# **ACS - 15 Years Of Smart Card Reader Innovation**



Interviewee: Gilbert Leung
Designation: Sales Director

Company: Advanced Card Systems (ACS)

The SMART Sense: ACS celebrated its 15th birthday recently, what was ACS' birthday wish?

**Gilbert:** Hong Kong is said to be a place of high costs (relative to other countries in Asia), short of IT people and difficult for small and medium sized companies to get funds. Furthermore the local market is small and there is hardly any help from the government. These are really the challenges faced by an emerging IT company like ACS.

ACS has now built a brand as a supplier of quality smart card readers. We have built a large base of satisfied customers. Once we expand our product offerings, our existing customers who like to work with us will be our target customers. It took us years to build the culture in the company to deliver promises and to be reasonable to others. Thus our customers find ACS easy to work with. Such qualities in ACS help us compete in every region in the world. Our wish is to keep such qualities in ACS. Our long-term wish is to combine scientific spirit and Confucius thoughts to build a sustainable electronic and IT business that is green in order to achieve the dual purposes of business growth and environmental protection.

The SMART Sense: Share with us some of the milestones ACS has achieved over the years.

Gilbert: Advanced Card Systems Ltd. (ACS, wholly owned subsidiary of Advanced Card Systems Holdings Ltd), founded in 1995, is Asia Pacific's top supplier and one of the world's top 3 suppliers of PC-linked smart card readers, as well as the winner of Product Quality Leadership Award for Smart Card Readers from Frost & Sullivan. One of two hundred firms in Forbes 'Asia's 2010 Best Under a Billion' list, a prestigious list of 200 top-performing firms selected from 12,930 publicly listed firms in Asia Pacific, ACS develops a wide range of high quality smart card reading/writing devices, smart cards and related products and distributes them to over 100 countries worldwide. I am glad to share with you some of the key milestones of ACS in last few years below.

# Key Milestones

1999

 ACR30, the PC-linked smart card reader was recognized as the world's first PC/DC compliant USB single-chip smart card reader

#### 2003

- ACS was listed on the Hong Kong Stock Exchange (SEHK: 8210)
- ACS won the "Growth Strategy Leadership" award presented by Frost & Sullivan

#### 2004

 ACS launched its first contactless reader, ACR120, which is based on the ISO 14443 standard the 13.56 MHz RFID technology

## 2005

- ACS won the D'ucoty Awards for "Product Innovation for Smart Card Readers"
- Both Hong Kong and Belgian governments qualified ACS smart card reader

#### 2006

All ACS products have been certified to be RoHS compliant

## 2007

- ACS achieved the ISO 9001:2000 standard certification, which is a world standard for quality management systems.
- ACS was declared the "Top Smart Card Reader Supplier" in China

## 2008

ACS was chosen by the World Olympians Association (WOA) to secure its events in the 2008 Beijing Olympic Games

# 2009

- ACR38 readers were deployed for both Italian Lombardy health card and e-government projects
- ACS was recipient of the 2009 Best Practices Award "Product Quality Leadership Award for smart card readers" from Frost & Sullivan.

## 2010

- Forbes Asia selected ACS as one of "200 Best Under a Billion" companies in Asia Pacific.
- Frost & Sullivan recognized smart card reader suppliers in the world.

## The SMART Sense:

Give us an in-depth look on ACS' product solutions for Dynamic Password Generators. Also, discuss the security benefits attainable through these products. Why is there a need for the deployment of such products?

**Gilbert:** Two-factor authentication is currently the most effective solution in curbing security threats to online banking. With the addition of smart cards into the equation, like using the EMV card with the ACR8202 portable reader, two-factor authentication gains a more solid security foundation. When the banks or organizations are considering to implement a strong online authentication solution, they have to think about different aspects, such as security level, deployment implementation, ease of use, manageability, and scalability.



Advanced Card Systems - ACR8202 portable reader

While the 'Identify' and 'Challenge-response' modes are commonly used and widely accepted in today's market, they can easily be applied to all types of CNP (card no present) transaction scenarios. Malicious attacks can be done by obtaining or intercepting sensitive information (e.g. account numbers, amount of money being transferred, etc.) during a real-time transaction between a user's PC and his/her bank. Therefore, the transaction data signing mechanism is very important to alleviate this vulnerability. From my point of view, the market adopts MasterCard CAP technology widely. It is also possible for banks to take the advantage of implementing MasterCard CAP for online authentication applications.

On the other hand, customer education is vital. A good example of why education is so important is phishing. A bank can invest a lot and implement the best technology, but the best way to combat phishing is through communication - similar to parents teaching their children proper manners. Banks need to educate their customers on how to identify e-mail that might be fraudulent and other security threats.

#### The **SMART** Sense:

With the year 2011 just kick-started, what does ACS intend to achieve this year?

Gilbert: Currently, ACS allocates over 75% resources on R&D (and general admin). As a technology-driven company, ACS has to keep developing new products to meet the global market changes. We always ask ourselves, "where are we now?" and "where are we going?". ACS has now built a foundation to become a viable player in the smart card industry. We have now a range of smart card and card reader technologies and a strong base of satisfied customers. Most importantly, we have a team of dedicated staff. However, ACS is still very small to take the advantage of an "economy of scale". We want to grow ACS to another order of magnitude in sales in the next few years. In order to take risks, an IT company must have a good amount of financial resources. It is an objective to make ACS financially very strong in the next years.