

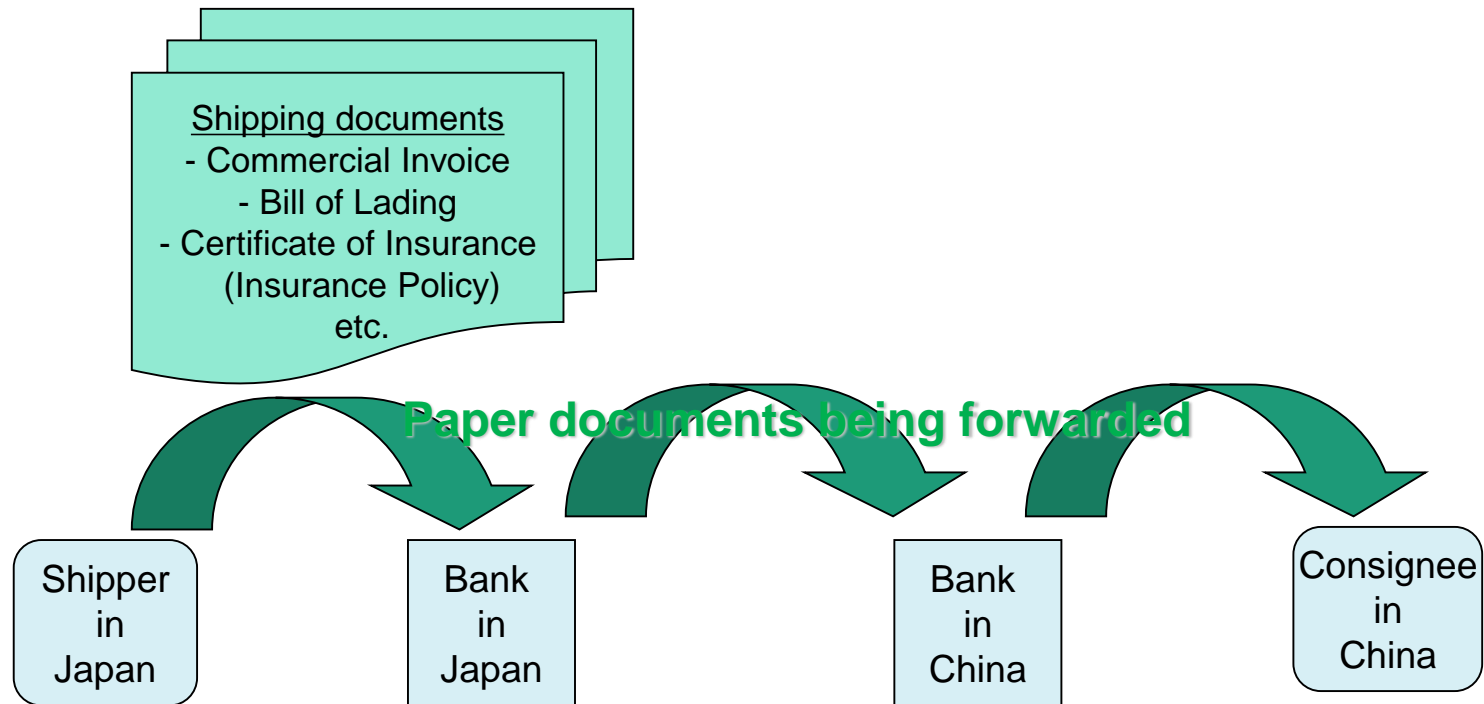
Agenda

- A problem we see in the global trading
- Advantage of the Blockchain and the “Proof of Concept”
- What is to change?
- Assignment of policy and IOT
- Smart contract and insurable interest

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A problem we see in the global trading

The “conventional” flow of documents for export/import under a L/C (CIF terms)

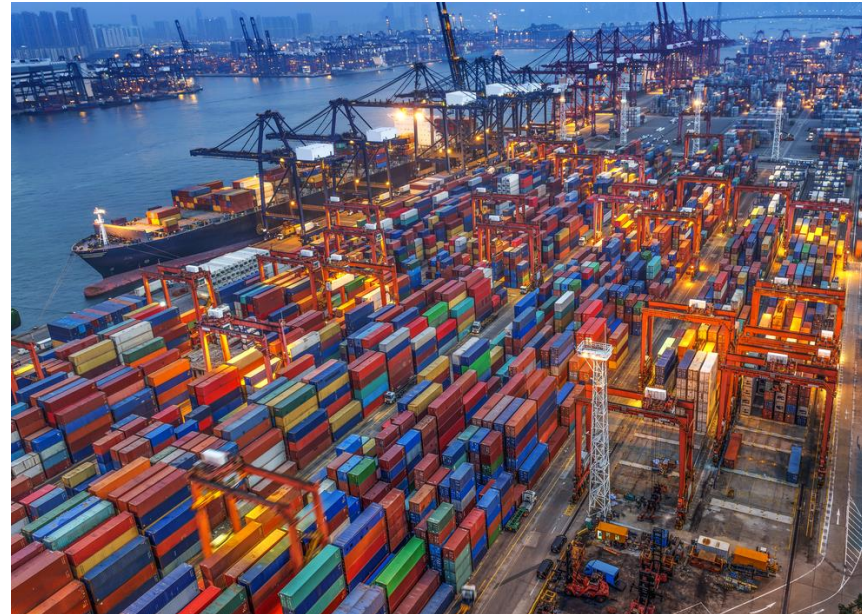


The Bank buys the shipping documents and the Shipper gets paid.

The Consignee pays against shipping documents

A problem we see in global trading

- The problem ;
- Why is it a problem ;



A problem we see in global trading

- Can electronic data exchanging solve the problem?
- Pros and Cons of electronic data



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Advantage of the Blockchain and the “Proof of Concept“

- A major advantage of utilizing blockchain technology is the **security**
- It is considered **impossible to forge** a data on a blockchain

 Traceable

 Irreversible

 Transparent

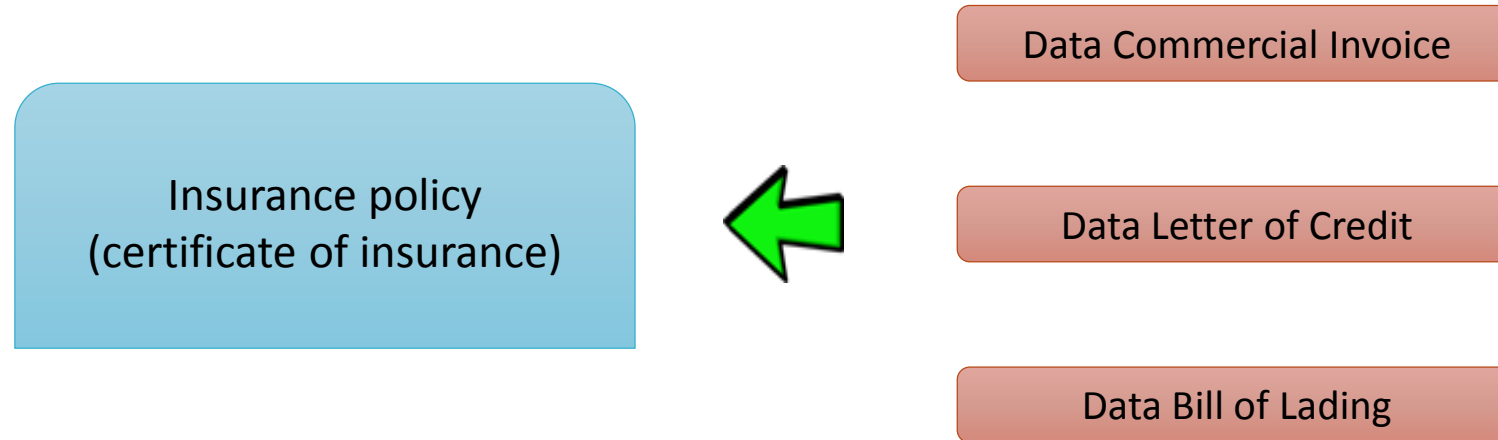
Advantage of the Blockchain and the “Proof of Concept“

- From December 2016 to March 2017
- With NTT Data
- Purpose
 - Create a blockchain based “Data” Insurance Policy (Certificate of Insurance)
 - Transfer of the blockchain based “Data” within the parties concerned
- Also to check if it is ;
 - ✓ **Practical**
 - ✓ **Efficient**
 - ✓ **Secure**



Advantage of the Blockchain and the “Proof of Concept”

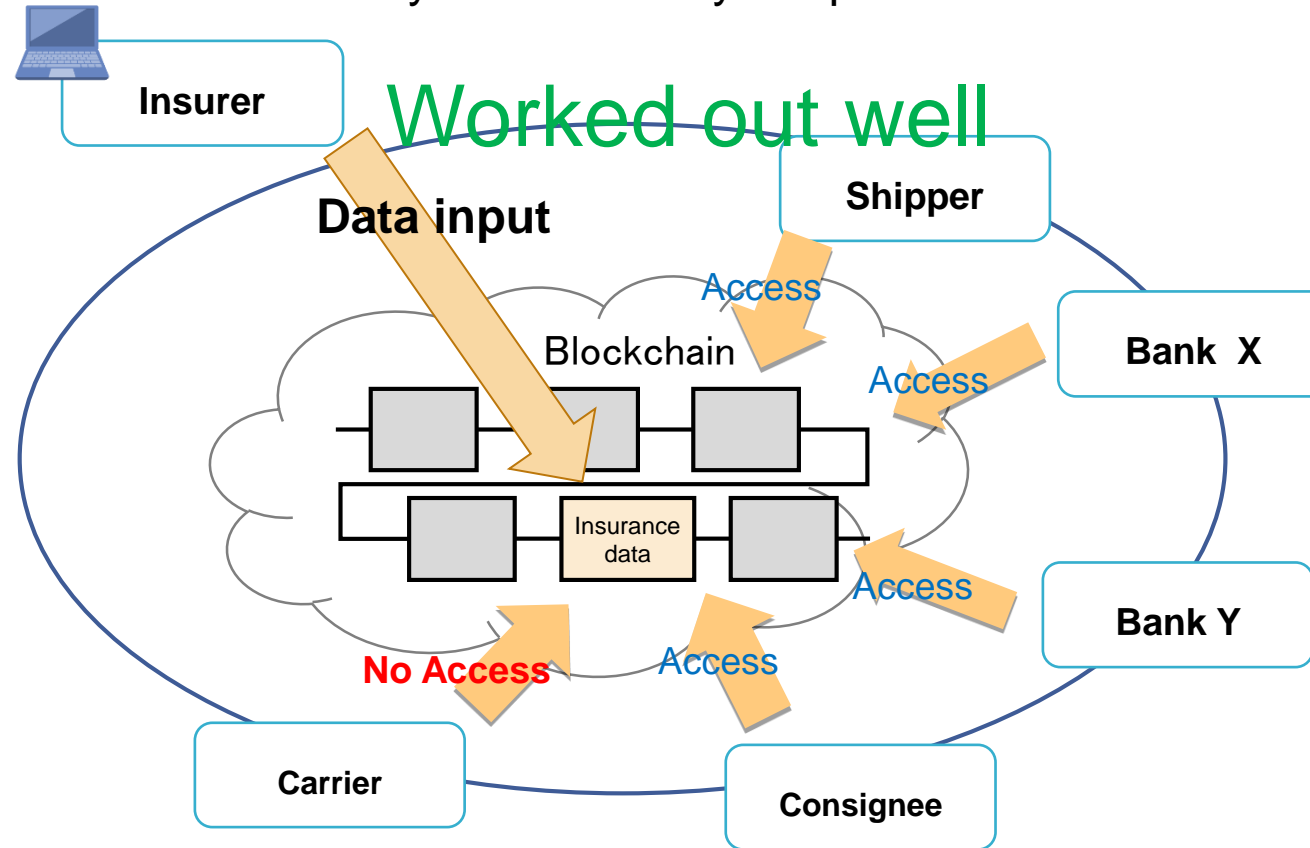
Created “blockchain based” ;



Worked out well

Advantage of the Blockchain and the “Proof of Concept”

- Tested the accessibility to the data by the parties concerned



- ✓ Also tested the control of accessibility

Advantage of the Blockchain and the “Proof of Concept“

- Proved that it will reduce the conventional clerical work

(e.g.)

Shipper - data input for insurance

Bank - verification of the terms on documents

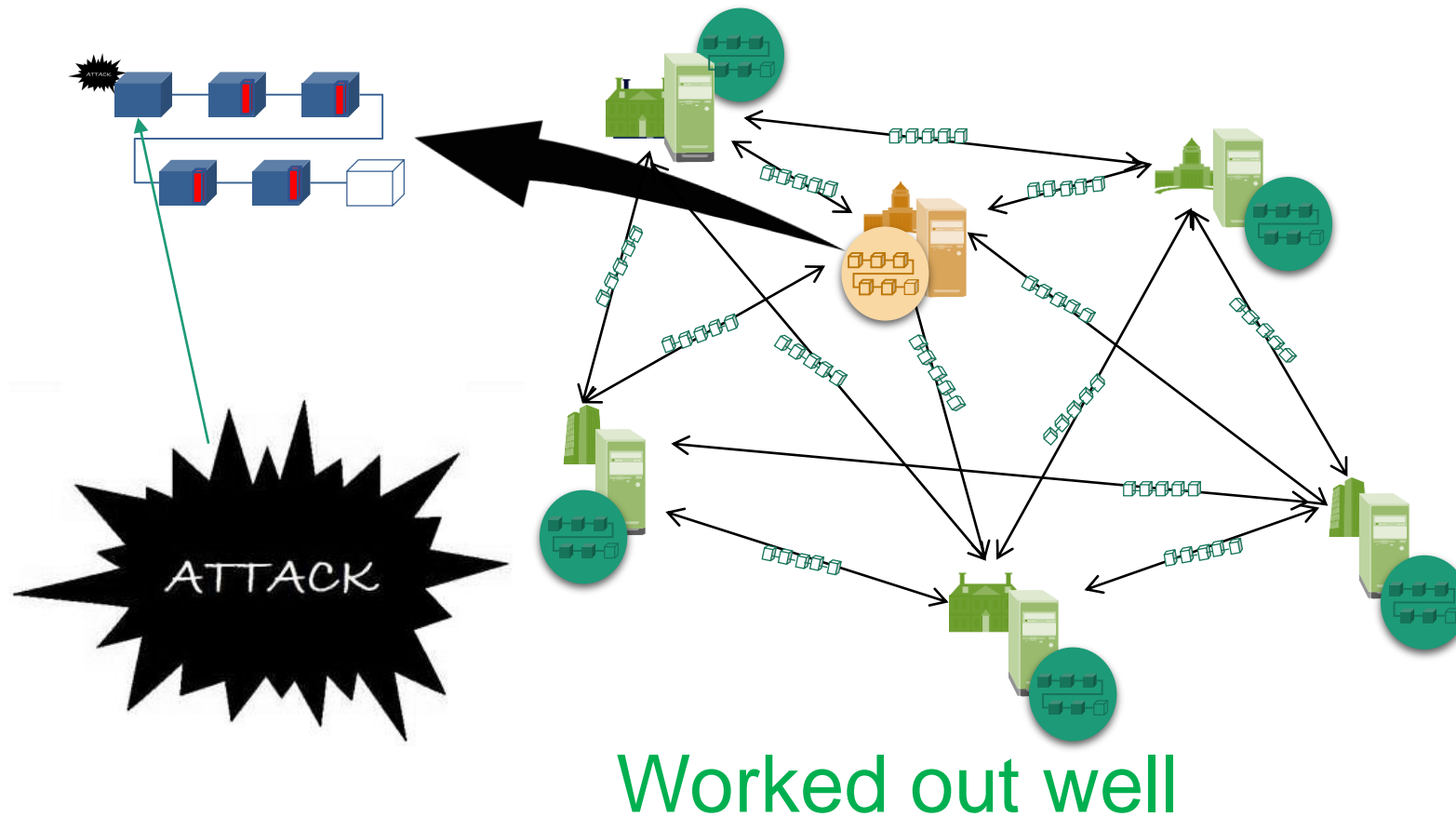
Bank - shipping the documents

Example of Shipper X

The shipping documents being data based, 85% of the Shipper's time for data inputting is presumed to be eliminated.

Advantage of the Blockchain and the “Proof of Concept”

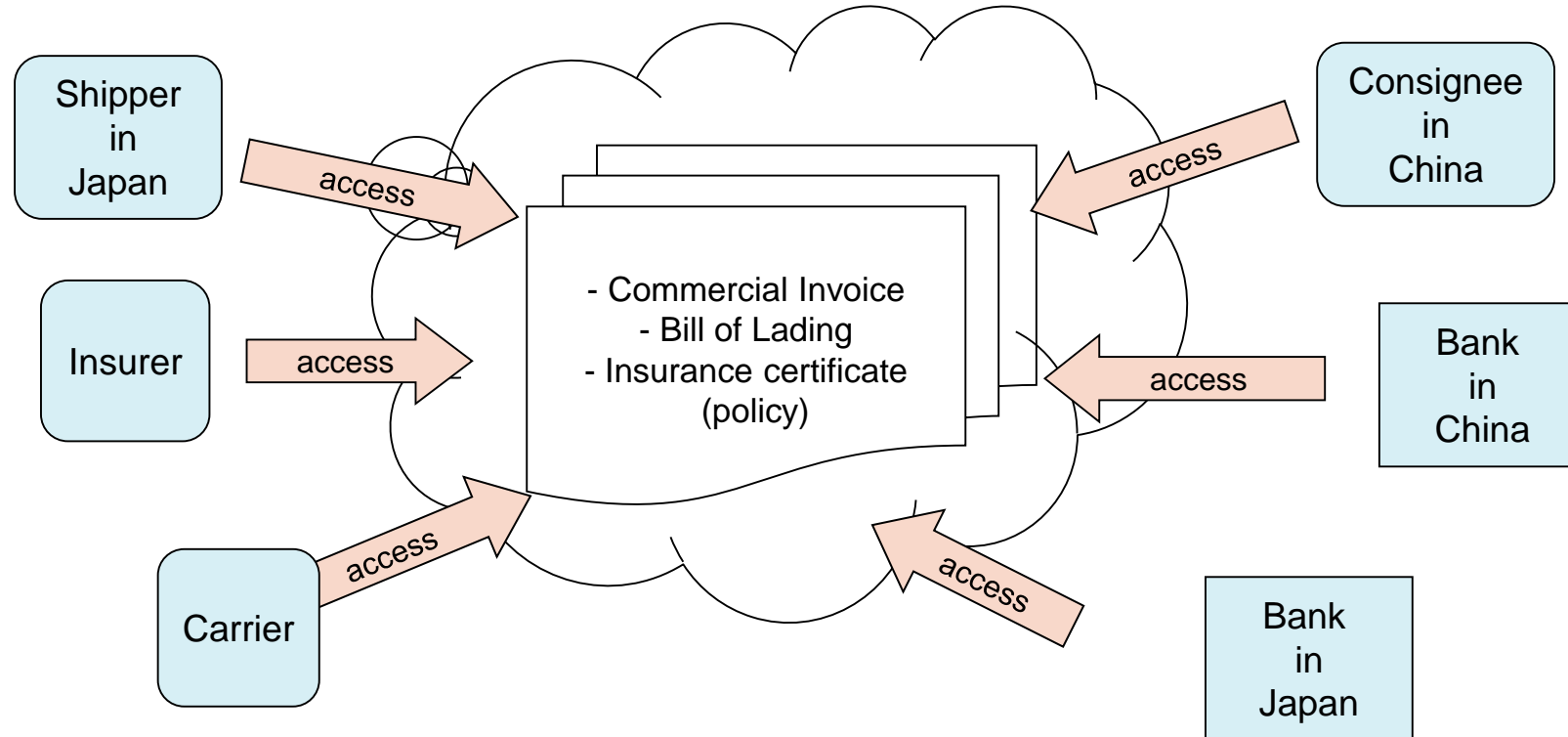
- Tested deliberately attempt hacks to the blocks



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What is to change?

Image of blockchain based transactions



- Reduces the amount of conventional clerical work
- Eliminates cost for sending documents
- Eliminates time for waiting the documents
- Eliminates risk of documents being lost or misplaced

What is to change?

Import cargo under “due course of transit” sitting at “Port X”

⇒ US\$370 million

“Provided“ the waiting time for documents being eliminated;

(Assumptions)

- LC as a payment method : 40%
- usage of Bill of Lading : 70%
- ratio of shipments shorter than 10 days : 50%

An example of accumulation decrease :

$$40\% \times 70\% \times 50\% = 14\%$$



(other factors to consider :Cargo picked up by L/G etc...)



At “Port X”, US\$370million x 14% = **US\$ 52M to be eliminated**

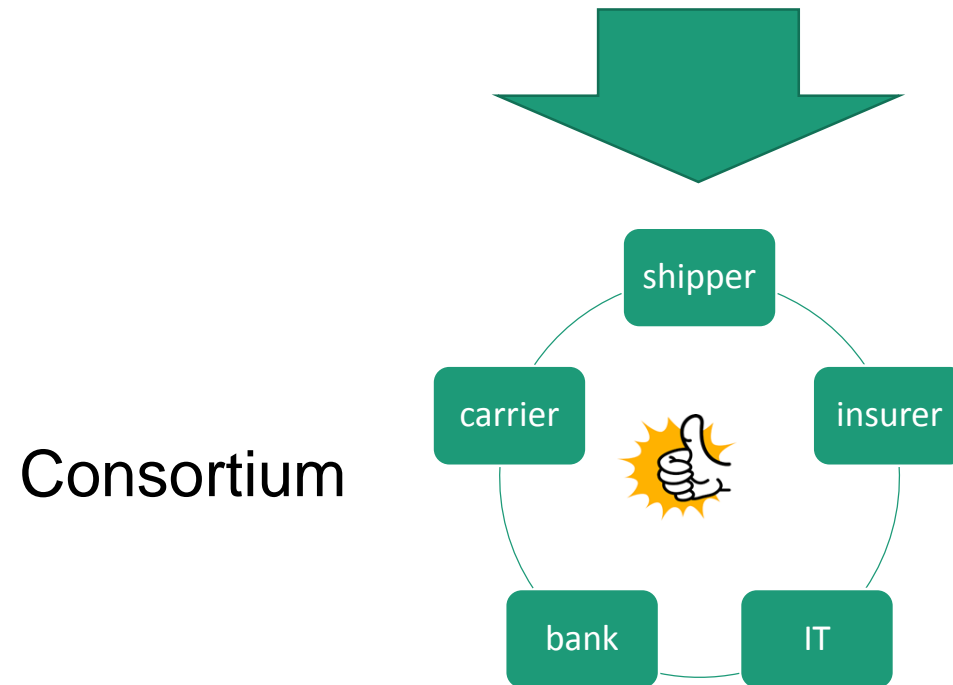


What is to change?

Blockchain based electronic data exchange --- **Will it fly?**

If it's "Insurance stand alone" --- **Will not fly...** (probably)

From an user's (or bank's) perspective --- **All or nothing**



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Assignment of policy and IoT

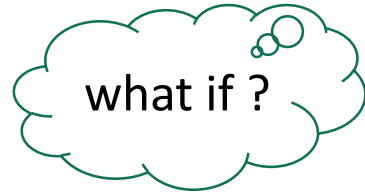
If blockchain based insurance policy (certificate) was in practice ;

- There is no physical “assignment ” of the policy or certificate

Question ;

1. How should we acknowledge the intention of assignment ?
2. At what point should we consider the assignment is completed ?

Assignment of policy and IoT



**Who is the Assured?
Mr. Shipper?
Mr. Consignee?**

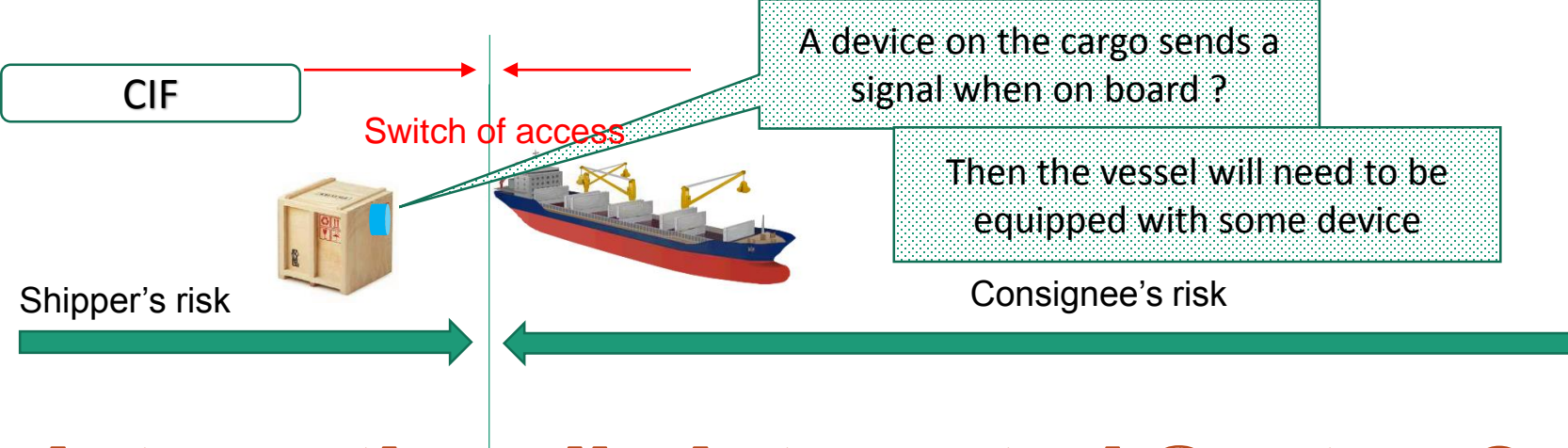
**I have the access.
I will claim for the loss.**

**No! I have the access too.
I will claim for the loss!**

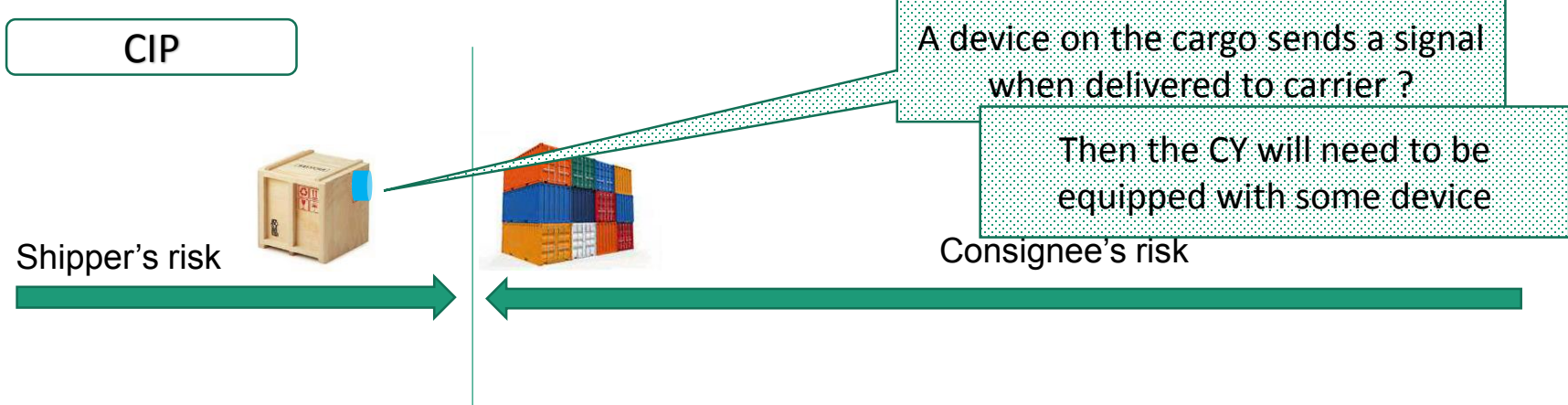
The **control of access** to the data insurance policy (or certificate) will become important.

Assignment of policy and IoT

- So where and how do we control the access?

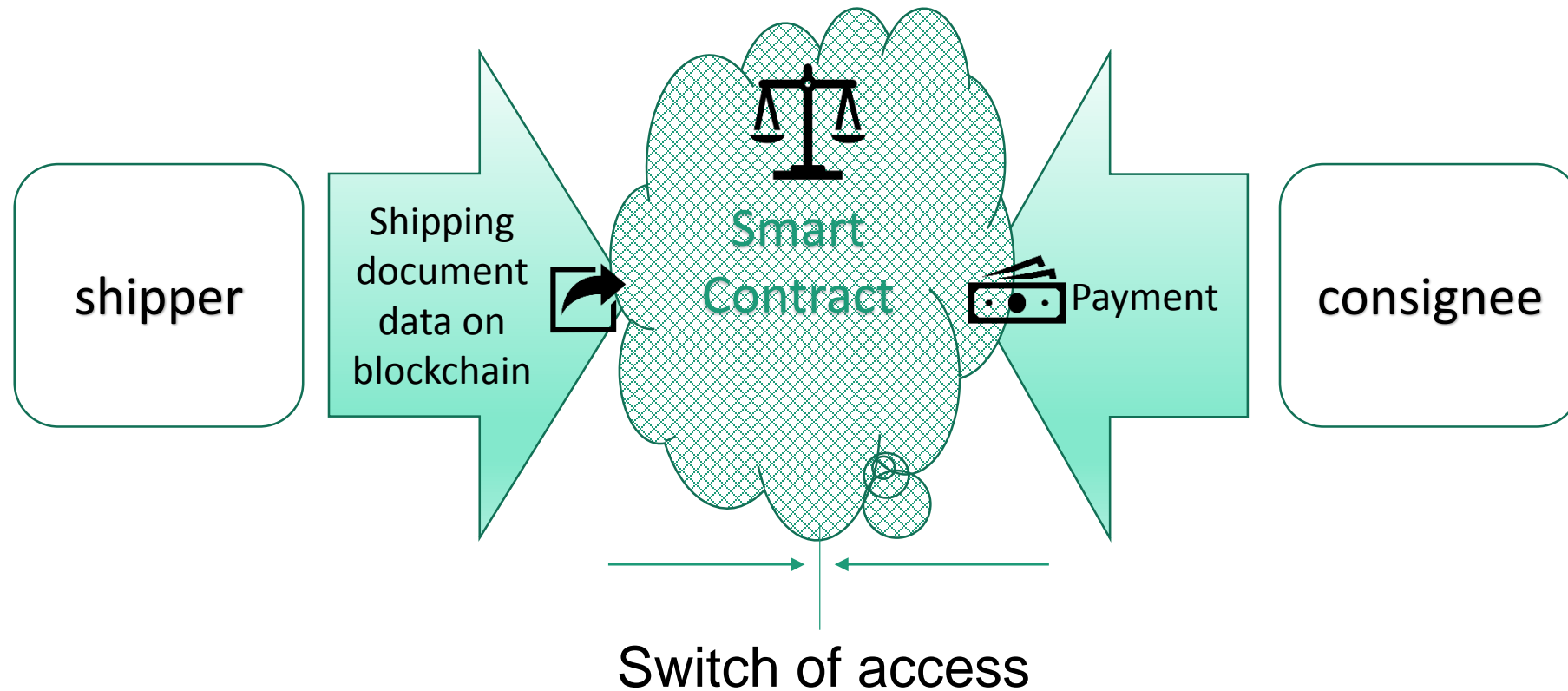


Internationally Integrated System?



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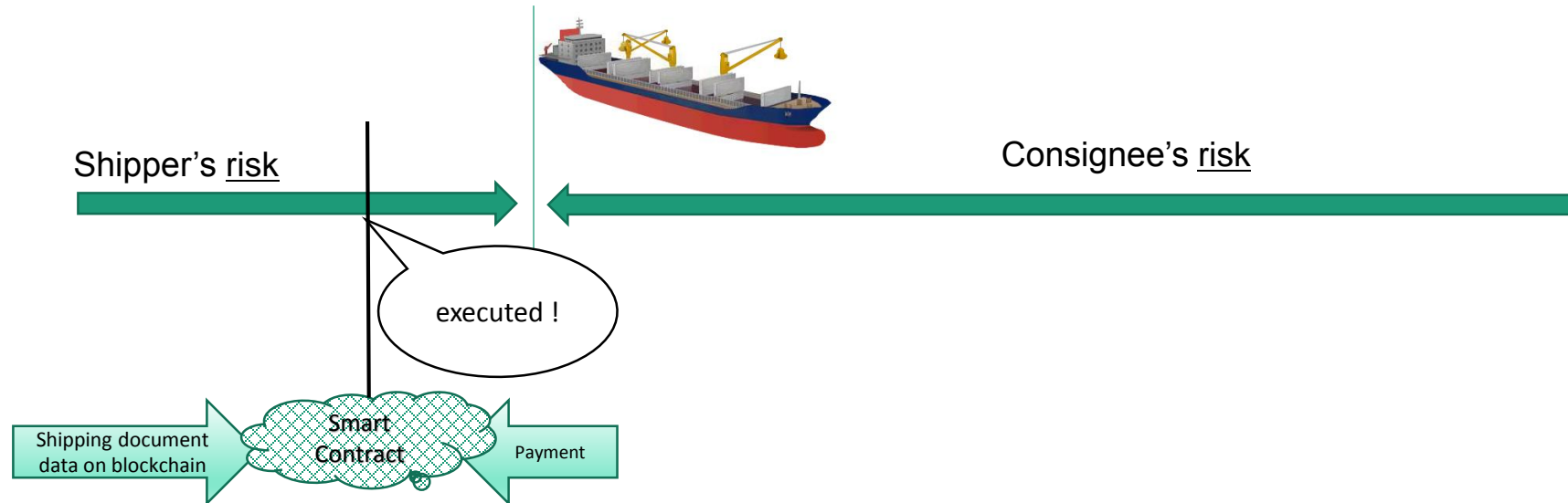
Smart contract and Insurable interest



- What if the access is controlled by a Smart contract ?

Smart contract and Insurable interest

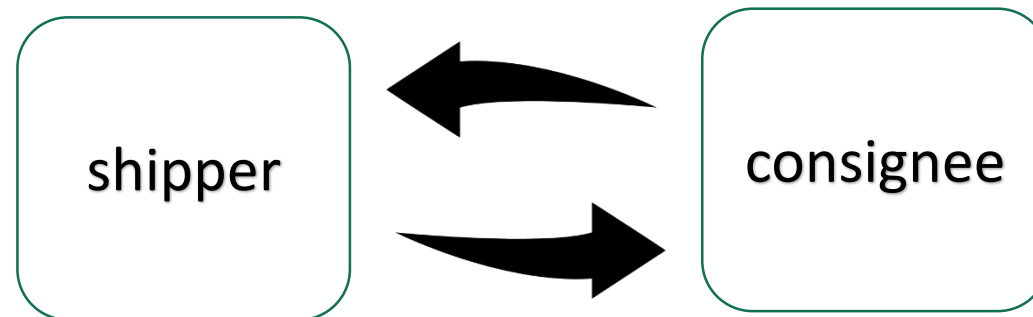
Incoterms(CIF) with Smart Contract



Smart contract and Insurable interest

When smart contract comes into play ;

 Direct transactions between



What are we going to face then?

Smart contract and Insurable interest

What we will face ;

Who has the Insurable Interest ?

Who is the Assured ?