



## 中小企雲端應用安全策略

首頁 免費課程 下載 活動花絮 指南 鳴謝 關於計劃

「提升香港中小企在資訊科技及  
雲端商用上的安全策略」  
培訓及資詢項目計劃

## 認識網上及流動支付

日期: 2015年 8月13日 (星期四)

時間: 下午2時至5時

地點: 香港灣仔活道27號 職業訓練局大樓11樓

<http://cloud4smb.hk>

雲端服務、各種網上或電子商貿服務不僅是可以加強業務運作效率，  
可以幫助企業家探索和取得新商機、新市場和新客戶，以及加強  
實現許多策略性業務目標，包括節約成本。中小企從業員更需了解  
雲端服務在保安上的詳情。

# 中小企雲端應用安全策略推廣計劃

## SME Cloud Security 中小企雲端服務信息安全



『中小企業發展支援基金』撥款資助  
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工業貿易署  
Trade and Industry Department

主辦機構



香港中小型企業總商會  
The Hong Kong General Chamber of Small and Medium Business

協辦機構



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# 計劃顧問及課程導師

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# 認識網上及流動支付

## 1. 嘉賓講者

- 聯網通商務網路(Linking Business Network)
- PayPal Hong Kong

## 2. 電子商務的網上及流動支付你要知

## 3. 用戶端安全手段

# 1. 嘉賓講者

聯網通商務網路(Linking Business Network)

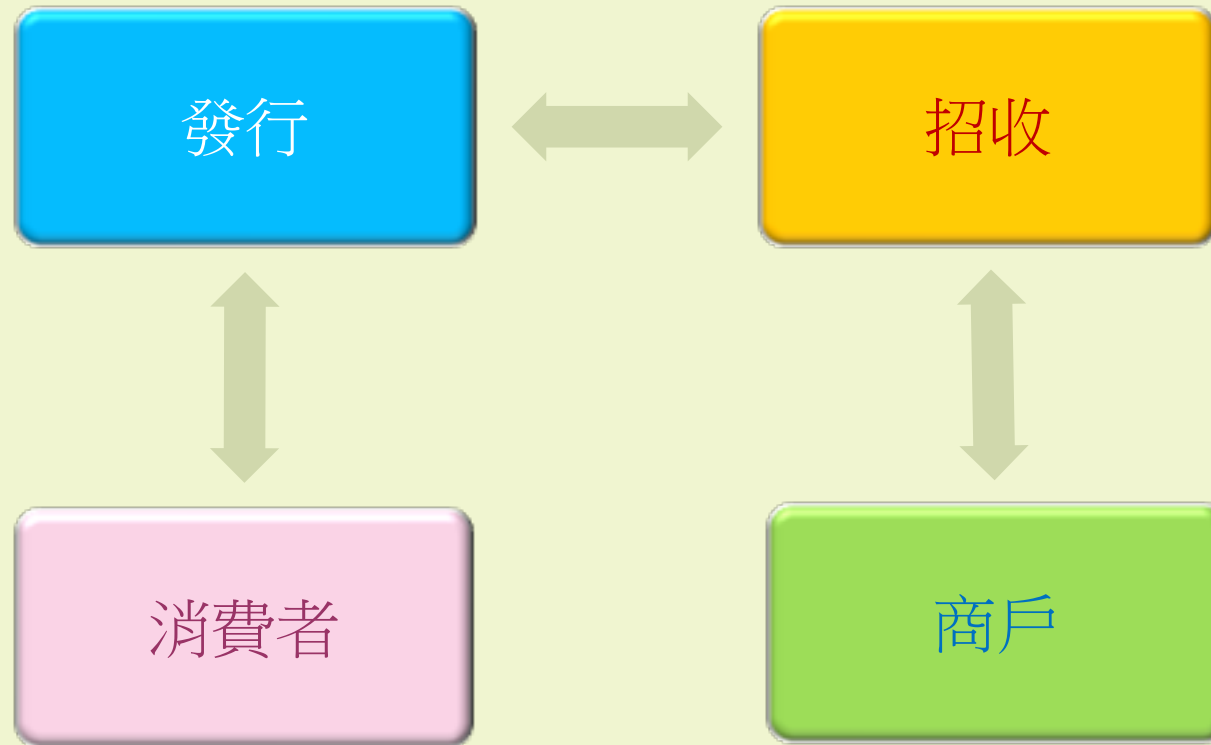
PayPal Hong Kong

## 2. 電子商務的網上及 流動支付你要知務你要知



# Payment Services (4-party Model)

**Business model:  
Payment services**

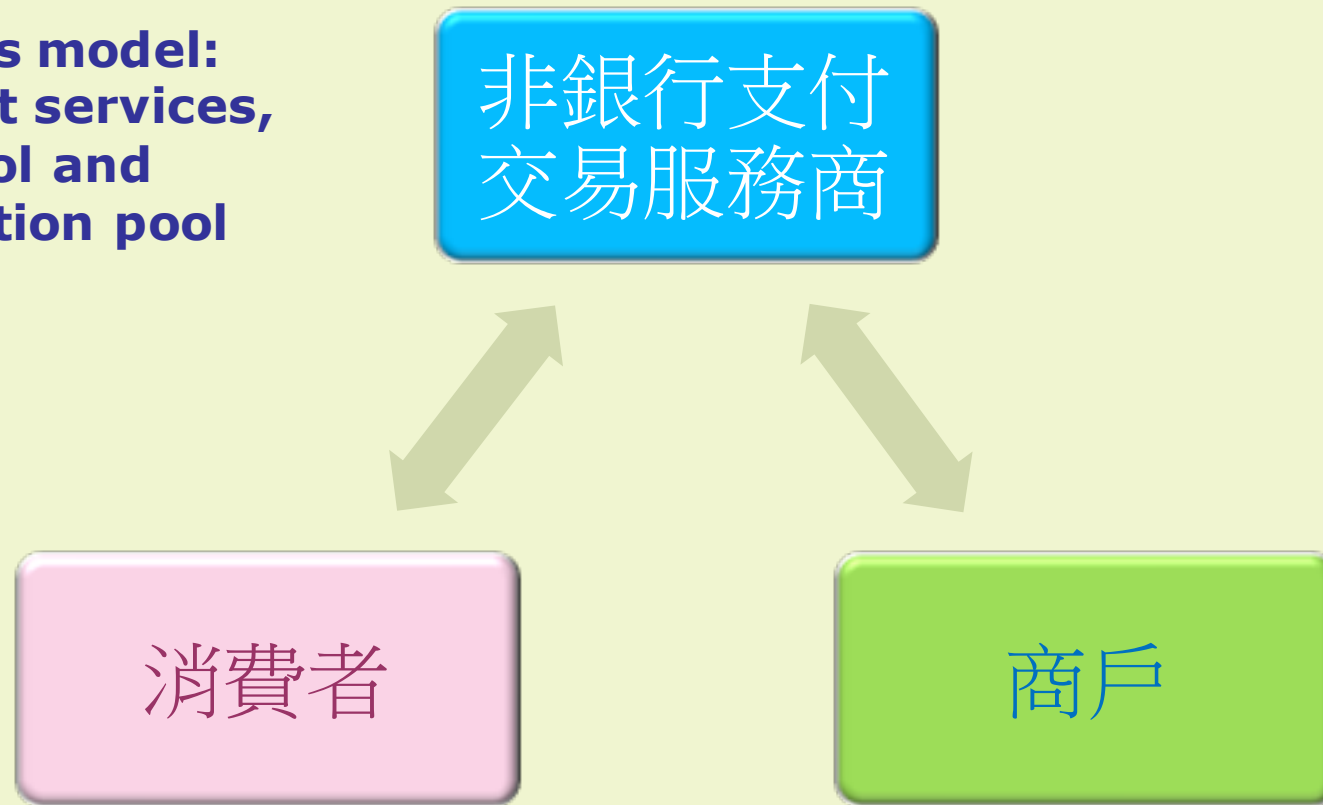


Source: *The role of Hong Kong Monetary Authority in supporting retail payments*, Esmond Lee, Cartes Asia 2014, 20 March 2014



# Payment Services (3-party Model)

**Business model:  
Payment services,  
fund pool and  
information pool**



Source: *The role of Hong Kong Monetary Authority in supporting retail payments*, Esmond Lee, Cartes Asia 2014, 20 March 2014

# 網上及流動支付你要知務你要知

- 網上支付 Online payment
- 流動支付 Mobile payment

# 安全的網上交易

雙重身份驗證(Two factor authentication)

實物的使用令互聯網交易更安全

- Digital certificate within a smart card (HK Smart ID card) or electronic key (USB key)
- SMS-based one-time-password (OTP)
- Security token-based OTP

# 雙重身份驗證

Education video from The Hong Kong  
Association of Banks

<http://www.hkab.org.hk/DisplayArticleAction.do?sid=5&ss=0>

# 安全的網上交易

- 用戶端設備設置
  - Personal firewall 個人防火牆
  - Anti-virus software 防病毒軟件
  - Anti-spyware software 反間諜軟件
- 網上交易平台極少主動發電郵要求重設密碼
- 從預設或官網連結進入帳戶登錄

# 八達通 Octopus Online Payment

- Tapping Octopus on NFC-enabled Android mobile device
- 國內購物網 - 服務費折合為港幣的應付購貨金額之1.5% (以透過支付寶付款的淘寶網平台商戶為例)

Source: <http://www.octopus.com.hk/get-your-octopus/where-can-i-use-it/list-of-places/online-payment/tc/index.html>

# E-Commerce Online Payment

- HKTDC Small Order Zone
  - <http://small-order.hktdc.com/buy/en/buyer-guide/payment-options.html>
- Taobao
- Alipay



# 網上及流動支付你要知務你要知

- 網上支付 Online payment
- 流動支付 Mobile payment

# 本地流動支付 - 用戶期望

## 3Cs

- Confidence 信心
- Convenience 便利
- Cost effectiveness 成本效益

# Stored value facilities (SVF) 儲值設施

- Device based
  - Multi-purpose (Octopus)
  - Single-purpose (Coffee shop stored value card)
- Non-device based

# 本地流動支付現況及發展

## 現況

- Multi-purpose stored value card 根據銀行法例監管
- 無牌發出SVF 觸犯法例

# SVF法例監管發展

- The Clearing and Settlement Systems (Amendment) Bill introduced into Lego on Feb 2015

# SVF法例監管發展

- 獲發牌條件
  - 根據香港法律註冊成立的公司
  - 主要業務
  - 最低資本要求(on-going) HK\$2,500萬
- Single-purpose SVF 不需要牌照
- 為了更好保護 SVF 的"Float"：要求與持牌人的資產、其他基金分開

# Retail payment systems (RPS)

## 零售支付系統

- 處理轉讓、清算和結算小額交易：
  - Credit card schemes (e.g. Visa, MasterCard, UnionPay)
  - Debit card schemes
  - Merchant acquirers (e.g. banks, EPS)
  - Payment gateways (e.g. PPS, Electronic Bill Presentment and Payment EBPP)



# 零售支付系統(RPS) 監管發展

## 現況

- Code of Practice for Payment Card Scheme Operators endorsed by HKMA
  - American Express, UnionPay, Diners Club, EPS, JCB, Jetco, MasterCard, VISA etc.
- new legislative approach is proposed

# NFC mobile payment

- Near-Field Communications (NFC)
- Two NFC-compatible devices transfer of data within 4~10 cm

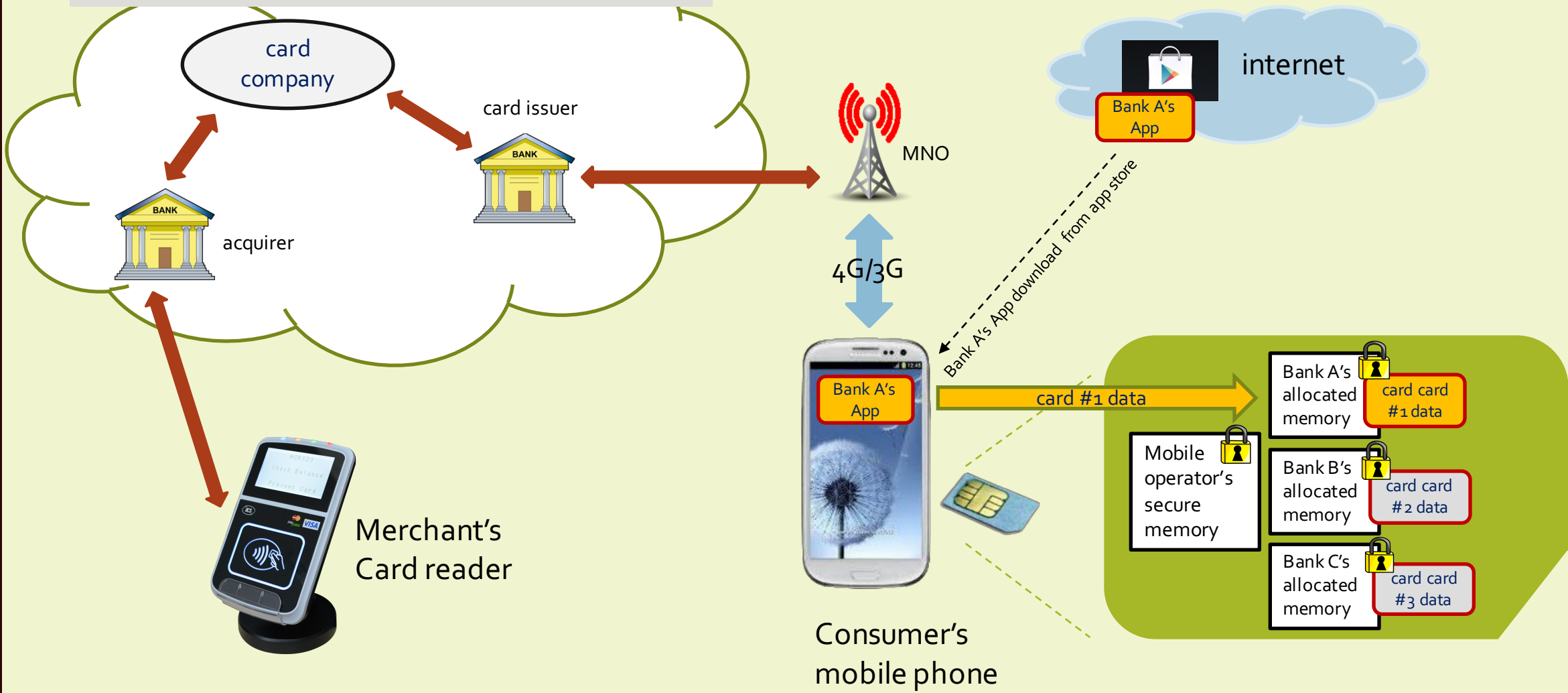
# NFC mobile payment infrastructure

## Stakeholders:

- Regulator
- Payment service providers
  - non-banks / global players e.g. VISA, MasterCard, UnionPay
  - Banks
- Mobile network operators (MNOs)
- Handset manufacturers
- Secure Element Providers (e.g. SIM card/chip-set provider)
- Trusted service managers (typically working on behalf of payment service provider)

# NFC mobile payment infrastructure

## Payment Service Providers



# NFC mobile payment infrastructure

- Market driven
  - e.g. France Citizi (a jointly service provided by MNOs, banks and a transport operator)
- Government driven – setup an open and common infrastructure
  - e.g. Singapore IDA (awarded a contract to a consortium of MNOs, banks, NFC technology provider)

# NFC mobile payment

- HSBC, Hang Seng Bank, BOC, Citibank launched NFC mobile payment services in 2013
- Octopus launched Octopus SIM and Octopus Online Payment services using NFC mobile phones
- Visa payWave and MasterCard payPass installed in merchant shops

# The ideal NFC mobile payment infrastructure

From consumer point of view:

- Able to download available payment services from different payment service providers onto a single NFC-enabled device (i.e. multiple credit cards within a phone)
- Independent of MNOs
- Independent of handset hardware
- High level of security to protect transaction data and privacy



# Possible NFC devices

- SIM card, Micro-SD card, Phone sleeve, Audio jack device
- A SIM card is good to support multiple payment service providers but it is owned and issued from a MNO

# Possible NFC valued-added services

- Loyalty, rewards and coupons
- Advertisement
- Transportation and ticketing
- Physical access control

### 3. 用戶端安全手段

Hands-on

你的設備安全設置

# 資料來源：

<http://www.hkma.gov.hk>

<http://www.pcpd.org.hk/cindex.html>

[http://www.infosec.gov.hk/tc\\_chi/main.html](http://www.infosec.gov.hk/tc_chi/main.html)

<http://www.infocloud.gov.hk/home/1?lang=tc>

<http://www.lapssolutions.com>

<http://www.taobao.com>

<http://www.alipay.com>

<http://www.ebay.com>

<http://www.paypal.com>

<http://www.google.com>

<http://www.apple.com/apple-pay>

<http://www.visa.com.hk>

<http://www.mastercard.com>

<https://www.hkab.org.hk/>

<http://www.consumer.gov.hk>

<http://www.octopus.com.hk>

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