Next Generation Payment Infrastructure

- P2P Mobile Infrastructure
- EBPP/EIPP Infrastructure
Mobile is rapidly becoming preferred Channel. For Everything.

Population V.S Tech users

- **96 Million** Mobile subscribers in Thailand Dec2014
- **46%** Mobile
- **29%** Mobile Internet users
- **25%** Smartphone users

<table>
<thead>
<tr>
<th>Year</th>
<th>Total population</th>
<th>Total number of mobile phone users</th>
<th>Smart Phone &amp; PDA users</th>
<th>Tablet users (Such as iPad, Galaxy Tab)</th>
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</thead>
<tbody>
<tr>
<td>2010</td>
<td>67.13</td>
<td>38.24</td>
<td>0.04</td>
<td>0.67</td>
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<td>2011</td>
<td>67.47</td>
<td>41.43</td>
<td>5.19</td>
<td>3.21</td>
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<td>2012</td>
<td>67.77</td>
<td>44.10</td>
<td>9.66</td>
<td>16.96</td>
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<tr>
<td>2013</td>
<td>68.09</td>
<td>46.40</td>
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<tr>
<td>2014</td>
<td>66.88</td>
<td>48.07</td>
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Ref: Annual report of AIS, Dtac & True

Ref: BOT Payment report 2013 & www.ais.co.th
Payment Channels becoming Personal ….
Building the Payment Channel Roadmap
What is P2P?

P2P (person-to-person) payment concept is an online method that allows customers to transfer money from their bank account to another individual's account using **Mobile phone number, Email address, QR code.**

**P2P payment concept**

- A wants to send money to B
- A can use either a computer or mobile phone to send P2P electronic payment instead of cash or check
- A logs in to online banking account and enters PIN
- Enters B’s mobile phone number or email address and the amount
- Confirm transaction then hits “Send”
- A and B get a text or email message telling that the money is in B’s account
Why P2P Mobile?

- Consumers have become increasingly comfortable using mobile-payments
- Adoption of Smartphone, 143% Mobile Penetration with 22 millions of Smartphone users in Thailand (2014)
- P2P payment is *new market opportunity* to replace cash transaction in daily life, for example…
  - Pay for individual person (C2C) e.g. friend & family
  - Share cost of Dinner, Gifts
  - Pay for taxi (C2C)
  - Pay for workers, or SME shops (C2B)
    - i.e. J.J. market, street shops …
P2P Mobile Inter-bank Payment Infrastructure

- Proven track-recode and remarkable success in ATM switching and IT Payment solutions for a decade.
- Seamlessly integrated with ITMX Single Payment and interbank fraud monitoring and detection system.
- Capability of high volume transaction processing.
- Share national infrastructure and reduce cost from duplicated investments of each bank.

Customer channels:
- Internet
- Telephone
- Mobile Banking
- Branch
- ATM

Diagram:
- 1. Payment Request
- 2. Payment Request
- 3. Accept/reject
- 4. Payment Confirmation
- 5. Net Settlement positions

Branding:
- BAHTNET
- ITMX
- Corporate
- Mobile Registration Repository
- Payment Switch
- Settlement / Clearing
  Settlement Risk
  Mgmt.
  Reporting Portals

- Customer Notification
- Sending Bank
- Receiving Bank
- Corporate input

Reported:
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The vision for Next Generation Mobile Payments

- **Power up** Consumers Mobile Banking experiences
- Money management solution **Across Banks**
- Real time, 24x7, **Secure, High Availability**
- ISO20022 to allow Interoperability **Across industries**
- Fraud & KYC managements – **Real time monitoring**
- **Systematic risk management** including settlement risk
- Able to extend to **Cross-border coverage** over AEC and beyond
What is EBPP and EIPP?

- **EBPP** stands for Electronic Bill Presentment and Payment, the process by which companies send their bills to customers (B2C) and receive payments electronically.

- **EIPP** stands for Electronic Invoicing Presentment and Payment, same solution as EBPP but for B2B e-Invoicing and e-Documents etc.

- **National EBPP /EIPP** is Consolidator Model, whereby the bills from multiple billers are delivered to a Single Online Banking Website (then expand to multi-channels of the member Banks), to be presented in aggregate to consumer for viewing and payment.
Why EBPP / EIPP?

Key initiatives

- Set up national utility to drive electronic bill payment with common standard, improved customer experience, and pass-through of cost savings.
- Drive B2B electronic payments through establishing B2B e-Invoicing and electrifying VAT and withholding tax payment process.

Important of EBPP and EIPP Implementation

- Unlock the potential and launch a new era of payments in the country.
- Create accelerator with expecting 2-4 x jump in significant efficiency gains.
- Target cost savings approximately 0.8% of GDP of the country.

Ref: Launching a New Era of Payments in Thailand, TBA
Annual Global Bills & Invoice volume (paper + electronic) = 500 billion
- B2C/ G2C = 330 billion
- B2B / B2G / G2B = 170 billion

Estimated e-bills & e-Invoicing in 2014 reached 40 billion worldwide with annual growth rates of 20%.

Remark: “Laggards” does not mean there was no e-invoicing in these countries, they are typically in the first experience with e-billing while “Developing” means they are typically the innovators for e-invoicing.

Source: Billentis, 2014
The Vision for Next Generation EBPP

- Customers are able to view, manage payment, and pay all bills from multiple billers at one place.
- Bill Consolidation would be created as a SINGLE facility for ALL Institutes to join
- EBP operated with secure / standardized framework, protected ALL e-Documents and be LEGALLY accepted
- EBP to be seamlessly integrated with ALL payment channels
The EBPP Ecosystem Vision Diagram

- ITMX is performing centralized reconciliation and settlement on behalf of all billers and banks.
- Share national infrastructure and reduce cost from duplicated investments of each bank.
- Seamlessly integrated with Single Payment system and Fraud Monitoring and Detection system for interbank transaction to ensure security and reliability.
- It’s Time-to-Market, each bank has developed EBPP and EIPP Stand Alone Model for a while and ITMX will soon offer Consolidator Model for all member Banks to enhance business growth and interbank service for both EBPP and EIPP.
Benefits to the country and digital economy

- National Consolidator will accelerate customers migration to electronic-channels delivering time and efficiency saves to overall economy
- Share national infrastructure and get rid of duplicated investments
- Develop secure and standard protocols related to B2C transaction
- Facilitate standard bill payments and is expected to provide the basis for developing wide range of electronic payments in the future (EIPP for example)
- Create challenging environment by providing a robust, scalable and flexible platform for a growth of future e-government services.
Q & A

Thank you