



United Nations
UNCITRAL

2023 Incheon Law & Business Forum
11~12 September

KTNET
POSCO
INTERNATIONAL

Documents to Data : Legal & Commercial Solutions for Digital Trade

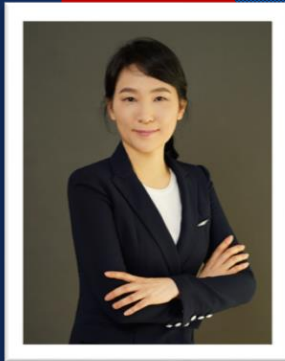
X of Next Trade Facilitation



KTNET (Korea Trade Network)



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uTradeHub
National Paperless Trade

Vice Chair
DLT Standard Forum



X of Next Trade Facilitation



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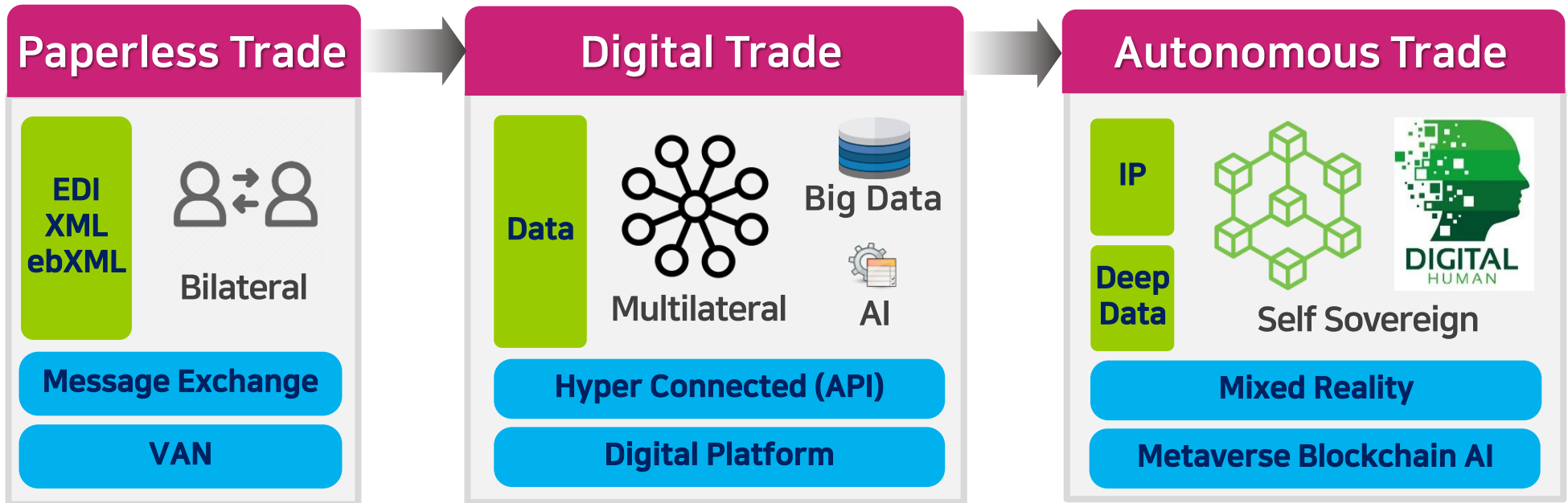


1 Roadmap of Trade Facilitation 3.0

TF1.0

TF2.0

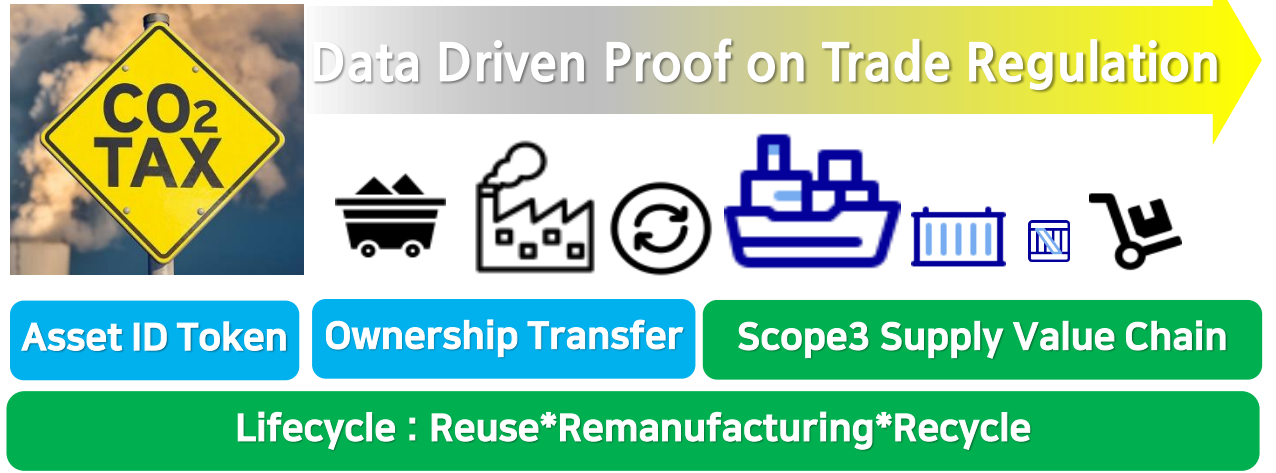
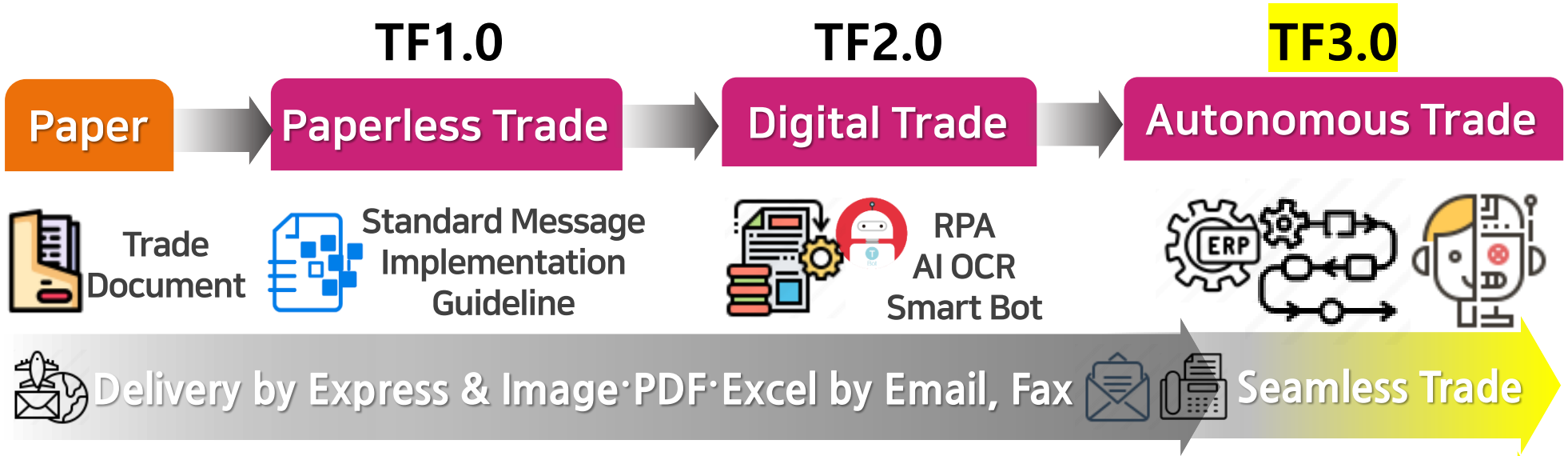
TF3.0



	Internet	WWW	Web3.0
Network	Document	Data	Ownership
New BM	Bilateral	Community	Cross Border
Trust	Product (Cargo)	Service (Contents)	Digital Asset (Token)
Trading			



2 New Technical Barriers of TF 3.0



3 DX Challenges beyond TF 2.0



**uTradeHub 2.0 Grand Opening
2019~2022 Digital Platform**

3 DX Challenges beyond TF 2.0

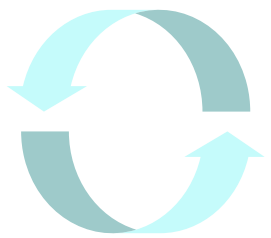
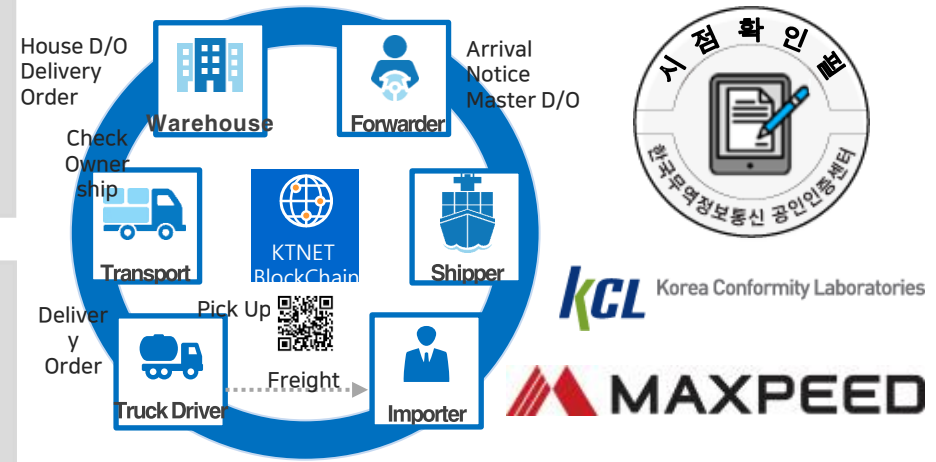


1 **Product Testing & Inspection (2021~3)**
 Digital Report & Certificate on E-Document Wallet

2 **Imports Delivery from Warehouse (2021)**
 Master/House Delivery Order with Transport Driver QR Code - Freight

3 **Exports O/A without Document Express (2022)**
 E-BL Full Life Cycle PoC with Bank on Korea(Exporter)-Canada(Port)-U.S.A(Importer)

4 **E-Commerce Cross Border Trade Hyperconnected Harmonization (2023~)**
 Export Declaration driven Import Seller(Korea)-Forwarder-Customs-Buyer(U.S.A.)



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3 DX Challenges: ETR on Export O/A



PILOT ETR Project

General Agency



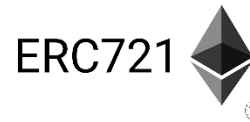
Blockchain Platform



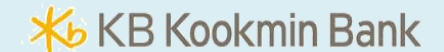
Business Application

Electronic Bill of Lading (e-B/L on O/A)

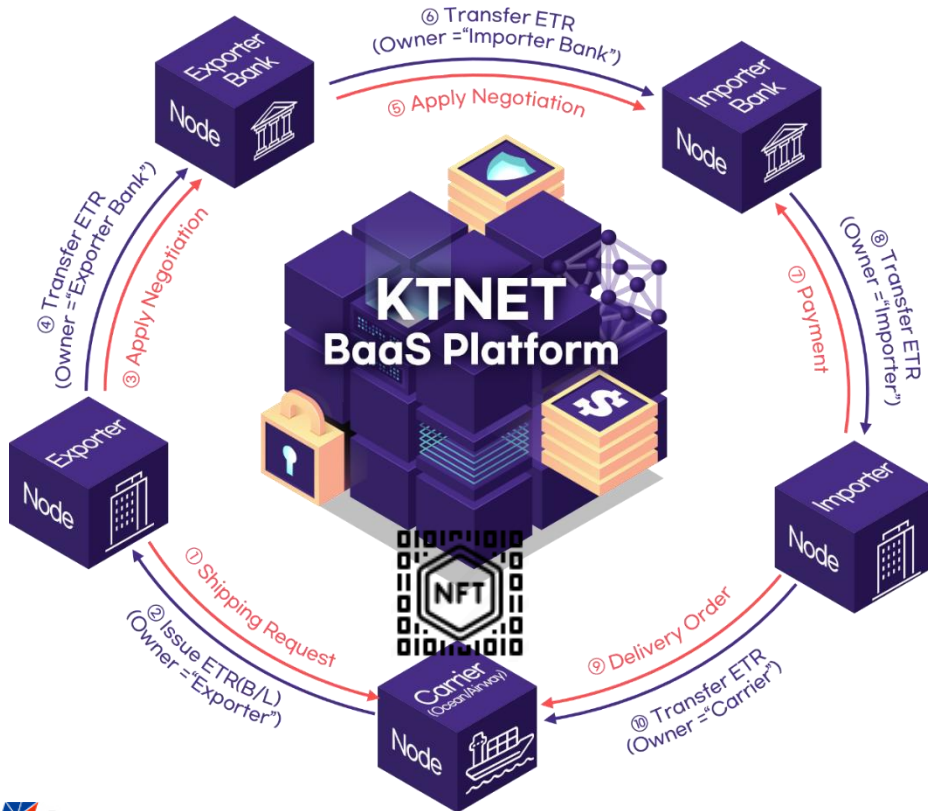
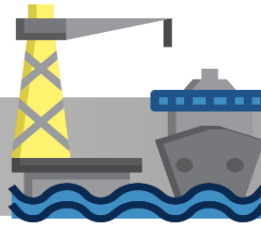
Standards & Compliance



Participants



3 DX Challenges: Active Biz Flow



Real Export Transaction on Active Contract

- Exporter: Posco International, Korea
- Importer : Posco International, U.S.A.
- Bank : Woori Bank, Korea & U.S.A
- Vessel : Maersk (Automobile Parts)
- Departure : 28 Oct 2022
- Arrival : 20 Nov 2022
- Port of Loading : Busan, Korea
- Port of Discharge : Vancouver, Canada
- Bonded Transportation : Detroit, U.S.A (7days)
- Global Cooperation : **IBM** | **MAERSK**

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3 DX Challenges: Legal Compliance



TF1.0

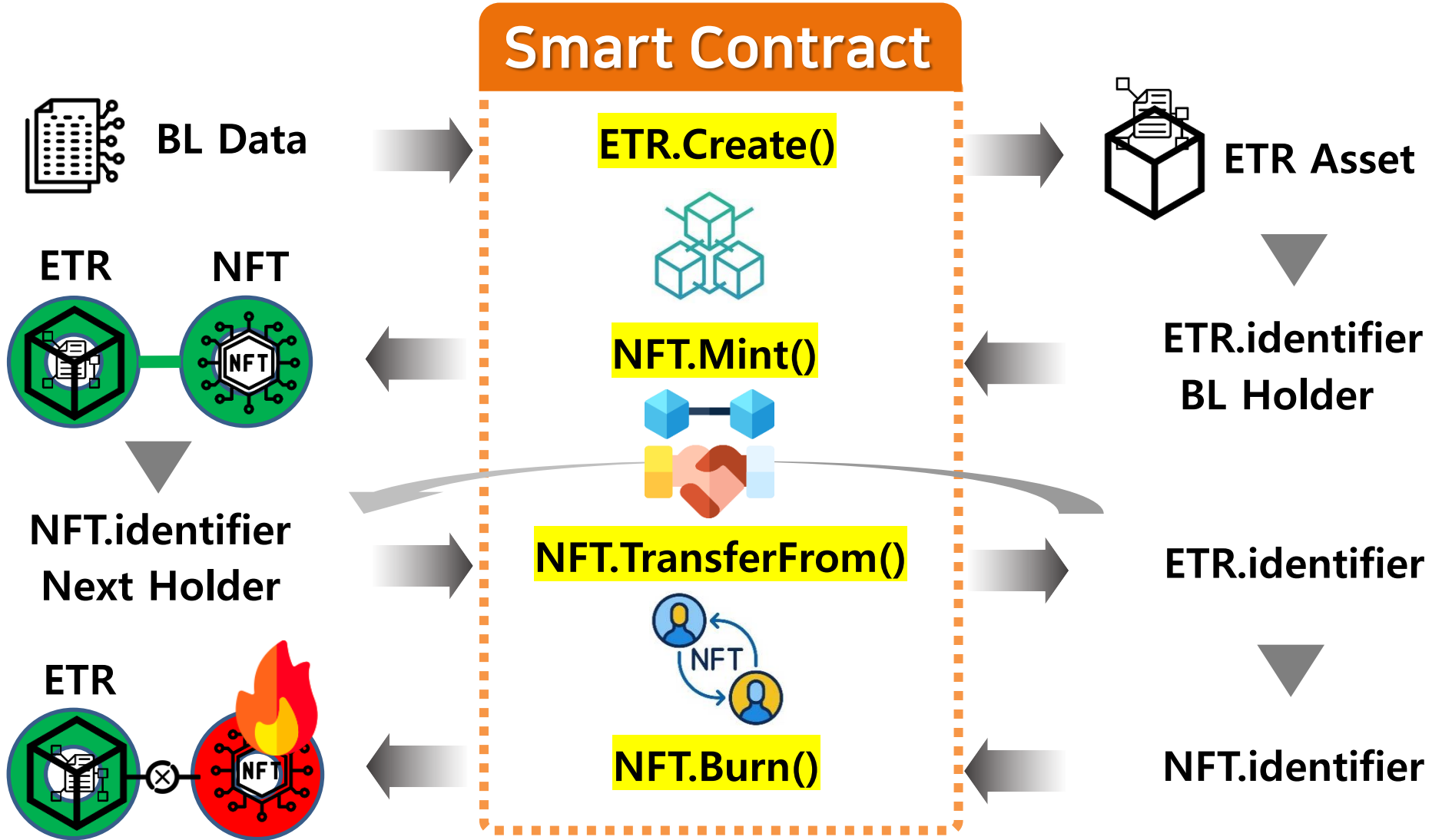
TF2.0

TF3.0



UNCITRAL MLETR (2017)		Commercial Law (2008)	E-BL Regulation on Implementation (2013)	E-BL PoC on O/A (2022)
A7. Legal recognition of ETR		A862. ①	-	Compliant with MLETR
Ch2. Functional equivalence	A8. Writing	A862. ②	A6. A13. 10yrs Preservation	ETR(e-BL) Asset Life Cycle
	A9. Signature	A862. ②	A2. A8. Digital Signature Act	PKI Digital Signature
	A10. Transfer	A862. ③ ~ ④	A8. Transfer	Decentralized Network
Ch3. Use of ETR	A11. Control	A862. ③ ~ ④	A9~11. A14. Supervision	- Permissioned Private
	A15. Endorsement	A862. ③ ~ ④	A8. Transfer	- Ownership Transfer by NFT Smart Contract
	A16. Amendment	-	A9. Modification	- Digital Uniqueness by BL Blockchain Asset UID
	A17. Document to ETR	-	-	- NFT Interface Standard ERC-721
A18. ETR to Document		-	A12. ETR to Documentary BL	
Ch4. Cross-border recognition of ETR		-	-	Korea→Canada→U.S.A.
-		A862. ①, ⑤	A3. Designation of Registry Agencies, A15. Revocation	E-BL Registry Agency

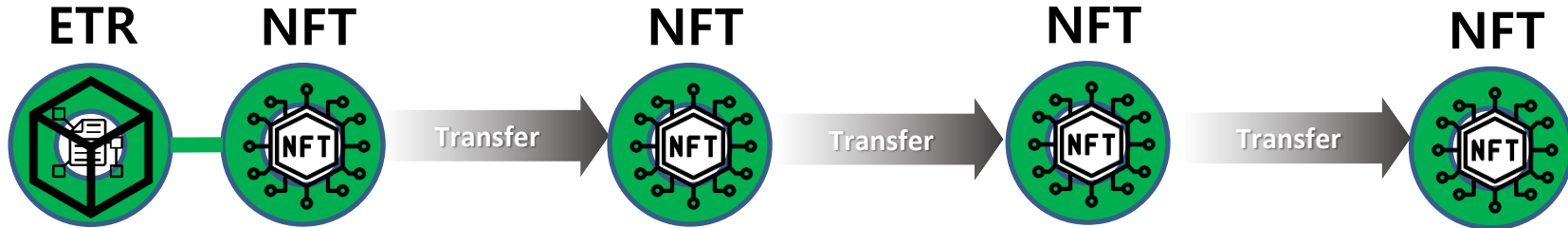
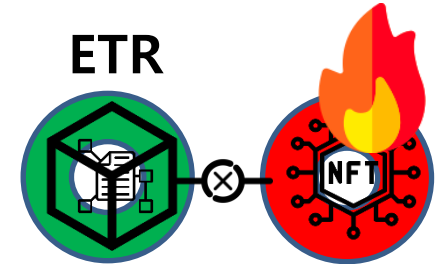
3 DX Challenges: ETR Blockchain Asset



3 DX Challenges: ETR Transfer with NFT



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3 DX Challenges: ETR Patent Application

“MANAGEMENT METHOD OF ETR FOR DIGITAL TRADE
BASED ON UNCITRAL MLETR AND SYSTEM PERFORMING THE SAME”

출원 번호 통지서

출원 일자 2022.11.22
특기사항 심사청구(무) 공개신청(무) 참조번호(P2022175)
출원번호 10-2022-0156854 (접수번호 1-1-2022-1243696-10)
(DAS접근코드2017)
출원인명칭 주식회사 한국무역정보통신(1-1998-096847-3)
대리인성명 윤병국(9-2004-000251-6)
발명자성명 엄기석 민철홍 허순행 류동기 이지은
발명의명칭 UNCITRAL의 MLETR에 기초한 디지털 무역용 ETR의 관리 방법 및 이를 수행하는 시스템

특 허 청 장

4 Federation against Squid Game



MLETR ↔ Commercial Law ↔ eBL Regulation
Cross Border Mutual Recognition

Legal
Framework



Governance of Soft TF Commons

- Consensus on Rule : Autonomous Process
- Federation on Community : Digital Trust
- Appliance on Business : Standard & Interoperability
- Life Cycle Assessment : Control & Monitor

Soft TF
Commons

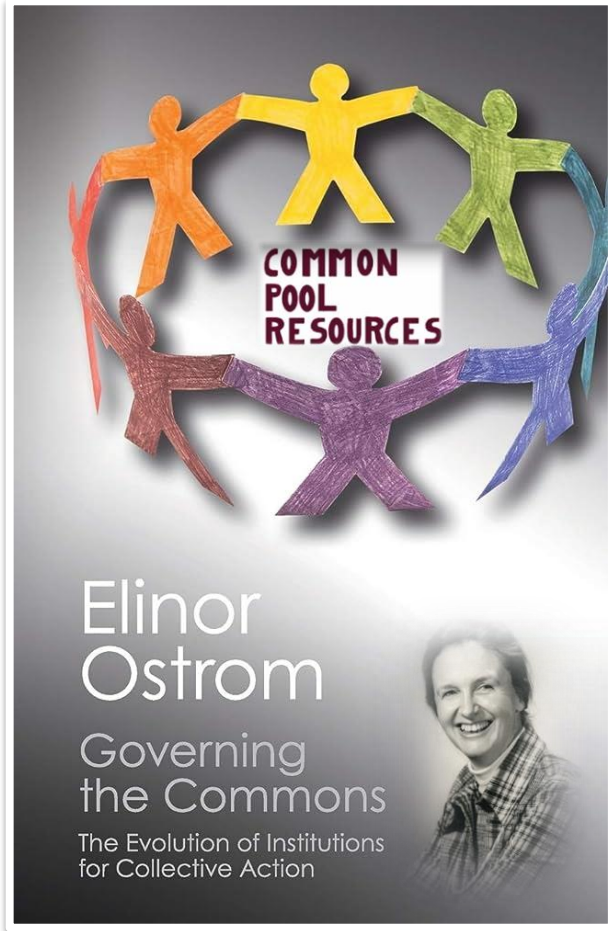


Governance of Hard TF Commons



Hard TF Commons

4 Governing the TF Commons



Digital TF Common Pool Resources by Self Organized Model & Cross Border Principles with Global Community



CURRENT MODELS



TRAGEDY OF THE COMMONS



PRISONERS DILEMMA



LOGIC OF COLLECTIVE ACTION

SELF-ORGANIZED MODEL



GROUP OF PRINCIPALS

DESIGN PRINCIPLES



LONG ENDURING CPR INSTITUTIONS

(Common Pool Resource)

Elinor Ostrom, Governing the Commons
2009, Nobel Prize in Economics

Community of Trade Facilitation



Private Trade Partner



Digital Trade Platform

UtradeHub

TRADEFLOW

U LogisHub

100K Ex/Importer, Supplier
3K Global Seller

5B Trans./Y

12.5K Logistics Company



Public Agency & Authority



Leading Trade Facilitation 3.0

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쇼미더무역



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