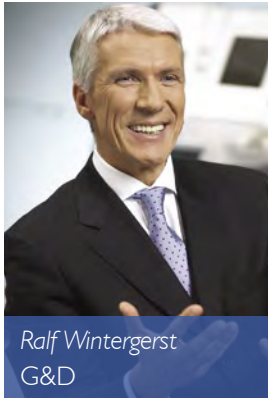


**GIESECKE & DEVRIENT PERSPECTIVE**

# Challenges and opportunities in evolving payments space



Ralf Wintergerst  
G&D

**It is no longer sufficient to establish an overall positive business case for making technology investments – the various third-party players must also have a positive business case**

*Interview with Ralf Wintergerst, Group Senior VP Banknote Processing, and Willem Bulthuis, Group Senior VP, Mobile Security, Global Marketing and Sales, G&D*

Founded in 1852, Giesecke & Devrient (G&D) celebrates its 160<sup>th</sup> anniversary this year. The company is a global market leader and pioneering innovator in banknote production and processing, security solutions, and identification systems. In addition to providing central banks and commercial banks with cash solutions, G&D supplies commercial banks, business enterprises, network operators and public transportation companies with innovative hardware, comprehensive software and services, and end-to-end solutions for mobile security applications.

Banking Automation Bulletin has had the opportunity to meet up with Ralf Wintergerst, Group Senior Vice President of Banknote Processing and Willem Bulthuis, Group Senior Vice President, Global Marketing and Sales. Mobile Security to discuss key trends in the world of payments and what developments we should expect over the next 5-10 years.

**Bulletin (B):** How is the world of payments evolving and what are some of the factors driving these changes?

**Ralf Wintergerst (RW):** *There is an ongoing evolution of payment methods, including cash and cashless means of payments. Today we are in a situation where multiple methods coexist and offer consumers a broad choice of options, ranging from cash and cheques to contact and contactless payment cards and mobile payments.*

*If we go back to the traditional payment method – cash – it is proving particularly resilient. Although there are significant geographic variations, around 90% of all retail payments worldwide are made using cash, and currency in circulation is expected to continue growing by an average annual rate of 4% for the foreseeable future.*

*Why is cash proving so resilient? Firstly, cash benefits from an established acceptance infrastructure, offering convenience, security and anonymity. Cashless payment methods must compete with these benefits in order to provide a compelling alternative. In many developing countries with large unbanked populations, cash is often the only available payment method – this may change with mobile payments. Furthermore, during the current economic and financial crisis, we have witnessed a trend towards cash payments, as consumers tend to prefer the tangible nature and direct accessibility of cash during periods of uncertainty.*

**Willem Bulthuis (WB):** *There are several technological trends which are driving change in the payments market, including mobile, contactless cards and combination cards.*

*Historically, the convenience and security of payment cards along with the availability of credit have contributed to the rapid development of the cards sector. Considering that there are roughly 1 billion bank accounts but 5 billion mobile phones, it is easy to understand why mobile offers tremendous potential – in particular in locations where the infrastructure for payment cards and ATMs is not universally established. In such locations, the mobile phone becomes the gateway for accessing banking services and making payments. Contactless (NFC) is still emerging, but has grown rapidly in the transit industry. Combination cards and NFC smartphones also offer an important opportunity for banks and retailers to develop loyalty features and location based services, which can be used to enhance customer interactions and drive additional revenue.*

**B:** What are some of the key challenges facing banks in terms of payments technology?

**RW:** *One challenge facing banks is how different channels serve cash, cards and mobile in parallel, and increase customer convenience while pursuing cost efficiencies. It is no longer sufficient to establish an overall positive business case for making*

technology investments – the various third-party players at each step in the banking value chain must also have a positive business case.

**WB:** Cost and security are important drivers of innovation in the cards business from a technology provider perspective. For example, the introduction of EMV smartcards has been driven by security concerns, and is now opening up new opportunities which did not exist with the magstripe card. For banks, customer intimacy and security are both important considerations. Mobile technology can help address both, for example by providing PINs via the mobile phone.

Traditionally, it was the banks that provided the bank accounts and payment mechanisms, but now you also have the mobile network operators (MNOs), and companies such as Google, PayPal and Apple, creating an increasingly dynamic playing field. As the mobile payments infrastructures open up, we will probably see a lot of changes in the ecosystem over the next decade. Everybody is vying for position and traditional sector boundaries are being blurred. It is likely that the banking sector will go through a process of de-verticalisation, whereby functions and services from the traditionally vertically integrated banking value chain are carried out by different companies. This will create exciting opportunities, but establishing a new ecosystem based on complex partnerships between banks, MNOs and other third-party organisations will also be a challenge.

**B:** G&D operates in both the cash and non-cash space – what can the cash sector learn from the non-cash sector and vice versa?

**WB:** One of the key factors explaining the success and resilience of cash is its general acceptance. Mobile and contactless payments will not take off until a critical level of general acceptance has been achieved. Things are moving in the right direction and the number of NFC-compatible readers and mobile phone handsets with NFC is growing rapidly. We expect that by 2015 approximately 400 million NFC-enabled smartphones are sold annually. Furthermore, the mobile phone infrastructure enables the possibility of building in different levels of security depending on the nature and size of a purchase. For example, low-value payments may not require any PIN, while high-value purchases may require one or even two PINs.

**RW:** While the cash sector benefits from widespread acceptance, it suffers from a lack of or much slower

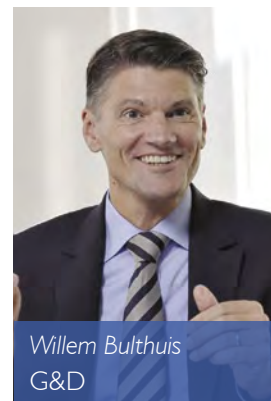
speed of innovation compared to the non-cash payments sector. This is partly due to limited thinking in systems, lack of standardisation and limited interoperability. Each country – and in many cases, each organisation – will typically have its own independent approach. The result is that a lot of inventions are not innovative. The non-cash payments sector benefits from global standards established by the global card schemes Visa and MasterCard – there is no equivalent in the cash sector. Furthermore, while the card schemes and the Googles and Apples of this world are able to pursue clear business objectives relating to non-cash payments, central banks have to remain neutral even though they may have a preference for promoting the usage of cash from which they earn seigniorage.

**B:** How can G&D help banks meet the new challenges and opportunities offered by changes in cash and cashless payments?

**RW:** The three key pillars of our Group strategy remains innovative drive, global customer proximity and the trust in the G&D. G&D's substantial investment in R&D allows the firm to offer a pioneering portfolio of payment solutions, which are actively shaping our key markets segments and which are helping to solve customer problems. We have moved away from a pure product perspective to a solutions perspective and invested in building partnerships with other organisations in order to offer a wide range of services, automation technologies and software solutions. An example of such a partnership is our pooling of expertise with Wincor Nixdorf aimed at enabling greater efficiency in the handling of ATM cassettes and optimisation through banknote recyclers and sensors in the cash cycle.

**WB:** G&D is uniquely positioned to help its customers take advantage of the rapidly evolving and converging fields of payments, mobile communications and internet services. Some of the important trends in the payment cards and mobile security space include dual interface cards, data integration and personalisation. The personalisation services we offer include the loading of individual customers' personal data onto payment cards and the secure management of customer data, as well as the possibility of sending card data as a virtual card to a mobile phone. ■

If you would like to know more about G&D's banknote processing and mobile security solutions, please visit [www.gj-de.com](http://www.gj-de.com).



Willem Bulthuis  
G&D

**It is likely that the banking sector will go through a process of de-verticalisation, whereby functions and services from the traditional value chain are carried out by different players**

