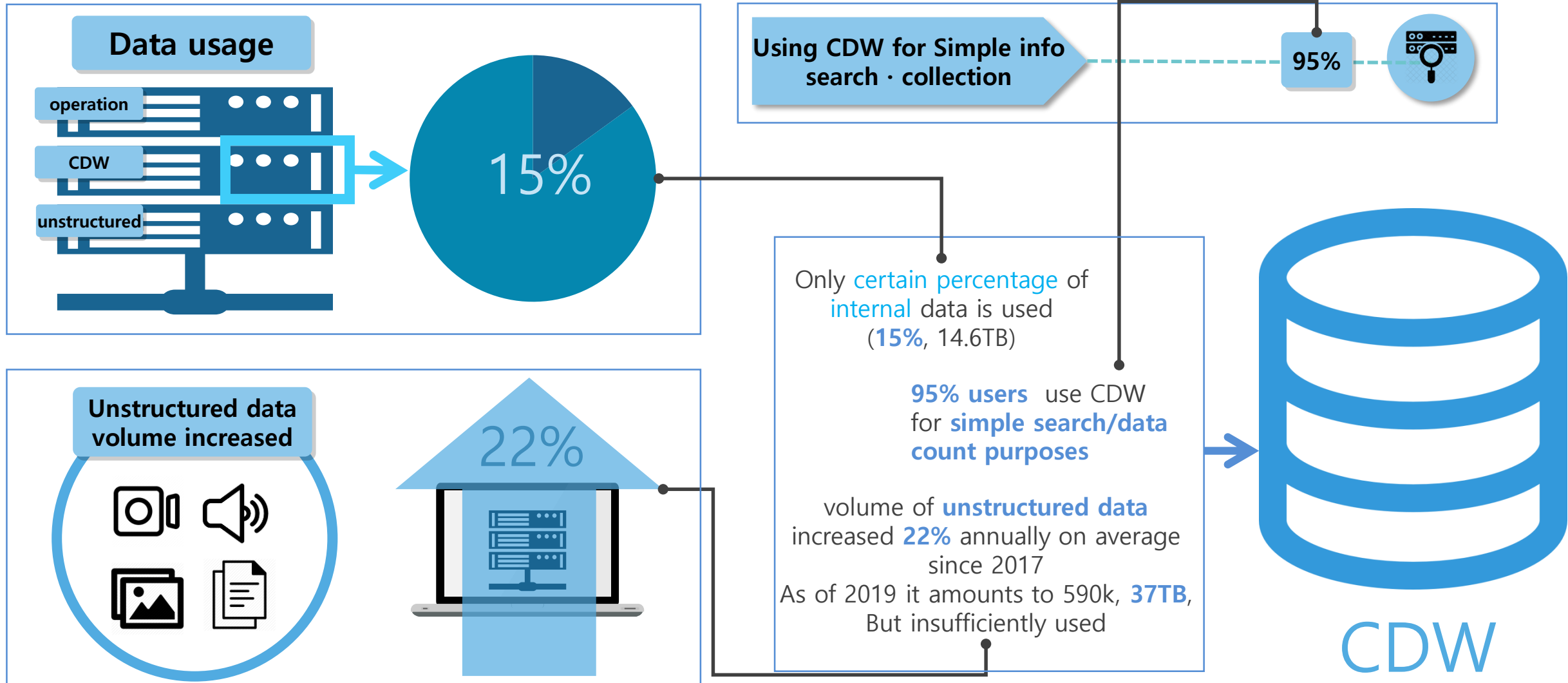






Bigdata Strategy of KCS

Big data VS CDW



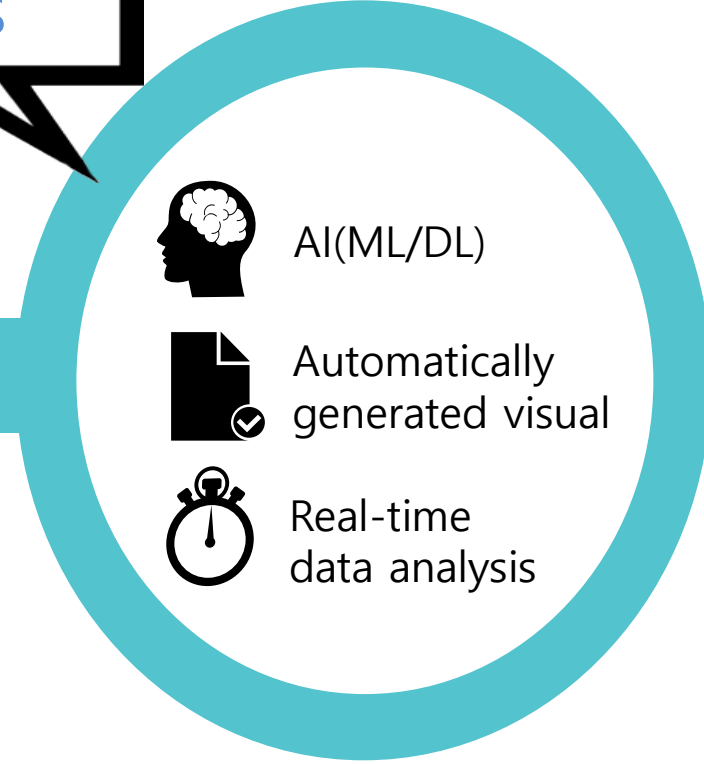
Big data VS CDW






-  Every un/structured data in UNIPASS (CDW, x-ray image, Investigation report, official doc.)
-  External Bigdata on int. trade (Corporate My data, NTS tax record)
-  Semi-structured data generated by system (system log)
-  Unstructured data in WEB, SNS

Scope of data use
Dramatically Increased

Various
Advanced analysis



-  AI(ML/DL)
-  Automatically generated visual
-  Real-time data analysis

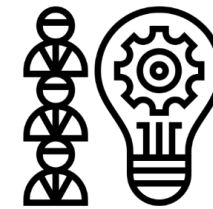
Strategic Effort – Planning & Team

Research & Development (2017)



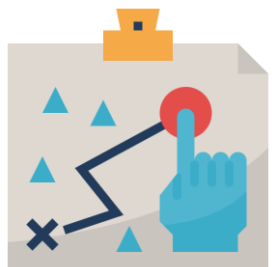
A Study on the step-by-step Application of Bigdata from Initial Planning to Utilization

Task Force(2020.1.20.)



5 experts

IT Strategy Planning(2018)

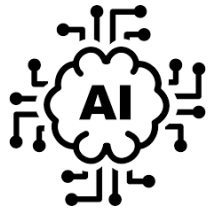


Established mid- to long-term strategic plans to reflect internal and external environmental changes and assess information service level of KCS

Establishment of Bigdata Center (2020.7.14)



Strategic Effort - Data analytics ability



Core ICT Experts



115

Total number of Trainees
('17~'22)

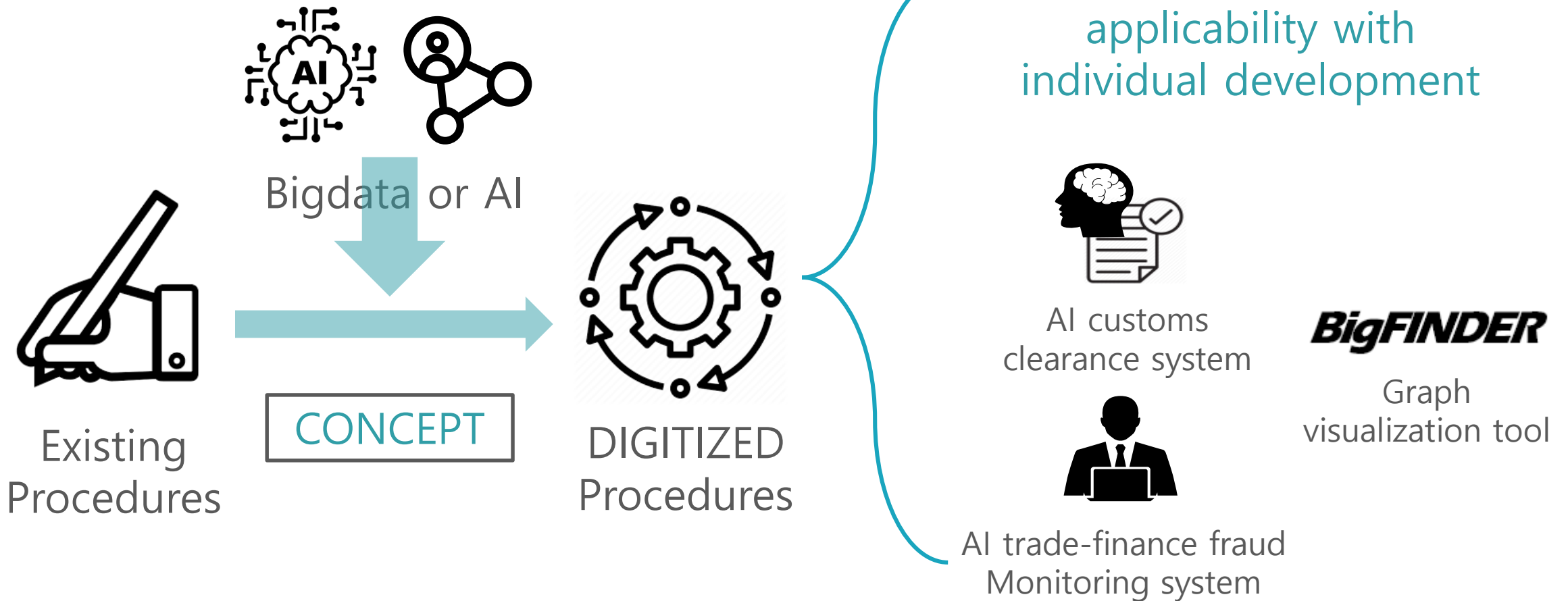
6

More than half a year of
INTENSIVE training in
ICT technology

38

Perform multiple pilot
KCS Bigdata analysis
('17~'21)

KCS Bigdata·AI Model



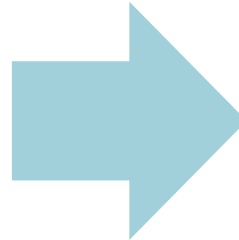
KCS Bigdata·AI Model



AI customs clearance system

- (1st)AI Clustering Screening Model

Generate group of high-risk data for a **certain period of time** (clustering) based on the company & item to measure the **risk level of import declaration**



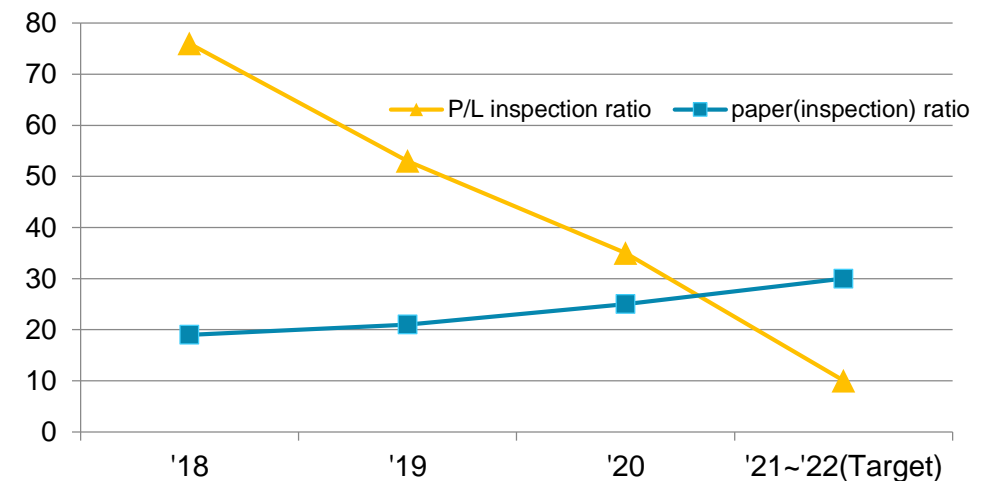
- (2nd)AI Deep learning Screening Model

Learn from clearance data for a certain period of time to measure level of risks

(Choice & Focus)

With AI customs clearance model:
Streamlined Clearance for low-risk items
Focused Control on high-risk items

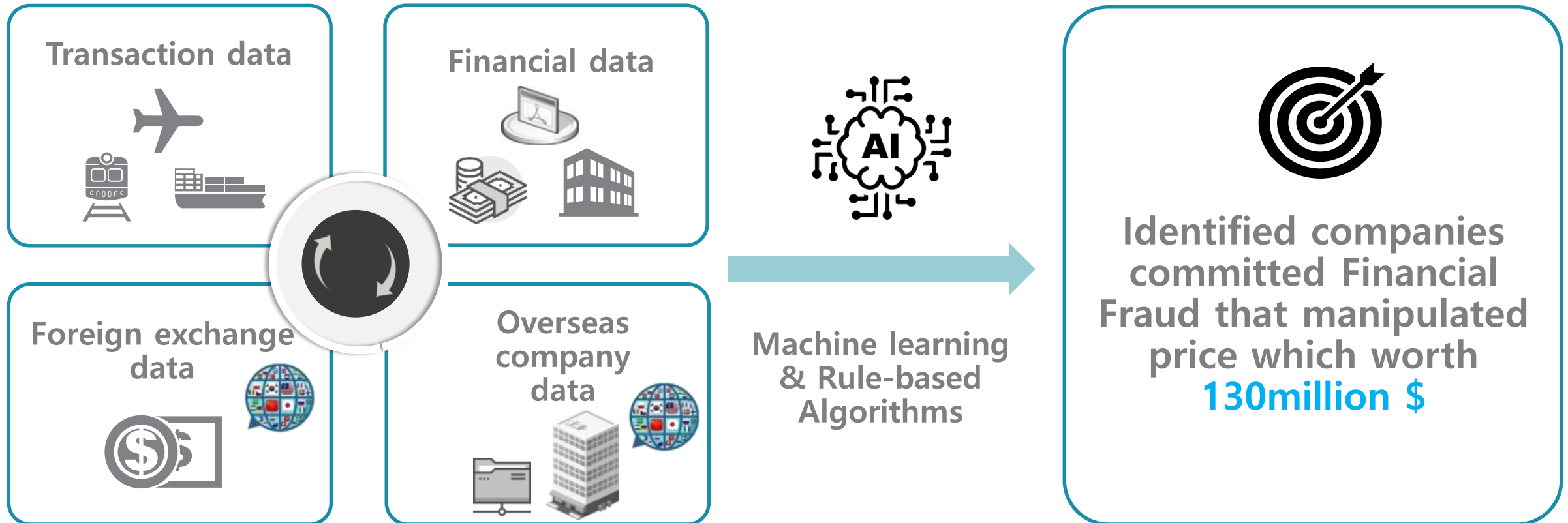
< Statistics on ratio of P/L inspection & paper inspection >



KCS Bigdata·AI Model



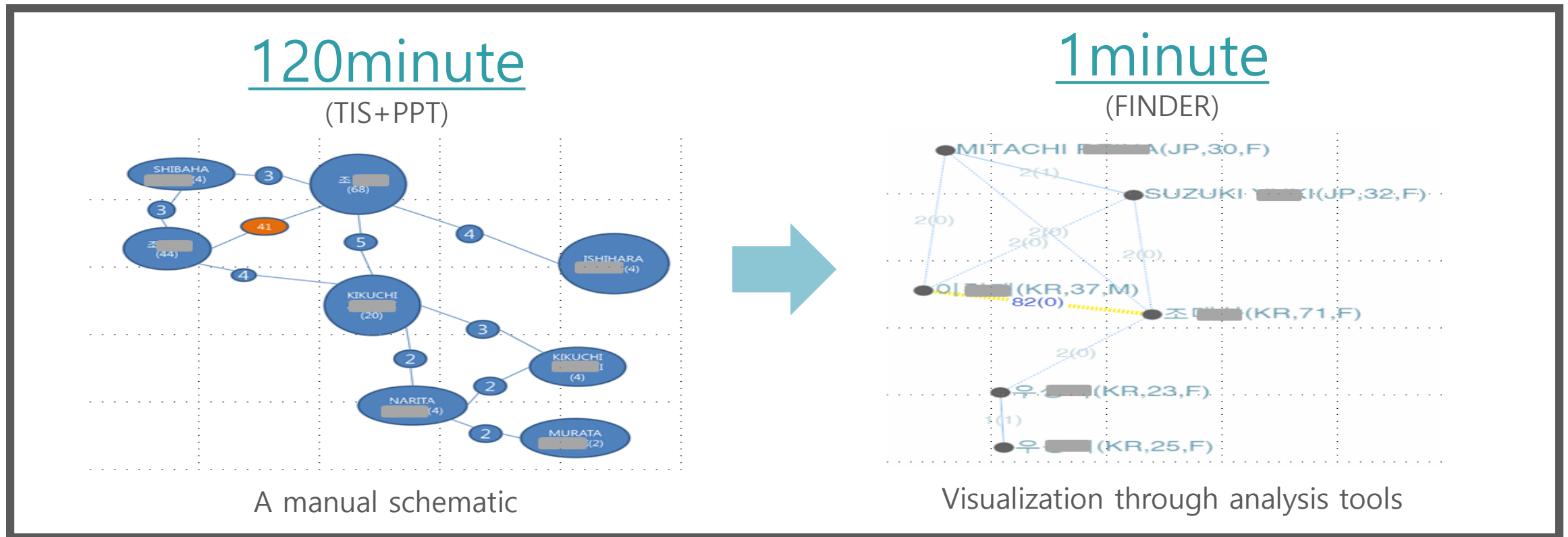
AI trade-finance
monitoring system



KCS Bigdata·AI Model

BigFINDER

Correlation analysis model for
① the Travelers, ② Export-Import supply chain
and ③ Bypass Imports of delinquent



Identifying hidden accomplice of high-risk entities

KCS Wide Analysis

2020 Bigdata analysis model -12

Project budget : USD 11 million (excluding HW, operation SW)

2021 Bigdata analysis model -12 (2 of last year's models were upgraded, 10 new models were developed)

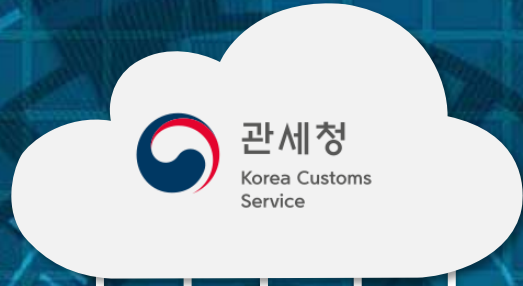
Project budget : USD 6 million (excluding HW, operation SW)

2022 Bigdata analysis model – is being developed

Project budget : USD 3 million (excluding HW, operation SW)

2023 Bigdata analysis model

Project budget : to be decided



Thank you!

