Advanced Card Systems Ltd.

By Jafizwaty Ishahak, Program Manager, Smart Cards and Auto ID, APAC

Mr. Denny Wong is the Chairman and Chief Executive Officer of the company. Mr. Wong founded ACS in December 1995. In 1985, Mr. Wong founded his previous company, Advanced Electronics Limited, which distributed semiconductor components of Motorola Semiconductors (HK) Ltd., and provided design and application engineering services to manufacturers of consumer, industrial and telecommunication products. Later in 1997, Mr. Wong disposed his entire shareholding interest in Advanced Electronics Limited to Future Mr. Denny Wong Electronics Holdings Inc., an electronic component distributor based in Canada and was appointed as its general manager for its distribution business in China during the period from July 1997 to April 2000. In June 2000, he took the position of the chief executive officer of ACS. Mr. Denny Wong obtained a Bachelor of Science degree in physics in 1972 and a master degree in business administration in 1975 from The Chinese University of Hong Kong

Jafiz (Jafizwaty Ishahak): Where does ACS fit in the smart card value chain and do you see any changes in the next few years?

DW (Denny Wong): The mission of ACS is to become a leading provider of smart card and reader technologies in the world market. We develop a range of smart card reader products and develop card operating systems. We deploy contract manufacturers to produce our readers and to produce the smart cards with our operating systems. We do not provide smart card solutions. Thus we can be called an enabler of smart card based solutions. Initially, we focused on developing PC-linked readers. We have become among the leading provider of PC-linked readers in the world. We are now widening the range of smart card readers we develop. We are also developing more sophisticated card operating systems. Thus in the next 2-3 years, we will continue to be primarily a reader and card technology provider. However, we are getting into the business of providing solutions. The first market segment will be payment solution using contactless cards. The business of providing solutions may become a vital part of our business after 2-3 years.

Jafiz: What are the main smart card applications for smart card readers today particularly PC-link readers?

DW:

1. EMV Migration

The use of smart cards for financial transactions has become a reality today as EMV worldwide migration has been in motion. The use of smart cards is an essential method to reduce frauds but it is also a challenge in view of the need to build the infrastructure to use smart cards. ACS provides products, services and associated support and consulting services for this EMV migration in terms of reader and terminal technologies.

2. Government ID Cards

Government ID card projects like national ID cards, driving licenses and various agency-wide identification card programs in Europe are presently in operational stage this year. Recently, ACS was awarded by The Federal Information and Communication Technology (FedICT) department of the Belgian Government to provide ACS' more than 125K ACR38 Smart Card Reader for the prestigious service project to deploy smart card readers for their national identification cards.

3. Access Control for Enterprises

With broad support for an enterprise's existing authentication mechanisms, smart cards and matching cryptographic service providers (CSP) add two-factor smart card security for passwords, dynamic passwords, Windows 2000 logon, VPNs, web authorization, public key encryption, digital certificates and digital signatures. Enterprises benefit from enhanced security for their existing authentication methods while also taking advantage of smart card protection for PKI-enabled applications.

Jafiz: Where does ACS's strength lie in APAC and in other regions today?

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DW: 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. Our advantage over many other APAC suppliers of similar products is that ACS started early to build its customer base in the world. The market of smart cards and readers for a new type of product usually takes off in Europe first. ACS usually finds a demand of one of its new products in Europe first. Then with successful sales records in Europe, it has an advantage of being a pioneer supplier in APAC among other APAC suppliers. Comparing other international suppliers competing in the APAC market, ACS has the advantage of being a company based in APAC and able to provide faster services here.

ACS has now built a name as a supplier of quality smart card readers. We have built a large base of satisfied customers. Once we expand our product offering, the target customers of these new products will be the existing customers who like to work with us. It took us years to build the culture in the company to keep promise and to be reasonable to others. Thus our customers find ACS to be a company easy to work with. Such qualities in ACS help us compete in every region in the world.

Jafiz: Can you share with us on ACS's latest innovation?

DW: 2007 is expected to be a good year for the smart card reader industry. Many companies have increased the R&D expenses; thus, we expect more security-related applications will be introduced in 2007. Also, since most countries are deploying their smart ID cards in 2007, we expect to see the increasing publicity and usage of smart card readers next year. We are excited that ACS will introduce the ACR88 mobile handheld smart card reader, ACR100 SIMFlash – Plug-in card reader with Mass storage, ACOS5 PKI smart card and other products in 2007. With our new technologies, we are confident that we will have a spectacular year that will take advantage of this market.

Jafiz: I understand that besides APAC, ACS have successfully penetrated other markets? Can you elaborate?

DW:

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1. Belgium ID Card Project

Recently, ACS was awarded by The Federal Information and Communication Technology (FedICT) department of the Belgian Government to provide more than 125K ACS' ACR38 Smart Card Reader for the prestigious service project to deploy smart cards reader for their national identification cards. For more information, please visit:

http://www.acs.com.hk/press_release/042706.asp

2. Egypt Taxation Project

The Egyptian Government is issuing new smart taxation cards for its tax-payers for security reason. They need a device (ACR100 SIMFlash) to input, check and back-up transaction information to improve the security of their tax-payer records and financial data without compromising its staff's ability to access the data conveniently and efficiently.

Jafiz: Is APAC still your largest market? Please elaborate.

DW: EMEA (Europe, The Middle East and Africa) is our biggest market. Usually the market of a new type of smart card product will take off in Europe first. In the past, ACS experienced several incidences of launching products to the market whose demand did not take off until a few years later. Thus usually we will get business first in EMEA.

Jafiz: In your opinion, what is the next big application /opportunities for PC link readers market (by region)?

DW: One application for each region as follows:

- APAC

   - National ID cards for logical access control.

- EMEA

- Health cards

• USA

- Government for CAC and the new cards for government officials based on the FIPS standard.

• South Americas
    - Banks

Jafiz: What is your opinion on the contactless readers market? I understand that ACS has started exploring this space. can you tell us more?

DW: These are the big markets:

1. Transit
2. National ID and electronic passports
3. Paypass and visawave readers
4. Physical access control

Each market in these four segments is growing rapidly. However, the ratio of cards to readers is very high for most of all these four segments, especially for segment (2). Thus the present contactless card reader market is still small. Fortunately the gross profit margin is still good in the contactless reader market. Therefore, this market is interesting to ACS. Furthermore, it is a high growth market. ACS will continue to invest in R&D in order to come up with good products to capture this market.

Presently, ACS is supplying contactless card reader modules for customers to integrate into their end products used in the above four market segments. We are planning to develop and provide readers with more complete functions and will launch one or two products in 2007.

We believe that NFC readers advocated by Philips and Sony will become important devices as the popular mobile phone will be used to replace the contactless card to a great extent in the coming years. We plan to launch an NFC reader in the first half year of 2007.

Jafiz: Understand that you've tapped into over 80 countries for ACS products? What are the emerging markets you will be targeting in Asia and other countries next year and beyond? why?

DW: ACS is primarily a product company. We produce a range of smart card readers and card operating systems to supply to software developers and system integrators. These customers would identify their applications in their respective domestic markets and ask us for the right products. The applications for which our products are deployed are wide. Nevertheless, we constantly endeavour to keep ourselves informed of

the relative sizes of the market and of the market changes. There is one emerging important market that we will place much emphasis on, i.e. smart cards and smart card reading devices used for logical and physical access control, and for payment. ACS is providing various products for this market. We have ACR38DT and ACR38ET which are used as an USB plug-in reader and as a contactless card. We provide hybrid cards with ACS PKI card operating system, Mifare chip and magnetic stripe for payment, access control and loyalty. We provide portable plus PC-linked readers supporting contact and contactless cards. We can combine our technical know-how in contact and contactless cards and in contact and contactless card readers to make devices to meet the specific demands of our customers.

Jafiz: What is the major challenge you foresee in 2007 and coming years for this industry?

DW: The total market of smart cards and smart card reading and writing devices is still not big enough for a large number of players in the smart card industry. There are a few big market segments in the industry, such as the market for GSM cards and the market for EMV cards. These markets are so well known and the specifications of the products are so well-defined that it is not difficult for any smart card player with a reasonable amount of financial resources to get into these market. The big players, mostly European, have the needed financial resources. So they get into the market and have to face the competition.

The total market of smart card solutions is very much bigger, many times bigger than the market for products. The big players will attempt to get into the solution market in order to expand the market that they can serve. If they succeed, their long-term viability can be extended. Otherwise, there may be further mergers and acquisitions in the industry.

The smaller players might not have the resources to capture the well-defined and big market segments. They will choose their niche markets to focus on. Once they get more financial resources they will extend their influence into the bigger market segments. I believe that there will be some uprising Asian companies which by making use of their flexibility and lower cost structure will rise to become important world players.

Jafiz: What are your personal targets for ACS in the next 5 years?

DW: 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 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". I 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 my objective to make ACS financially very strong in the next years. In this way, the present team of top management with a lot of working experiences can pass the responsibilities and authorities to our younger staff members more quickly and allow them to take more risks. After all, the IT industry is for young people.

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Jafiz: ACS has recently been awarded with the Frost & Sullivan Business Development Strategy Leadership award for World PC Link readers market. Many congratulations!! How do you think ACS will benefit from being the recipient of this prestigious award?

DW: The award is an encouragement to all ACS staff members as recognition of their achievements.