

DATA LAB

GUARDA AVANTI

Big Data, nuove competenze
per nuove professioni.



Cofinanziato
dall'Unione europea



Sapere utile



Università
degli Studi
di Ferrara



UNIMORE
UNIVERSITÀ DEGLI STUDI DI
MODENA E REGGIO EMILIA



UNIVERSITÀ
DI PARMA



POLITECNICO
MILANO 1863
POLO TERRITORIALE DI
PACENZA



UNIVERSITÀ
CATTOLICA
del Sacro Cuore

“Anticipare la crescita con le nuove competenze sui Big Data” Operazione Rif. PA 2023-19167/RER approvata con DGR
n° 843 del 29 maggio 2023 e co-finanziata dal Fondo Sociale Europeo Plus 2021-2027 Regione Emilia-Romagna

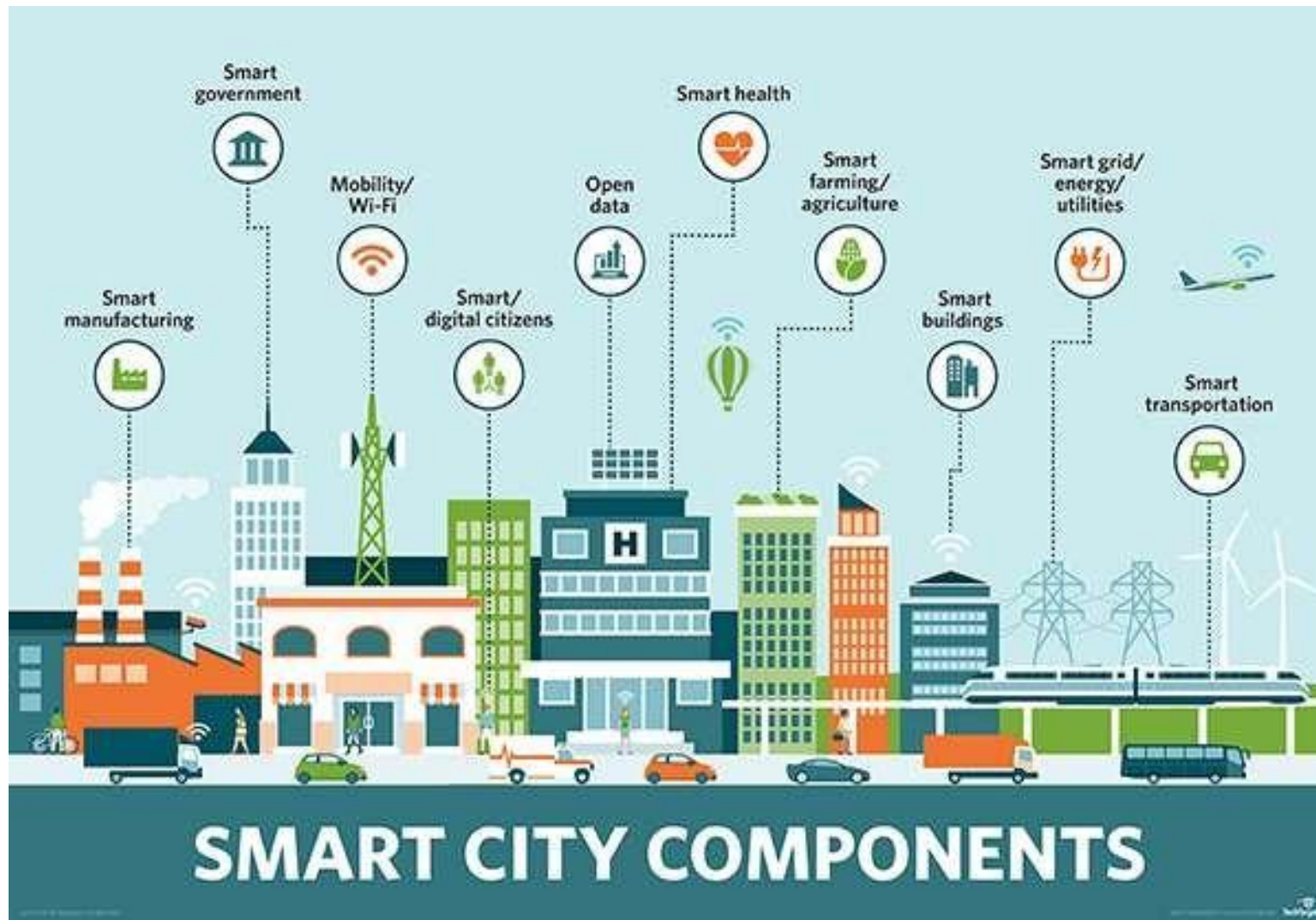
The background of the entire slide is an underwater scene. On the right side, there is a large, dense school of fish, possibly sardines, swimming in the same direction. On the left side, a scuba diver is visible, wearing a black wetsuit and yellow fins, holding a camera. Bubbles are rising from the diver. The water is a deep blue color.

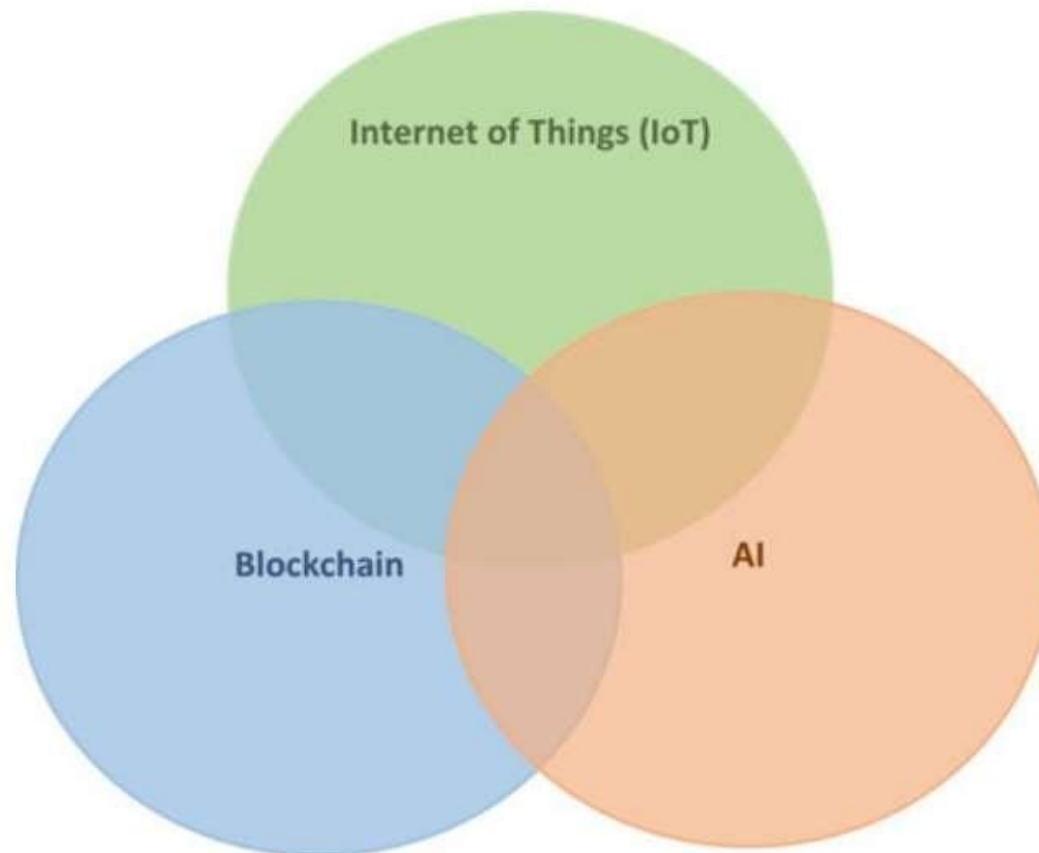
ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

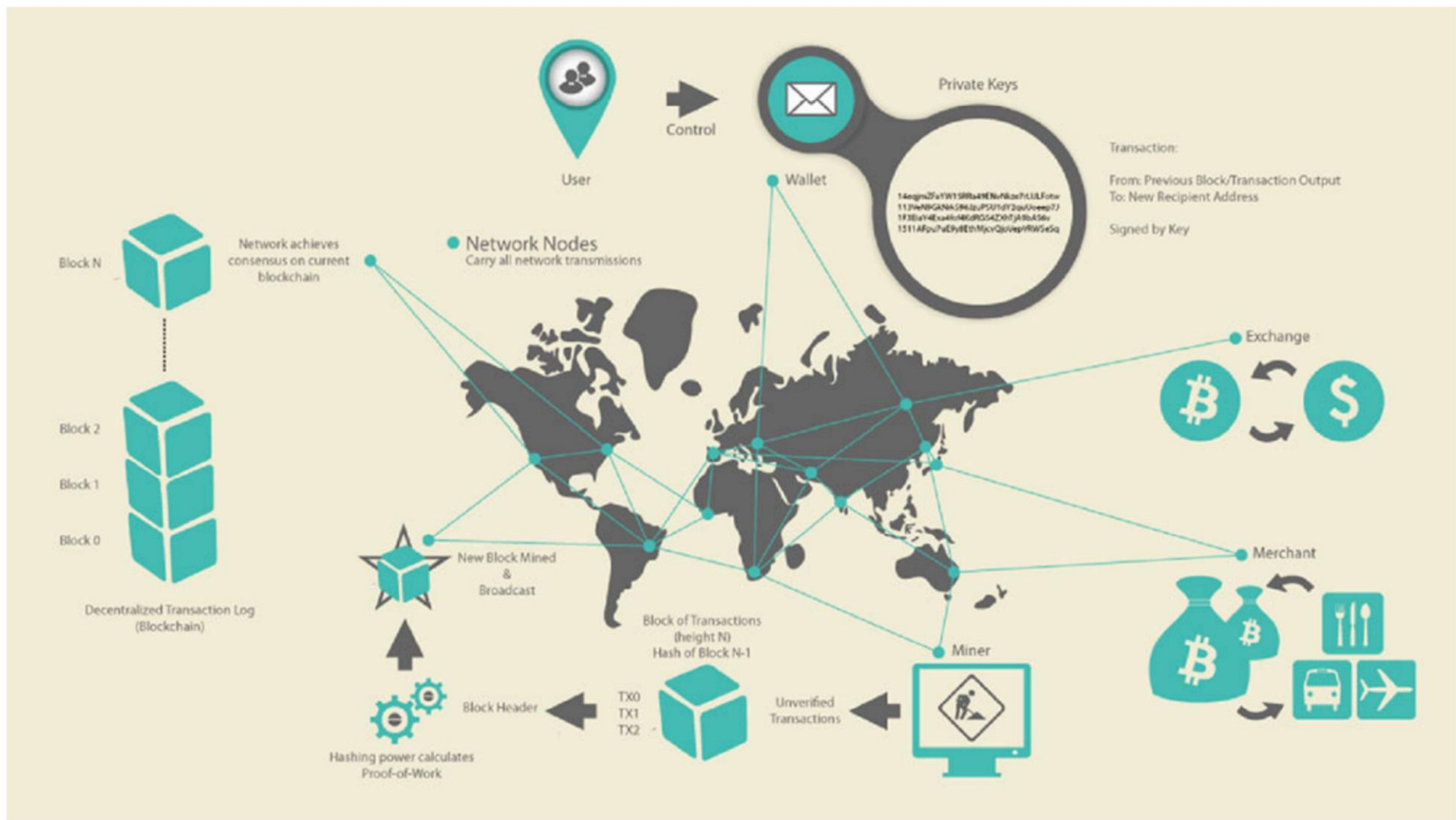
Operazione Rif. PA 2023-19167/RER/10/1, "ANTICIPARE LA CRESCITA CON LE NUOVE COMPETENZE SUI BIG DATA", approvata dalla Regione Emilia-Romagna con DGR n° 843 del 29/05/2023 e co-finanziata dal Fondo Sociale Europeo Plus 2021-2027

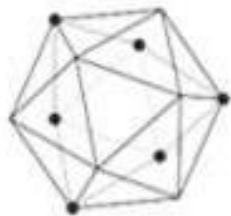
DATA LAB

The logo for Data Lab, featuring a stylized white elephant head profile inside a white circle, positioned to the right of the text "DATA LAB".

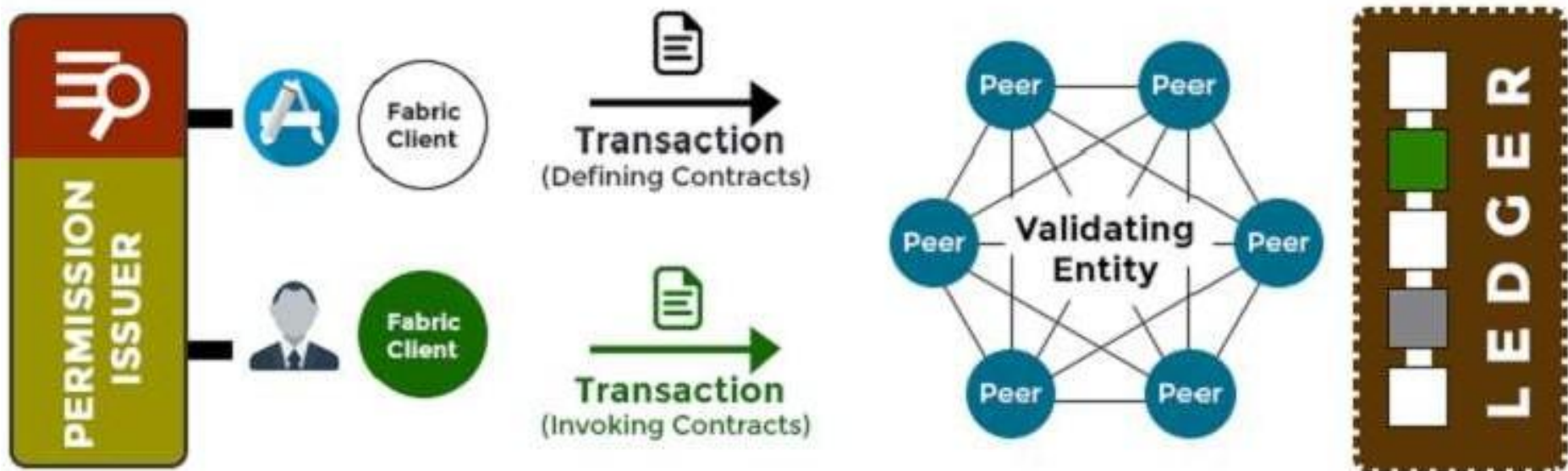





















HYPERLEDGER FABRIC



IBM Blockchain for Supply Chain & Trade Finance

Add New Contract 

Container ID	Content	Exporter		Loading Port		Port of Entry		Importer
MK20333	1000 red roses with lon...	Ecuador Grower		Port of Guayaquil		Berlin Port		Berlin's Fresh Cuts
MK112200	1000 dendrobium bouq...	Ecuador Grower		Port of Guayaquil		Berlin Port		Berlin's Fresh Cuts
MK003489	30000 Pink Roses long ...	Ecuador Grower		Port of Guayaquil		Berlin Port		Berlin's Fresh Cuts
MT45000	30000 pink daisies	Ecuador Grower		Port of Guayaquil		 Berlin Port		Berlin's Fresh Cuts
MK77793	25000 dendrobium bou...	Malay Grower		 Port Kelang		Port of Antwerp		Wholesale Flower
MK12000	30000 Pink Carnations	Pichai Flowers		 Onne Port		Port of Hamburg		Berlin's Fresh Cuts
MK10220	50000 Vandas long stems	Pichai Flowers		Laem Chabang		 Elizabeth		Trader Joe's
MK99999	20000 Dendrobiums	Pichai Flowers		Songkhla		Kobe Port		Flowers of Kyoto
MK12345	100000 Red Roses long...	Grower Group		Santa Marta Port		 San Francisco		Trader Joe's
MK00001	100000 white mums - p...	Grower Group		Barranquilla		Elizabeth		Walmart
MK10035	20000 Red Tulips	FlowerWorld		Port of Antwerp		Kobe Port		Flowers of Kyoto
MK30443	30000 Purple Dendrobi...	Ecuador Grower		Port of Guayaquil		Kobe Port		Flowers of Kyoto
MK20110	70000 White Dendrobiu...	Pichai Flowers		Lam Chabang		Kobe Port		Flowers of Kyoto

⬅ Back to all contracts

IBM Blockchain for Supply Chain & Trade Finance

🖱 **Contract:**

Issue Letter of
Credit

Logged on as

Bank of
Belgium



International
Shipper



BLOCKCHAIN SHARED LEDGER

Back to all contracts

IBM Blockchain for Supply Chain & Trade Finance

Contract: 21005

Bank of
Singapore



Click this participant
for the next step

SingaFlowers
PL



Port of
Singapore



Port of
Antwerp



Antwerp
Customs



Flanders
Flowers Co.



Logged on as

Bank of
Belgium



International
Shipper



BLOCKCHAIN SHARED LEDGER



Letter of Credit

Letter of Credit Created

Letter of Credit Received

Back to all contracts

IBM Blockchain for Supply Chain & Trade Finance

Contract: 21005

Bank of
Singapore



Request Goods
Inspection

Logged on as

SingaFlowers
PL



Port of
Singapore



Port of
Antwerp



Antwerp
Customs



Flanders
Flowers Co.



Bank of
Belgium



International
Shipper



Contract temperature range: 5° C to 12° C

Contract humidity range: 40% to 70%

BLOCKCHAIN SHARED LEDGER



Letter of Credit



Logistics Contract

Letter of Credit Created

Letter of Credit Received

Logistics Contract Issued

Back to all contracts

IBM Blockchain for Supply Chain & Trade Finance

Contract: 21005

Click this participant
for the next step

Bank of
Singapore



SingaFlowers
PL



Port of
Singapore



Port of
Antwerp



Antwerp
Customs



Flanders
Flowers Co.



Bank of
Belgium



International
Shipper



Contract temperature range: 5° C to 12° C

Contract humidity range: 40% to 70%

BLOCKCHAIN SHARED LEDGER



Logistics Contract



Phytosanitary Certificate



Bill of Lading

Letter of Credit Created

Letter of Credit Received

Logistics Contract Issued

Phytosanitary Cert. Issued

Bill of Lading issued

Click to all contracts

IBM Blockchain for Supply Chain & Trade Finance

Contract: 21005

Bank of
Singapore



Logged on as
SingaFlowers
PL



Port of
Singapore



Watson Internet of Things Platform

Port of



Antwerp
toms



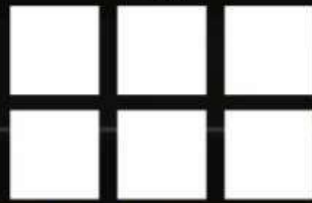
Flanders
Flowers Co.



Bank of
Belgium



International
Shipper



Contract temp

Contract humidity range 60% to 70%

Next

Blockchain Shared Ledger

Letter of Credit

Logistics Contract

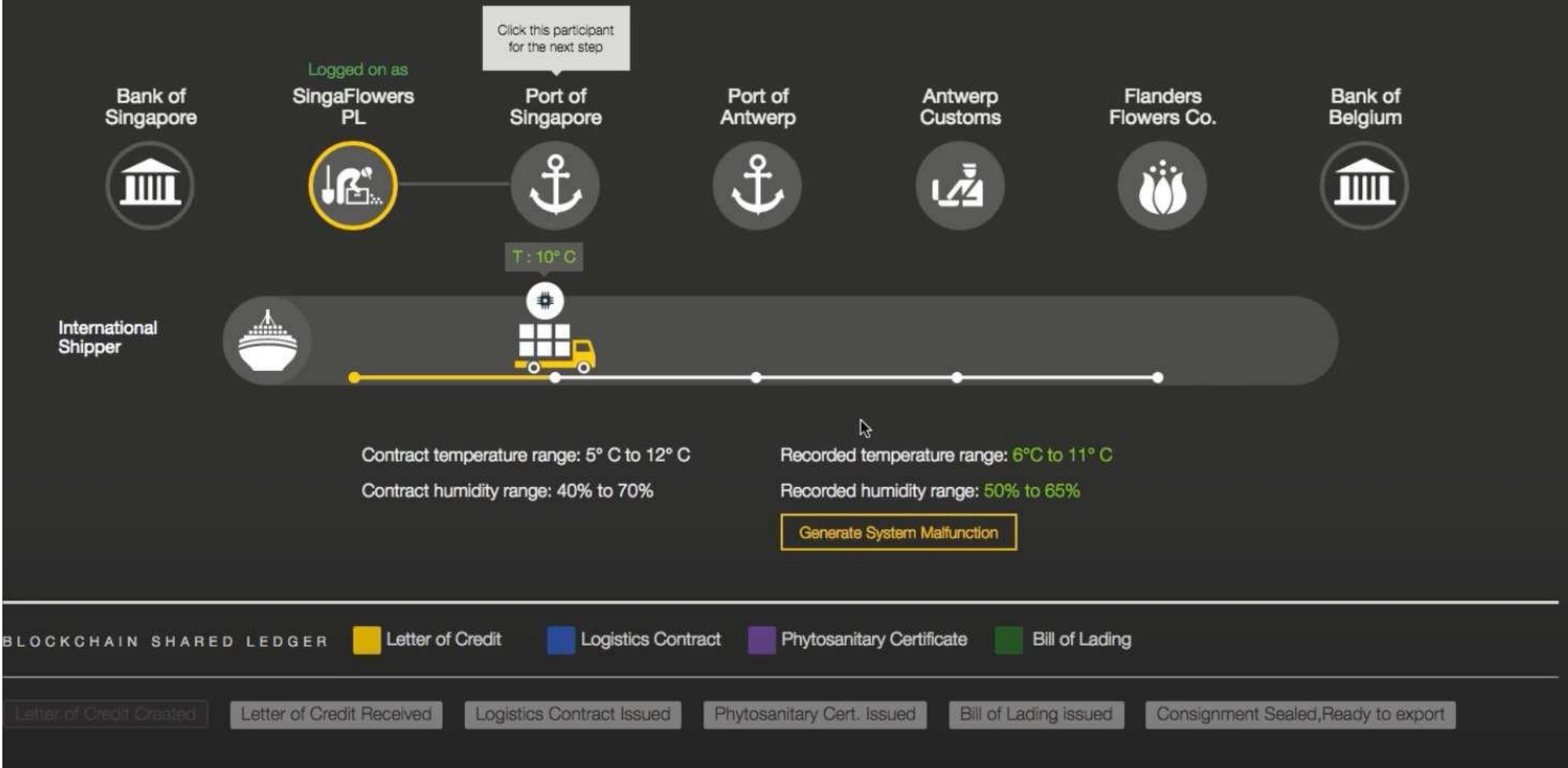
Phytosanitary Certificate

Bill of Lading

Back to all contracts

IBM Blockchain for Supply Chain & Trade Finance

Contract: 21005



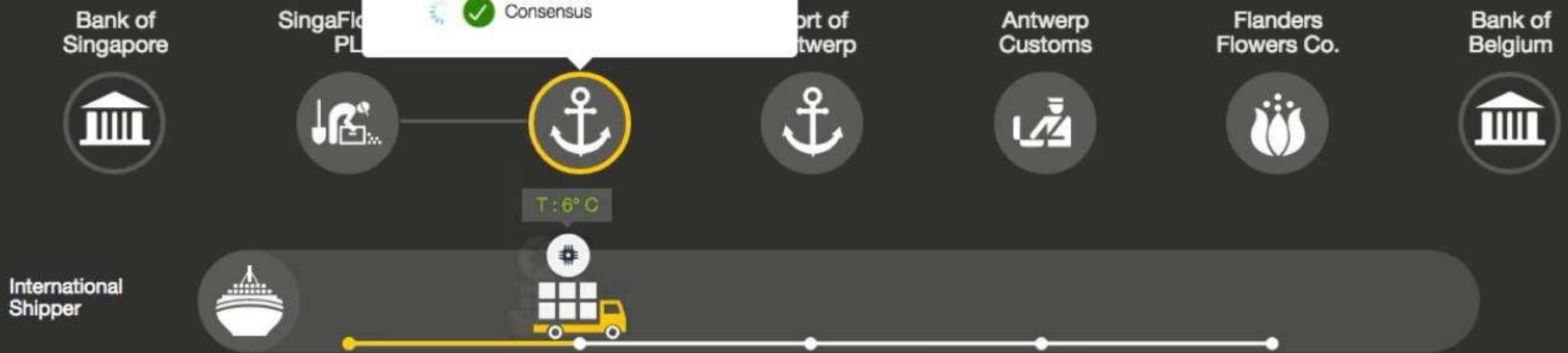
Back to all contracts

IBM Blockchain for Supply Chain & Trade Finance

Contract: 21005

Automatically validated by:

- ☒ International Shipper
- ☒ Bank of Belgium
- ☒ Port of Singapore
- ☒ Port of Antwerp
- ☒ Consensus



Contract temperature range: 5° C to 12° C
Contract humidity range: 40% to 70%

Recorded temperature range: 5°C to 17° C
Recorded humidity range: 50% to 65%

Generate System Malfunction

BLOCKCHAIN SHARED LEDGER

Logistics Contract Phytosanitary Certificate Bill of Lading

Back to all contracts

IBM Blockchain for Supply Chain & Trade Finance

Contract: 21005

Automatically validated by:

- ✓ International Shipper
- ✓ Bank of Belgium
- ✓ Port of Singapore
- ✓ Port of Antwerp
- ✓ Consensus

Bank of Singapore



Singapore Port



Port of Antwerp



Antwerp Customs



Flanders Flowers Co.



Bank of Belgium



International Shipper



T: 9° C



Contract temperature range: 5° C to 12° C
Contract humidity range: 40% to 70%

Recorded temperature range: 5° C to 17° C
Recorded humidity range: 50% to 65%

Generate System Malfunction

BLOCKCHAIN SHARED LEDGER

Logistics Contract

Phytosanitary Certificate

Bill of Lading

Letter of Credit Created

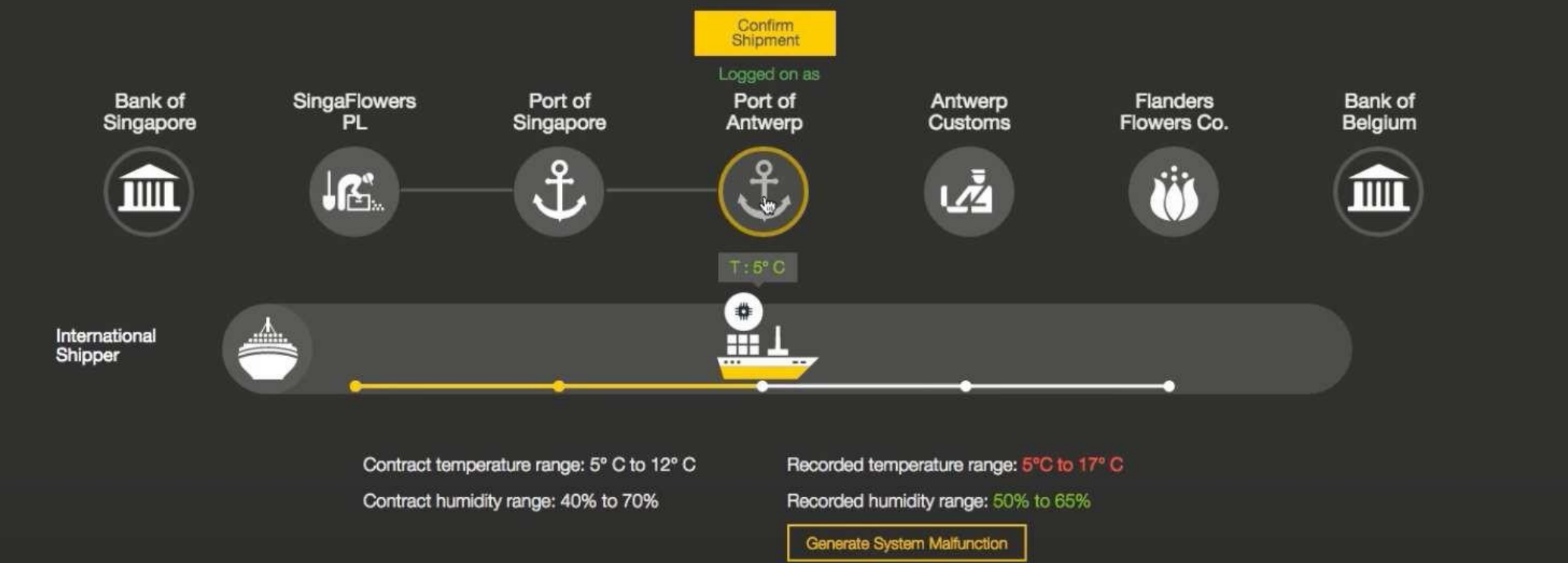
Letter of Credit Received

Logistics Contract Issued

Phytosanitary Cert. Issued

Bill of Lading Issued

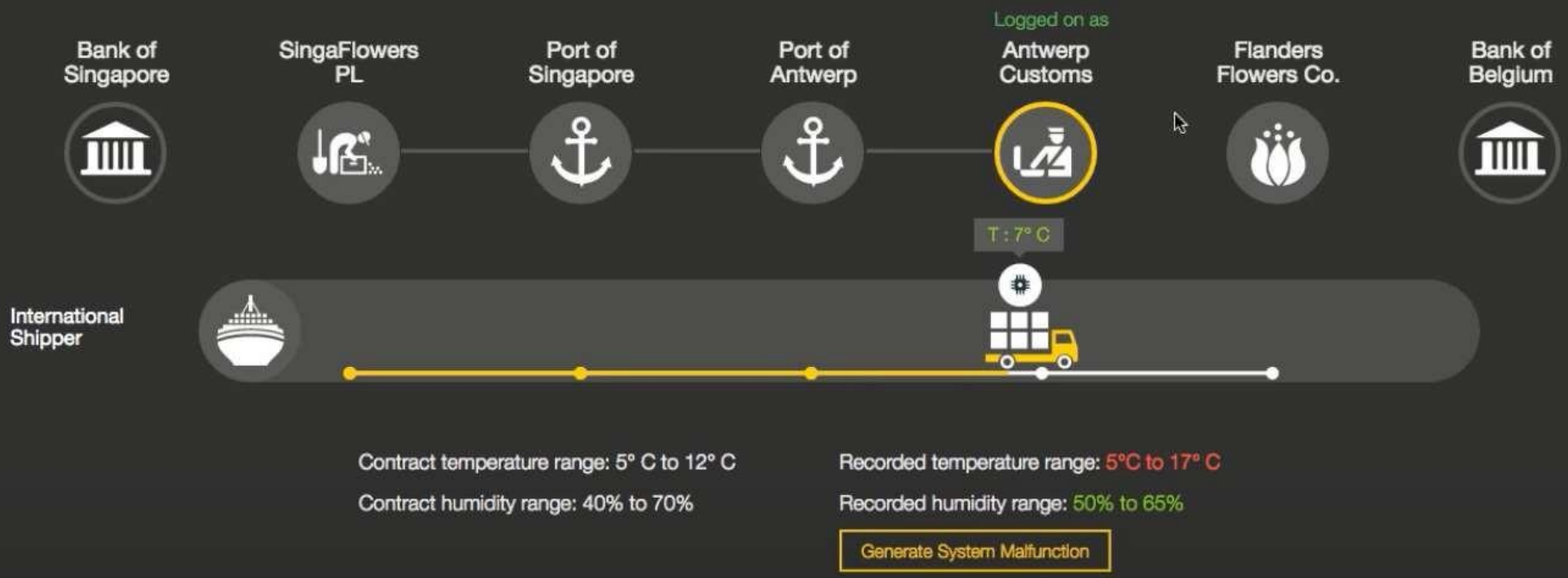
Consignment Sealed, Ready to export



⬅ Back to all contracts

IBM Blockchain for Supply Chain & Trade Finance

Contract: 21005



BLOCKCHAIN SHARED LEDGER

■ Phytosanitary Certificate ■ Bill of Lading

- Letter of Credit Created
- Letter of Credit Received
- Invoice Created Issued
- Phytosanitary Cert. Issued
- Bill of Lading Issued
- Development Speed Ready to export

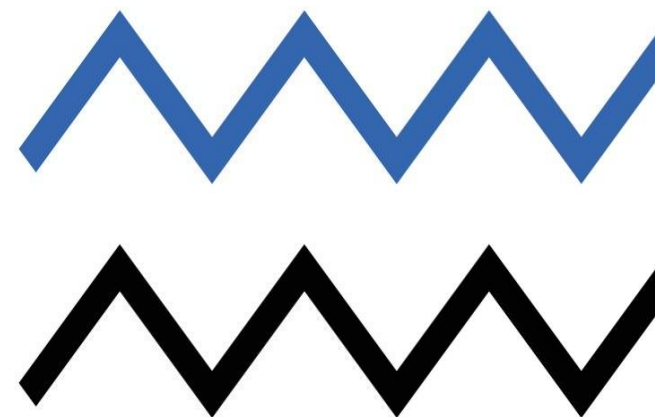
Payment = contract – 2% of penalty



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per nuove professioni.

www.bigdata-lab.it



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MODENA E REGGIO EMILIA



UNIVERSITÀ
DI PARMA



POLITECNICO
MILANO 1863
POLO TERRITORIALE DI
PIACENZA



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del Sacro Cuore