

OVERVIEW AND CHALLENGES
OF DIGITAL FINANCE
IN TAIWAN

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Overview of Digital Finance in Taiwan



Cases of Problems Caused by Digital Finance



CDIC's Measures to React to Digital Finance

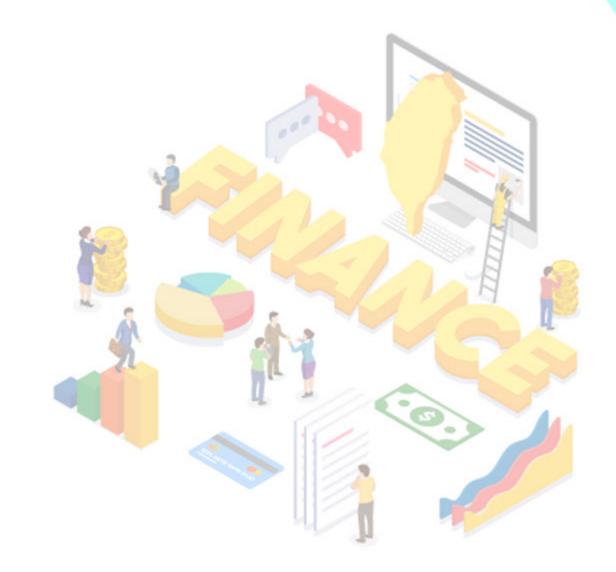


Future Deposit Insurance Issues





Overview of Digital Finance in Taiwan





Overview of Digital Finance in Taiwan

Online Application Services







Mobile Payments

Emerging Technology Application





1. Online Application Services

Digital Financial Environment Project 3.0 was launched in 2015



Networking

- 1. Added online application services
- 2. Enhanced customer convenience
- 3. Reinforced consumer protection



Cloud Computing

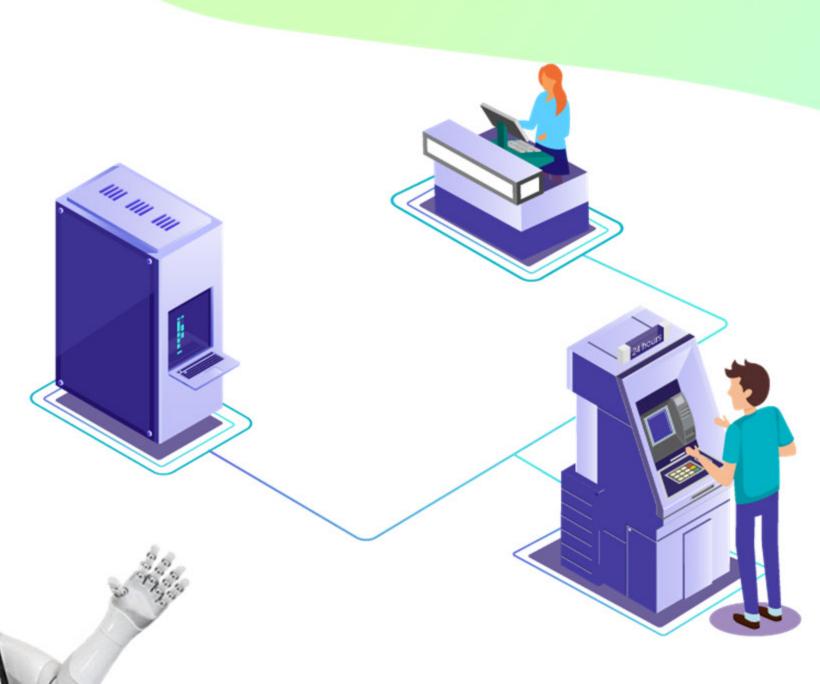
Development of Online Account Application

Account type	Application method	Number of application	Function
Type 1	Digital ID, key verifications, and image file setup	260,000 applications	Same as general demand deposit accounts
Type 2	Existing savings account verification	190,000 applications	Max. amount limit on online transactions
Type 3	Credit card or other bank account verification	190,000 applications	Limited to transfers between personal accounts





II. Virtual Branches



Welcome robot



Smart customer service



Digital experience area



VTM



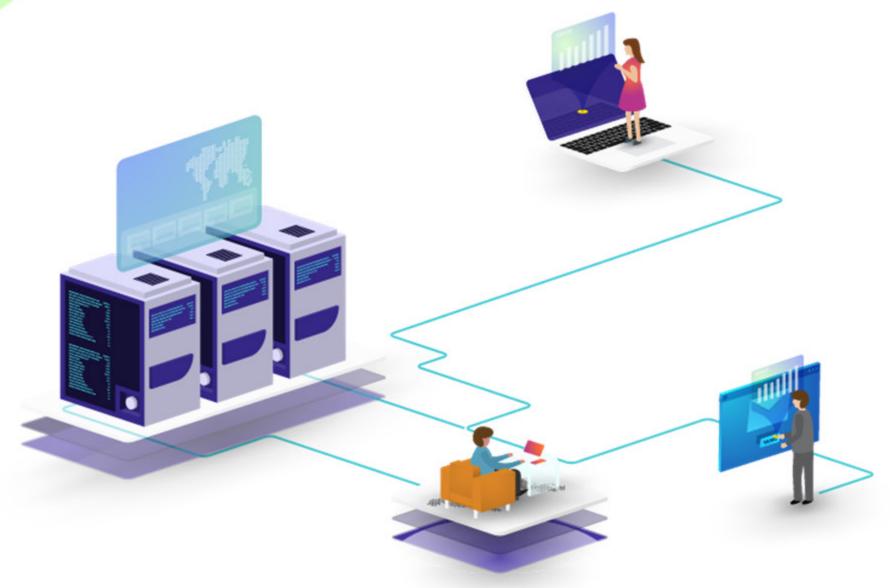
Bank C Digital (Smart) Branches

Time-saving digital services

Pre-complete transaction information and book an appointment at a branch



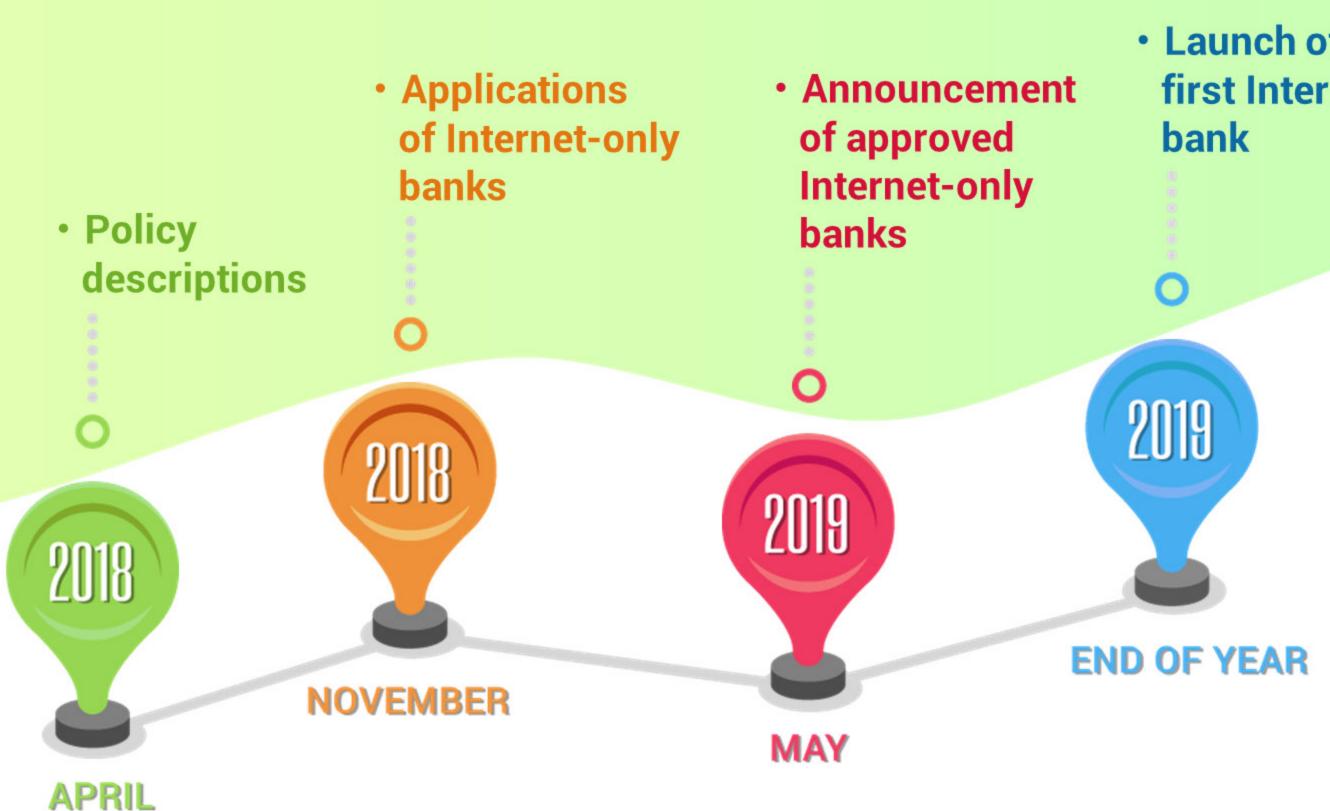
Video tellers to simulate live ATMs with 24-hour service







To Launch Internet-Only Banks Soon



Schedule and conditions for the launch of Internet-only banks in Taiwan

- Launch of the first Internet-only
- 1. Licenses available: 2
- 2. Startup capital: same as commercial banks (NT \$10 billion = US \$325 million)
- 3. Scope of business: same as commercial banks
- 4. Qualification of applicants: Founded at least by one bank or FHC, ownership > 50%



Utilizing Social Media to Expand Financial Services and Marketing





Official LINE account services

III. Mobile Payments







Pay by scanning QR codes



Payment Methods Offered by Taiwan's Mobile Payment Businesses





software

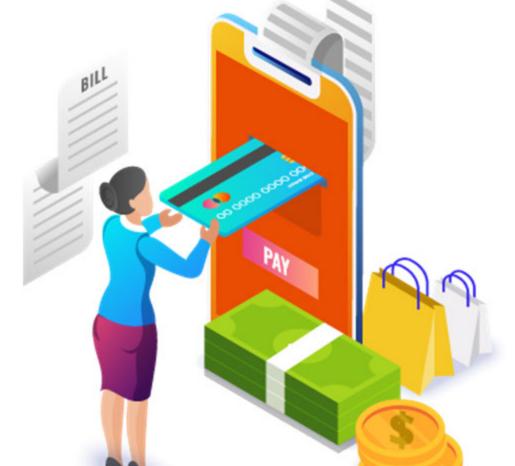






















IV. Emerging Technology Applications



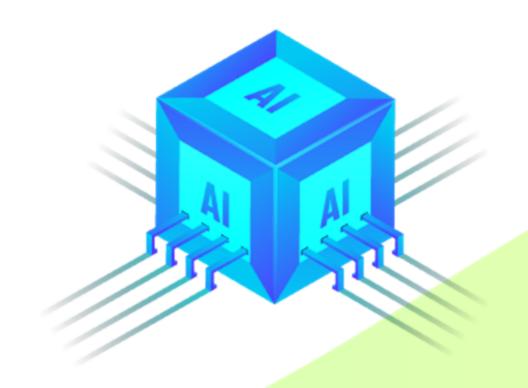




Fintech applications

Blockchain

- Settlement
- Payment
- Trade finance
- Authentication
- Syndicated loans

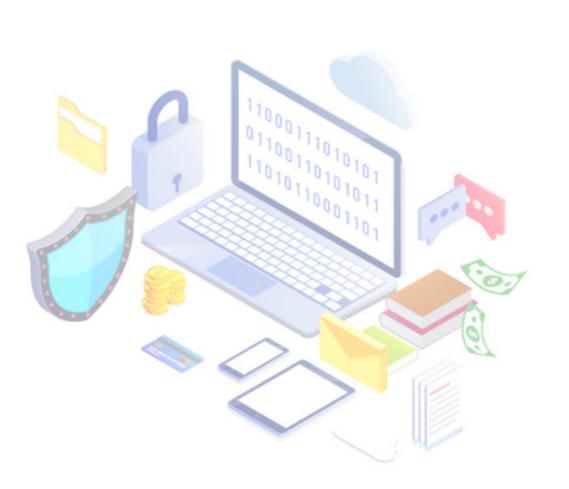


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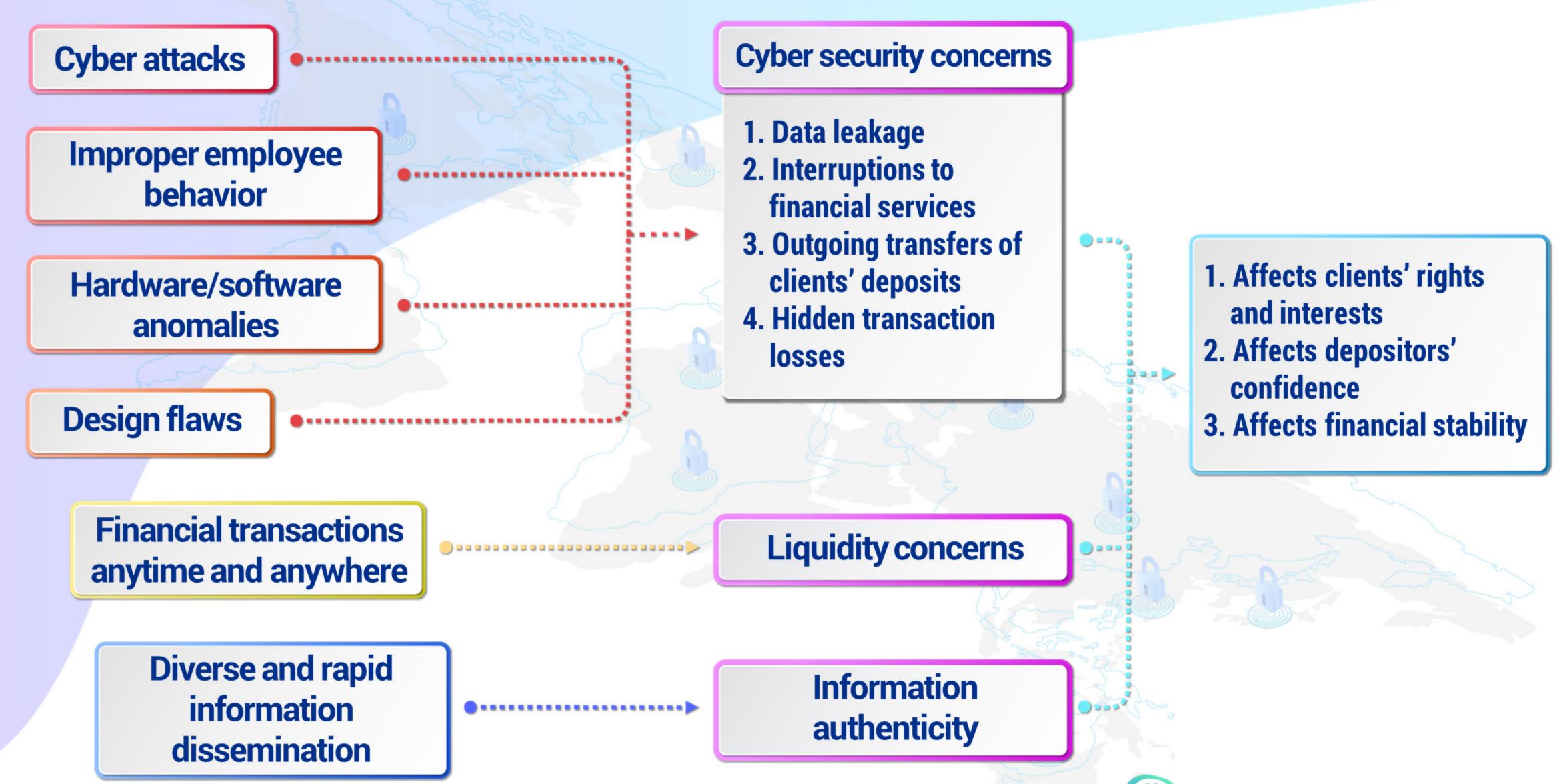
- Transaction and financial management consultation
- Risk management and model establishment
- Security and authentication
- Smart customer service
- Financial RegTech
- Precision marketing



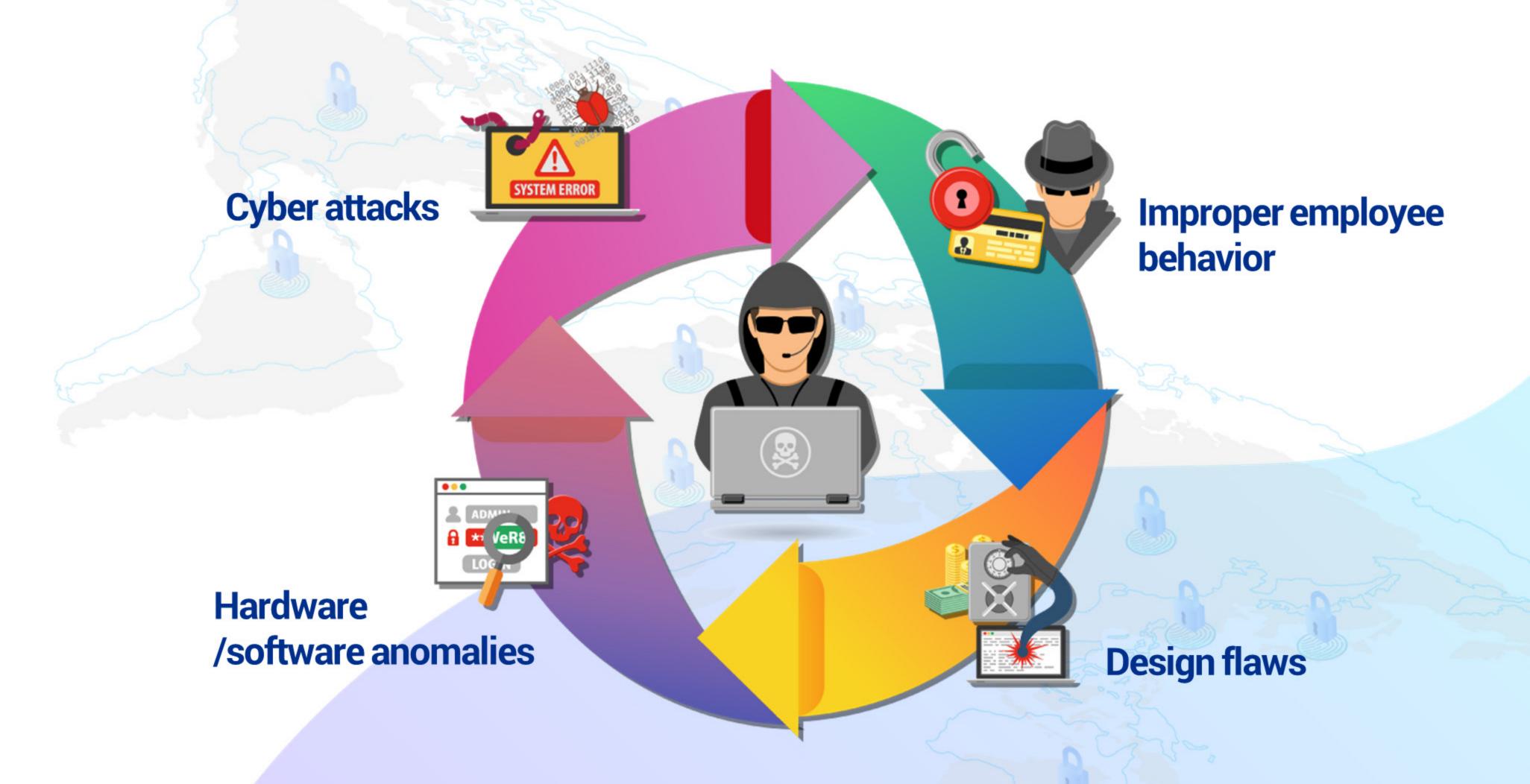
(III) Cases of Problems Caused by Digital Finance



Possible Problems deriving from digital finance

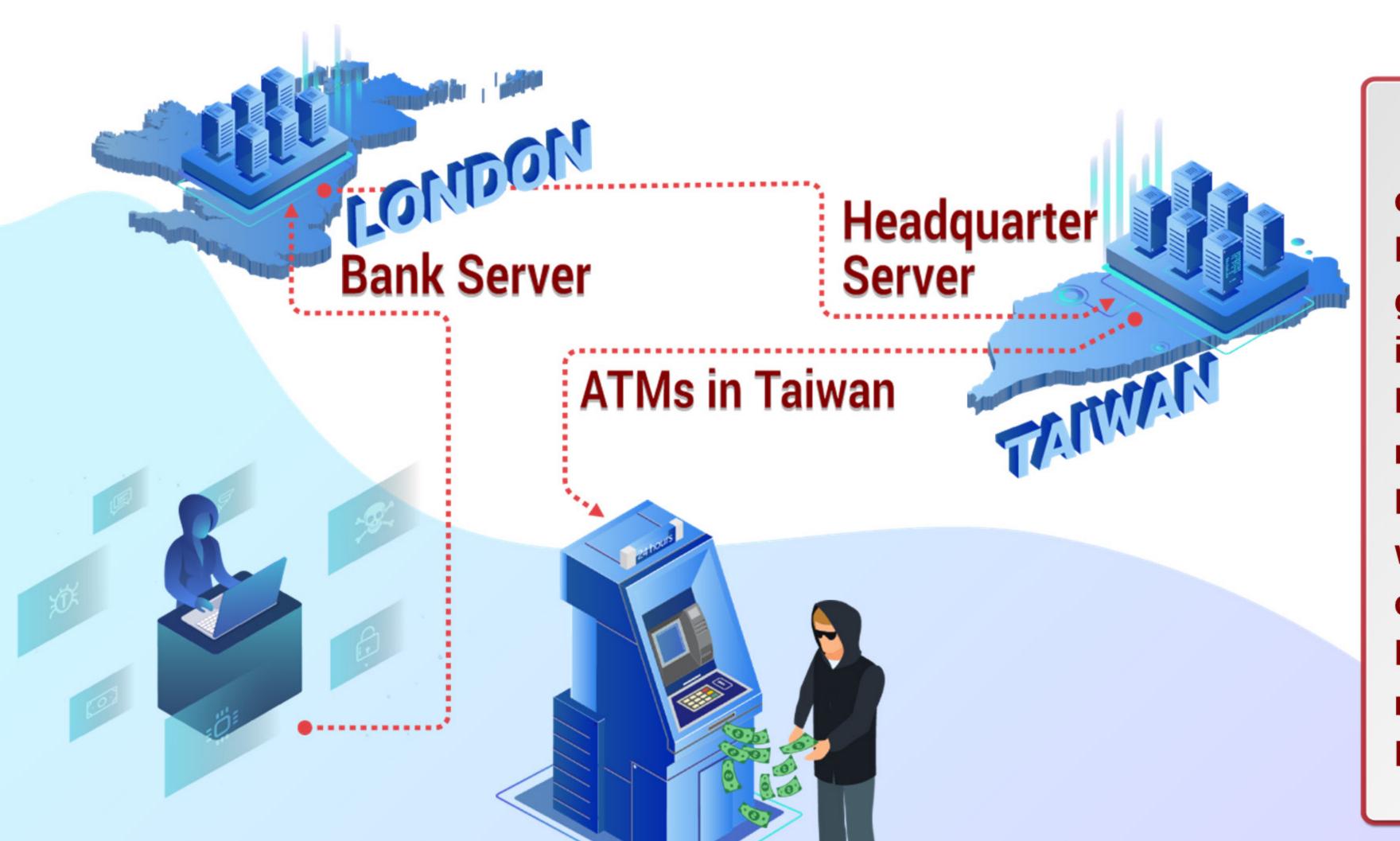


Cases of Cyber Security Concerns





Cyber Attack on the ATMs of Bank F



In July 2016, an East European cyber terrorist group hacked Bank F, a major bank in Taiwan. The group remotely controlled 41 ATMs in 22 branches across Central and Northern Taiwan via a telephone recording server in London. NT\$83.27 million (US\$2.7 million) was taken from the ATMs and collected by a dozen cash mules. Later, NT\$77.48 million was recovered, for a loss of around NT\$5 million for Bank F.





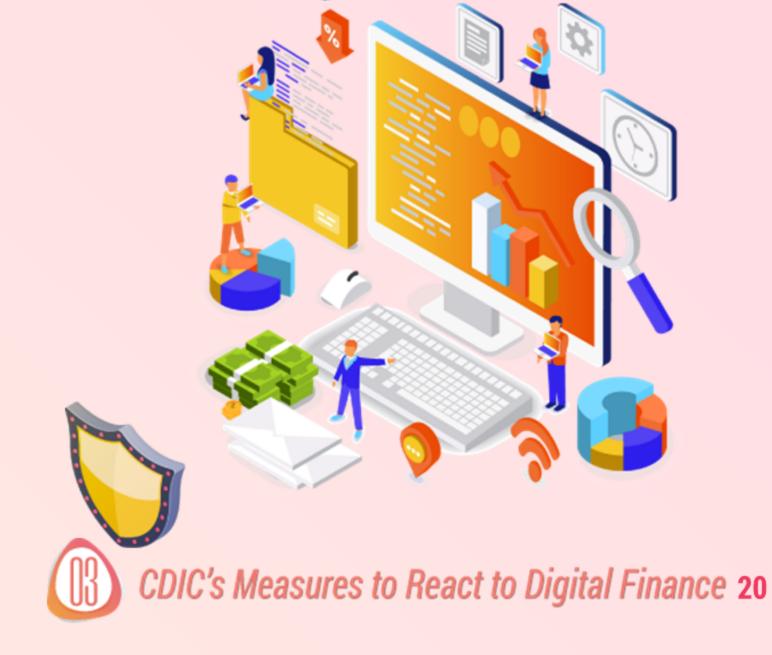


Monitoring the liquidity of online banking





- 1. Cyber security items: evaluation indicators in the risk-based premium rating system
 - > Cyber security-related certification
 - > Cyber security self-assessment
 - > Major breaches in information and communication security
 - > Staff information-related fraud cases





- 2. Response measures for liquidity crises in banks:
 - > FIs to fill out daily reports to timely monitor the speed and amount of deposit outflow via online banking
 - > Fls to closely monitor negative information online and provide clarification in a timely manner
- 3. Strengthen liquidity management for Internet-only banks
 - > Higher liquidity reserves
 - Sufficient balance in their "Interbank Funds Transfer Guarantee Special Accounts"
 - Opening interbank deposit accounts and short-term credit lines with other banks





4. Utilize social media (Line stickers) to raise deposit insurance public awareness











Future Deposit Insurance Issues



Future Deposit Insurance Issues

- 1. What will insured "deposits" be?
 - > e.g. Deposit-like stored-value products (DSP)?
 - In Taiwan, DSP issued by insured banks is insured by CDIC...
 - ➡ But if it is issued other than banks, e.g. mobile companies, should it be insured? How to regulate? Problems of competition and fairness?
- 2. What will insured "institutions" be?

> e.g. Mobile phone companies? Electronic payment institutions?

In Taiwan, deposits of funds as stored value funds are collected by electronic payment institutions. Those deposits of funds are also covered by CDIC if banks engage concurrently

in the e-payment business.



Future Deposit Insurance Issues

- 3. How to reinforce consumer protection?
 - > e. g. How to display deposit insurance signs for **Internet-only banks?** How to ensure depositors getting the accurate information?







