khawaja details. "Addresses were to be entered, yet those were never verified – one could simply type in anything in order to appease the system, even if it in no way matched the address registered to the card. It simply was not checked."

Deftness in digital security

The transactions of the day have come far since those described by the Allied Wallet CEO, who recognised such factors as potential flaws that malicious individuals could exploit. "Consumer privacy is vital to card companies, so they would not seek to pass 2







on the details necessary to verify a card to a third party," he explains. "That is why, in the early years of online buying, credit card companies outsourced their security concerns to companies such as ours, who would build a secure gateway through which such transactions could occur free from interference. Through our system, we are able to both verify the cardholder's address, as well as ascertain if the card is being used from the correct IP address." Every online signature on Earth generates a unique IP address, and those adept in recognising and crossreferencing them can easily ascertain the location from which the device conducting a given online interaction is based. "If a purchase is being made in the UK, for example, and the cardholder was in China, or Nigeria, or anywhere else, the IP address would reflect that – and our system would notify us of a potential illicit activity," Mr Khawaja mentions. "Further to that, the first six digits of a credit card denote its region of origin, which further accentuates the means by which we can ascertain the accuracy of a given transaction. We were the only company that held the technology to validate such transactions."

Leveraging such advantages has allowed Allied Wallet to develop and deploy a host of security solutions to the modern online retail space, with particular emphasis on both SMEs and multinational businesses. "Our capabilities to identify IP addresses and credit card number origins pioneered the industry at large," Mr Khawaja enthuses. "As the business expanded, we began preventing fraud and credit card theft while enhancing security in online business. However, one of the largest issues facing

the early ecommerce industry was exactly what we ought to do with the credit card data that has been collated. In the case of Allied Wallet, such data was held in specialised servers situated in undisclosed locations. Today, PCI security systems have reinforced the data that we utilise even further." PCI Compliance represents a system by which credit card details are encrypted in modern online transactions. Through such means, the precise details of the card are never fully revealed beyond the encryption of the data, creating a valuable means by which to conceal vulnerable personal details from unscrupulous eyes. Allied Wallet actively utilises PCI Compliance throughout its dealings today, reinforcing that strategy with unique and meticulously conceived systems of its own devising. "We watched security systems implemented by banks and other organisations failing, and used the knowledge gained from such observations to build a complete credit card transaction processing system," Mr Khawaja explicates. "Today, we offer an entire security product line."

Securing the smartphone era

Technology is consistently changing, and Allied Wallet remains in synchronisation with the dynamics of the modern world. The mobile nature of most of society's most compelling technological spending habits has not gone unnoticed by the business, and effective new systems are being deployed to meet the needs of the market. "Ours is a civilisation gripped by smartphone addiction," Mr Khawaja guips, "and that is not something that is going away any time soon. Mobile payment solutions are gaining traction in both advanced and emerging markets - and our role is to extend our security services to safeguard that phenomenon." Allied Wallet's robust relationships with the broader security industry have underlined several of the observations described by Mr Khawaja – such as the decline in popularity of conventional personal computers. "We often liaise with an organisation that specialises in international airport security and across the globe, they have noted and described to us that 10 years ago laptops were frequently taken on flights by as much as 70 per cent of travellers. Yet today, only 10 per cent of travellers do so – they have migrated to smartphone technologies."

Recognising the pervasive nature of smartphones, Allied Wallet has readied its latest solution to meet the upsurge of mobile transactions dominating modern ecommerce. "The market for smartphone apps is enormous, and has revolutionised all aspects of work and play," Mr Khawaja stresses. "Mobile payments are the future - the only thing concerning businesses and customers is security within those payments. Bluetooth is a particularly problematic area – a sophisticated enough individual can utilise that system to gain access to an entire phone's data with relative ease." Allied Wallet is combating the prospective challenges to effective mobile payments through means of 'tokenisation' - a system whereby a specialised encryption method



moves vulnerable data out of the smartphone entirely. "That tokenisation solution is live as of June this year," Mr Khawaja advises. "The token is created and stored on an individual's phone, yet any credit card data and all associated transactions are completely encrypted, and the tokenisation itself consists of a digit in excess of 300 characters. That code is linked to an account that is in no way stored on the device."

The system that Mr Khawaja describes is the end result of a concerted effort to recognise and adapt to the challenge inherent to mobile payment technologies. "It has taken three years to develop, refine and fool-proof the mobile tokenisation system," he remarks. "We benefit from our Level One PCI Compliance – a digital environment that is renowned for its difficulty in penetrating." The protection system that Mr Khawaja describes is at the pinnacle of the security industry today, and underpins all of Allied Wallet's solutions. "Tokenisation has been highly challenging to develop in the last three years - simply sending a payment from A to B using such means has required software comprising 137,000 pages of code. Because security is so costly to develop, many organisations do not invest proactively, preferring a reactive stance. Our outlook differs – we believe that security comes first, in order to ascertain the impregnability of the profits that will follow." Allied Wallet operates eight offices worldwide, generating its bespoke solutions to client specifications with entirely internally developed systems.

International internet innovation

Technology breeds internationalisation, and Allied Wallet has earmarked China as a promising location in which to consolidate its strengths. "China's influence on modern business is being felt everywhere," Mr Khawaia says, "We have already seen a good uptake for our solutions from Chinese consumers, and operate an office in Shanghai. Chinese customers demonstrate tremendous trust in products and software that have been developed in the West – and when local merchants illustrate that they are operating their transactional infrastructure utilising Allied Wallet, a Western company, that trust is a powerful element of reassurance that sways much Chinese trade to such

businesses. It is also allowing foreign companies and consumers to access Chinese marketplaces, and vice-versa." Within the opening months of Allied Wallet's Chinese presence, the company accrued over 3,000 clients, without any large-scale advertising - a strong indicator of the firm's prospects, and indicative of the strong market potential of the country.

Expanding by its own perspicacity of the ecommerce market, Allied Wallet predicts unparalleled growth to transpire in the mobile payments space moving forward further empowered by the security solutions that the business provides. "Mobile payments are only going to accelerate in the coming years," Mr Khawaja predicts. "The organisations able to provide the greatest security solutions are set to be those who experience the most radical growth. We are even able to whitelabel third party competitors, to assist and secure them – the market needs strong security to demonstrate its most compelling growth." Allied Wallet's track record in the ecommerce and online security industries offer the business a robust platform from which to build in the mobile payments sector, with its tokenisation provision serving to reinforce that ethos. "It is a cost-intensive industry, yet our concern is more with preventing fraud and identity theft," Mr Khawaja states. "Our solutions are scalable from small to gigantic businesses, and all of those receive the same high standard of service. I am hugely gratified when recognising that we process transactions in over 90 countries and have a user-base in excess of 125 million customers. Those metrics indicate trust, confidence and satisfaction with the solutions that we have devised."

As mobile penetration and the ensuing transactions that are fostered continue to expand worldwide, Allied Wallet is preparing to revolutionise the security sector all over again, and capture further leadership in the market. "Simple electronic transactions via mobile platforms are the centre of the ecommerce sector today," Mr Khawaja outlines. "The effective delivery of security solutions represents an enormous business opportunity that we will continue to innovate in. The protection of consumers and the safeguarding of growing business are the central focal points of Allied Wallet's strategy."

