An aerial photograph of a modern city, likely Hong Kong, featuring a prominent triangular skyscraper with a glass facade. The building is illuminated by the warm light of a sunset, with the sun visible through its central opening. The city below is densely packed with high-rise buildings, and a large body of water is visible in the distance. The sky is a mix of blue and orange, with a few clouds and a small airplane visible in the upper right.

Tech is Changing Finance & Treasury function and how we live with that

Sept, 2018

Tech is changing the way we do business, and the way we look at business from top management perspective



Business Model : Customer acquisition VS User acquisition



Business Targets : Maximizing single entity profits VS Value creation through collaboration, Ecosystem



KPI & performance measurement : Profit VS Valuation

...and the way we look at business, in turn drives the change in finance & treasury and also creates challenges & opportunities to audit



Business Life cycle is getting shorter and shorter:

- Winner takes it all. Life expectancy of companies is becoming shorter and shorter, going concern judgment more difficult
- Traditional capital budgeting is becoming more difficult



Cost & benefits analysis becoming more difficult :

- Traditional link between cost & return is weaken, and is becoming more invisible
- User acquisition as compare to customer acquisition
- Human being add little value to traditional financial analysis, machine can do better
- What truly valuable is intelligence forecast, which can only be done by AI and deep learning



Big leap in speed & efficiency of operation :

- RPA enables more finance operation to be done without human being
- Blockchain enables trackable evidence, creates both opportunities and challenges to internal & external audit

...and the emergence of face & voice recognition and other tech applications, are all changing the way we do banking and finance, and its happening



No-branch distribution network, No distribution staff
Full online and automation service, chatbot, AI customer service



Branch account opening, identity verification



Trade finance: No more documentation & verification checking needed

...features of Blockchain will improve efficiency & data integrity



可溯源
Trackable



不可修改
Not
Amendable



加密
Encrypt

Dis : Distributed Network



P : Permission

Co : Consensus



Distributed Ledger Technology



SC : Smart Contract

De : Decentralization



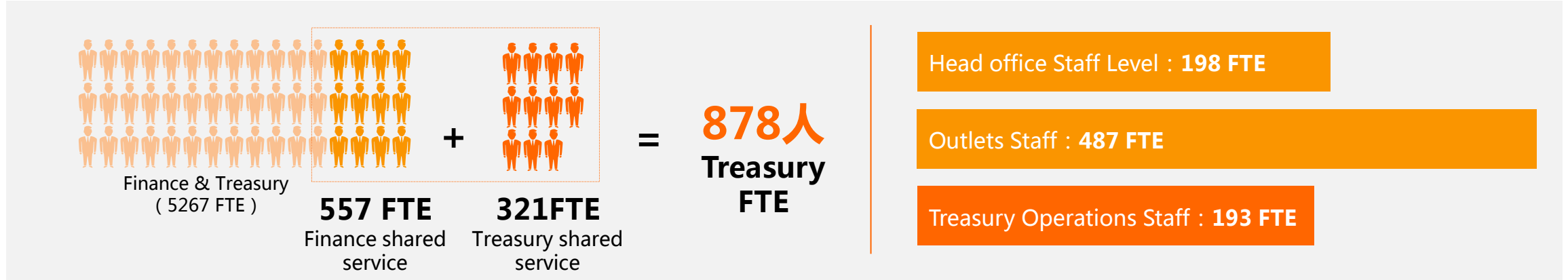
V : Value/ Asset

E : Encryption



O: Others

The future is now. Steps we took to cope with the change before it is too late



Step 1



Digitized + Standardize

Step 2



Centralised + Automation

Step 3



Reduce Operation headcount



Our Treasury: 1st batch in the world SWIFT GPI, the only one in Asia



Apply Blockchain technology in Treasury system

Exploration Phase



- **Corporates directly joined SWIFT gpi**

- Real time Trackable
- Highly secured



Fabric



Proof of Concept (PoC)



Secured data transmission

- Encrypt



Not amendable

- Not amendable



No duplicated payment

- No duplication of payment instruction



Secure key



Hash



Timeline



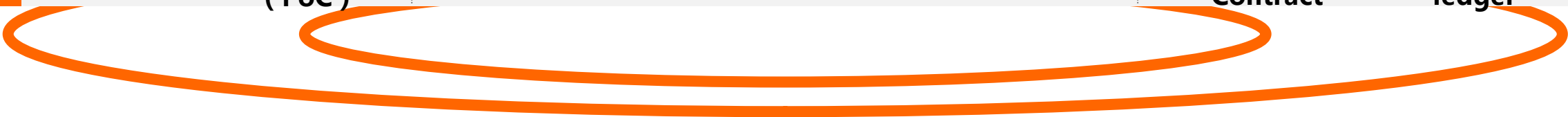
Inter-company related parties transactions



Electronic Contract



Distributed ledger



Treasury: Go Automation, Go Intelligence

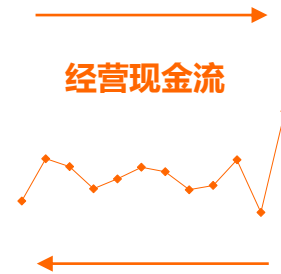
Best Liquidity buffer level



Fully automated cash pooling from 7000 bank accounts

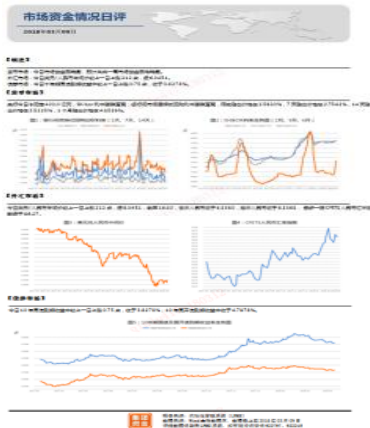
A.I. Dynamic estimation in best liquidity level

Cashflow forecast



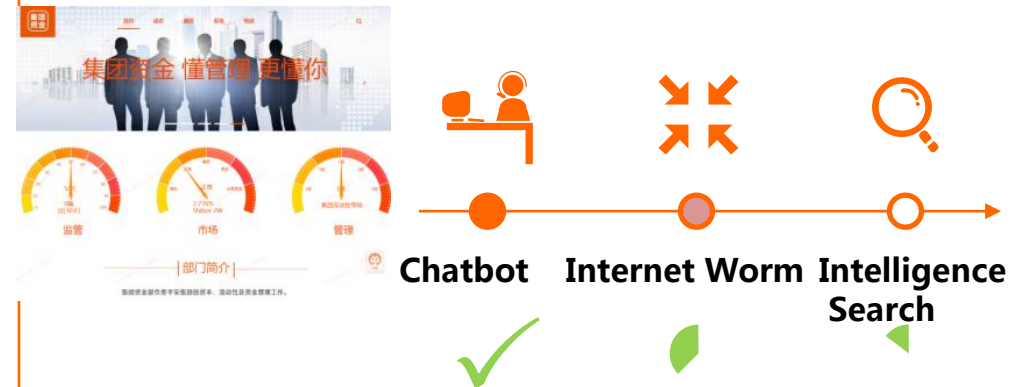
Automated Cashflow forecast

Market liquidity forecast



95%
人机预测accuracy

Chatbot, Intelligence Search



More efficient, more intelligence, more time for valuable works

Automation **98%** Automated Process level + Intelligence **90%** Automated Op Risk control = Treasury ops staff Headcount **30-50% Reduction**



1st batch of corporates in the world applying SWIFT GPI



Human vs Machine

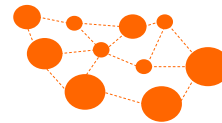


90% • Planning • Decision making + **10%**

10% • Exception Control + **90%**

2% • Off-site monitoring + **98%**

5% • Reconciliations & checking + **95%**



12 → 6 No of operation processes deduced by **50%**



7- 14days → 1day Cross border payment shorten



