



# EASYTOCERTIFY

DIGITAL CERTIFICATES - Frank Hoeben

A N N U A L G L O B A L N U M B E R O F

**+1 BILLION CERTIFICATES**

and growing

INCLUSION

FAIR

SECURE

QUALITY

SUSTAINABLE



According to Inspection and Certification bodies estimates



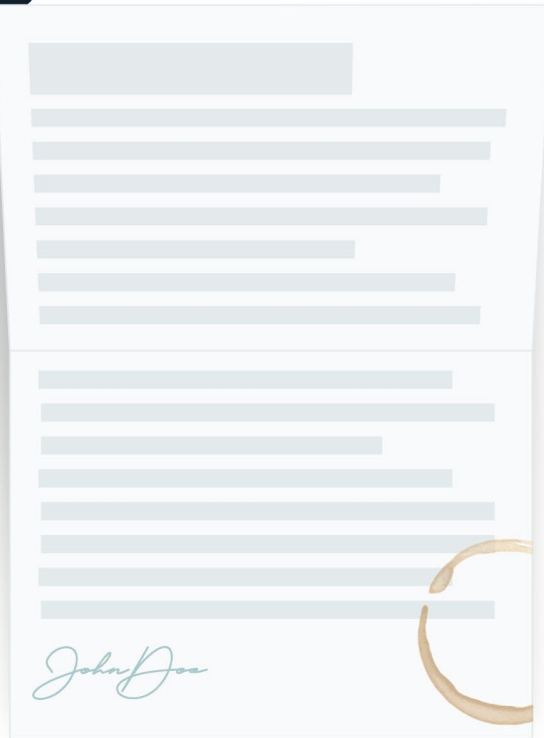
CERTIFICATES  
LICENSE TO OPERATE & PROVIDE TRUST

# PROBLEMS

- Rule based thinking instead of Principle based
- Time-consuming
- Lagging claims
- Exclusion
- Fraud



## 1 paper document



Analogue thing  
Physical asset

## 2 electronic extracts e-B/L, e-AWB etc.



Electronic representations  
(not a document)

## 3 trace:original document

##### THIS IS A TEST DOCUMENT - NO CONTENT IS LEGALLY BINDING. #####  
##### By signing the content in this digital original document and appendices hereto, #####  
##### using a digital signature, the signer accepts this digital original as the valid #####  
##### and legal bearer of its content. This document is a versioned digital original #####  
##### secured by the Engio trace:original system. #####  
##### If the document is registered in the trace:original public ledger, nothing #####  
##### may be altered or removed without this file losing its authenticity. #####  
##### All content is in VAM-format, cryptographically secured both in this file and #####  
##### by immutable references in the block-chained trace:original public ledger. #####  
##### Only those in possession of this trace:original file, or a copy thereof, have #####  
##### access to its business content. #####  
##### The authenticity of a trace:original file can be verified online as well as #####  
##### its consistency offline, by using the appropriate software and algorithms as #####  
##### found at <https://traceoriginal.com>. #####  
##### Only the holder of the current and valid trace:original file, together with its #####  
##### current private key, is the party able to exercise the legal rights as described #####  
##### in the document. Furthermore, this current legal holder has the control of the #####  
##### document with the right to make amendments, facilitate the procedure of adding #####  
##### signatures, transfer ownership and invalidate the current digital original. #####  
##### If not stated otherwise, this digital document should be subject to the AIDAS #####  
##### regulation (EU) no 910/2014. #####  
##### Additional information can be found on <https://traceoriginal.com>. #####  
##### Version: 1.0 #####  
Content:  
Company credit: Provisionary note 2019-1, Company Ltd, 551300ABC999ABC4500  
Agreement no: 12345  
Debtor:  
Company: DebtorCompany Ltd  
LEI: 54500ABC111ABC111  
Address: Drottningholmssvagen 10, 11242, Stockholm  
Contract period, Terms of Payment, Collaterals etc.:  
Credit Amount GBP (in letters): Ten thousand pound  
Credit Amount GBP (in numbers): 10000  
Credit period number of months: 6  
Due date repayment: 15th every month  
Amortization to pay each due date (GBP): 1666.66  
First due date amortization (year-month-day): 2019-05-15  
First due date interest rate (year-month-day): 2019-05-15  
Interest Rate % (yearly): 8.00  
Due interest rate: 15th each month  
Payment term interest (monthly or quarterly): monthly  
Number of payments: 6  
Setup fee (GBP): 0.00  
Notification fee (GBP): 2.90  
Terms and Conditions: 1  
By signing the provisionary note, the Debtor also approves Company Ltd General Terms (Appendix 1 referenced below) and shall pay to the Company Ltd, or order, the credit amount together with interest, fees and costs according to the provisions of this debt, some of which are in the General terms and condition for the credit. This agreement has been drawn up in an original form which the borrower has received a copy whose compliance with the original can be verified as described on the website <https://traceoriginal.com>. This agreement is valid from the signing of the agreement.  
Attachment 1:  
Name: General Terms and Conditions 2019-1.pdf  
Checksum (SHA256): 64788bc774ae3d413908b7b335ebcf0ba76c2b0ee0ebab763852b2a0e0270  
Signatures: The parties sign by E-Signature (Swedish Bank ID), confirmation of digital signing will be added and tied to this agreement.  
Debtor signatory:  
Name: Nils Nilsson  
ID: 068100-1111  
Role: Signs in the role as board member  
Technical details:  
Contenthash: "80417e9d0e86157022c83417fd27334c142801e450805f5781953bd0c0e515"  
Ownerkey: "83b396d980895454ff83178012a0f6431a09b0d1276c7114c1d26f7f191d9382"  
Versionkey: "34818618750d1650b03600c0551c70d1c0ac134e45d57f620f1c4416de"  
Timestamp: "2019-05-20T15:21:57.728"  
TraceOriginalId: "23ab1c08d0f0ed1033fafe0ab1c0addd87937e78f757066391c0d5399"  
LedgerSignature: "e5a1c0c08a5vpl0q7b/fH8z2b5Dv1Kc4QcAnF1V731Zy0uXN0d5p1DyE2Z7Z0P1G495a3c81303p="#####  
##### Amendments: #####  
Content: 1  
e-Signature of Nils Nilsson logged here  
Technical details:  
Contenthash: "62059c894be081d0a2f9ffe75448c8166ff794e3d50e8d1996c220ed830524"  
Ownerkey: "83b396d980895454ff83178012a0f6431a09b0d1276c7114c1d26f7f191d9382"  
Versionkey: "34818618750d1650b03600c0551c70d1c0ac134e45d57f620f1c4416de"  
Timestamp: "2019-05-20T15:23:10.7362"

Digital thing  
Digital asset

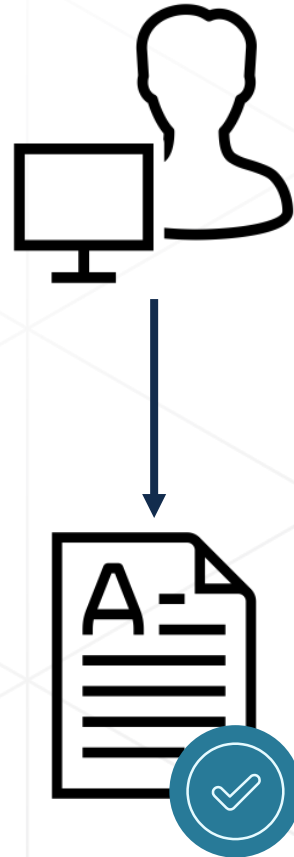


# Paper vs. Electronic vs. Digital

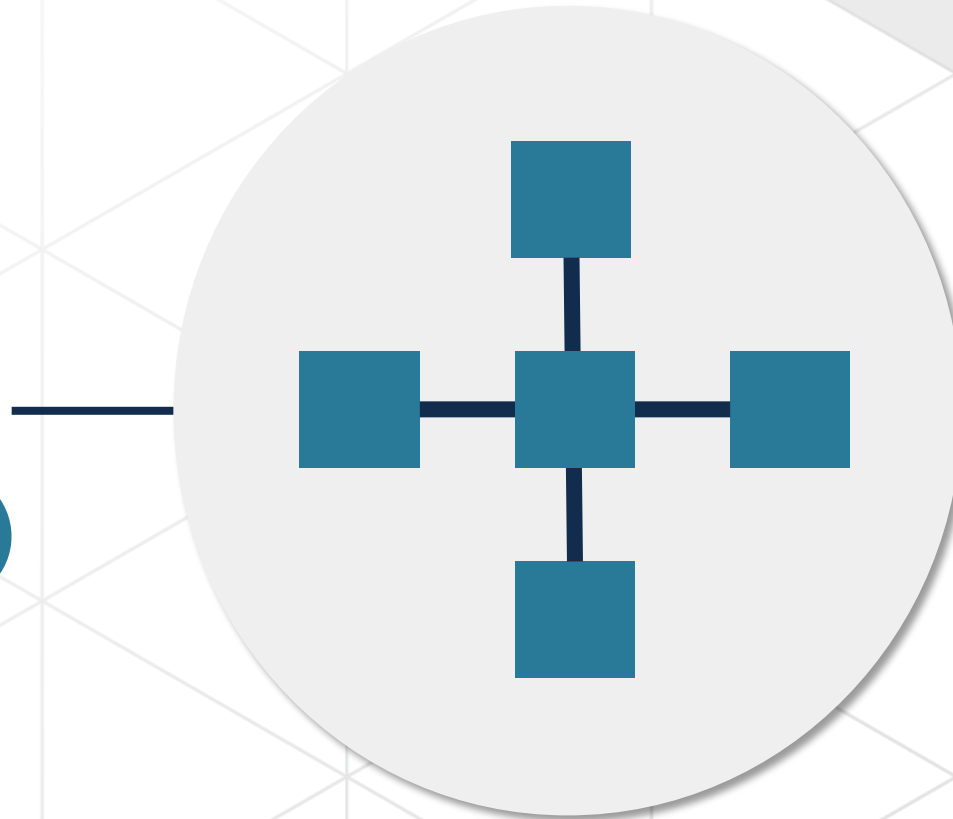
# Explanation

create a **digital original** - solely in  
the control of the holder

document is readable by man  
and machine  
and can be stored **locally** - and  
can be seen without blockchain

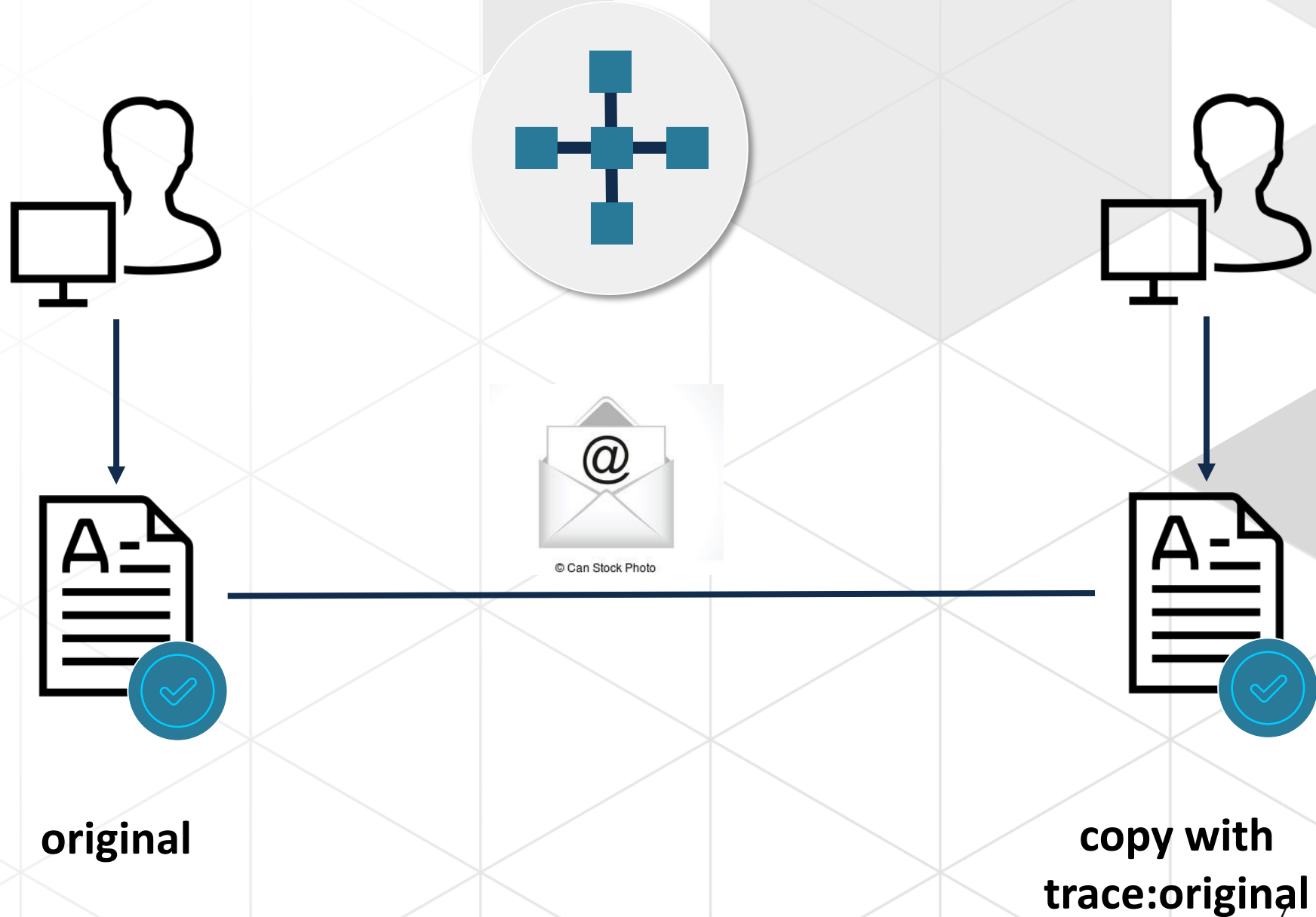


**original**



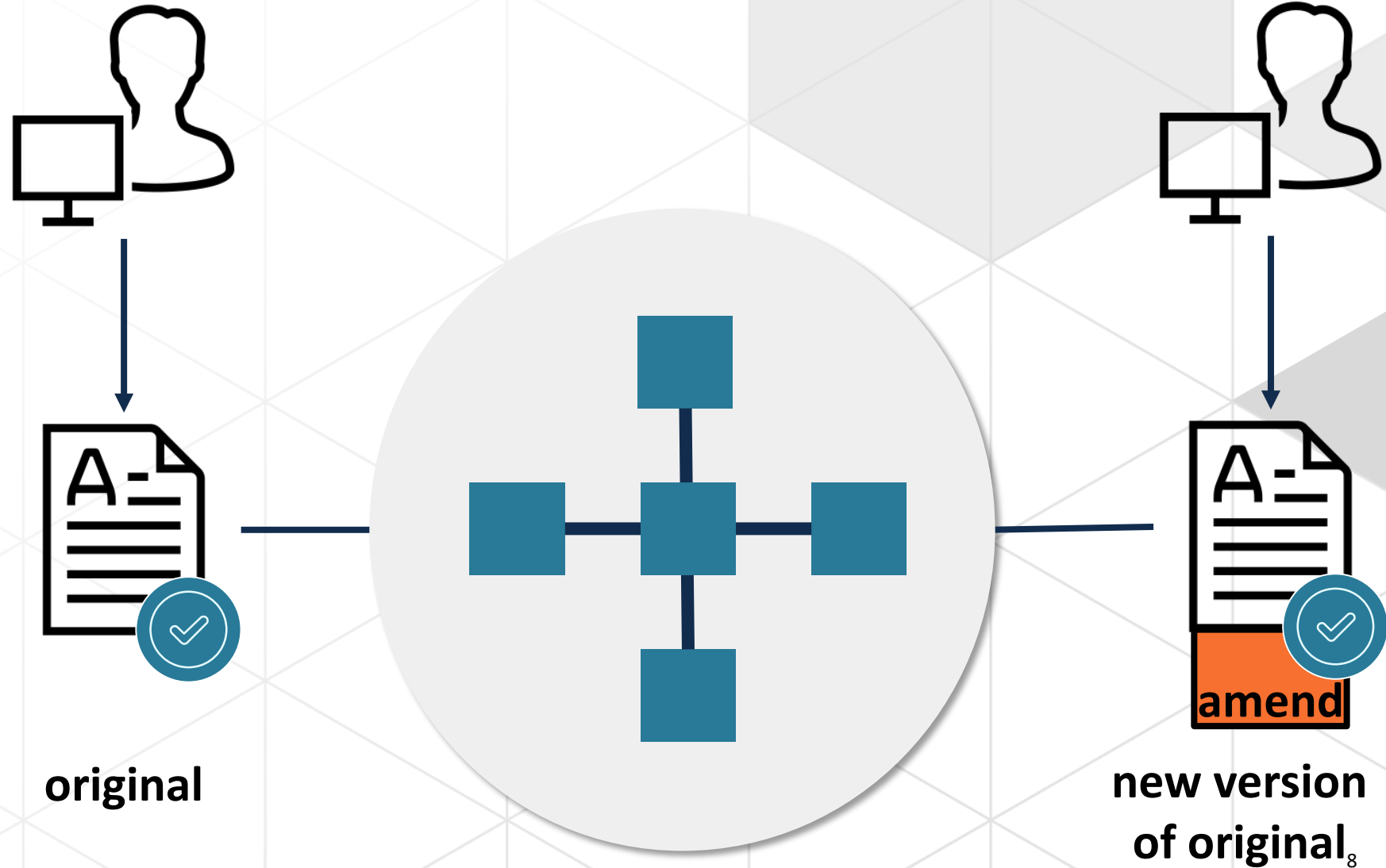
# Explanation

**distribute copies** of a digital original can be done using and normal distribution mechanism, such as e-mail or a USB-stick



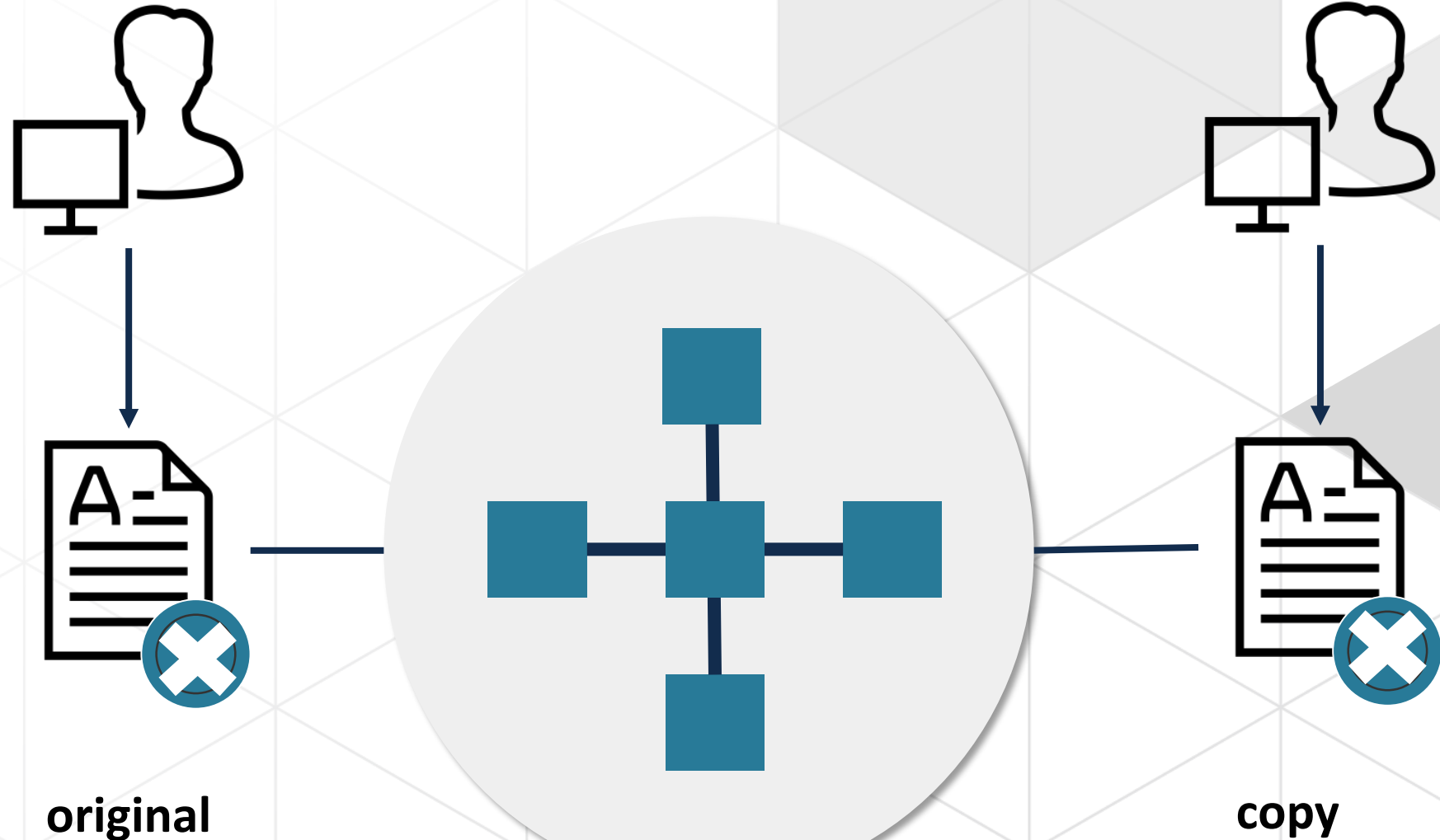
# Explanation

amend data to a digital original keep  
complete immutable **traceability** /  
audit trail documents can not be  
changed but amendments are  
possible

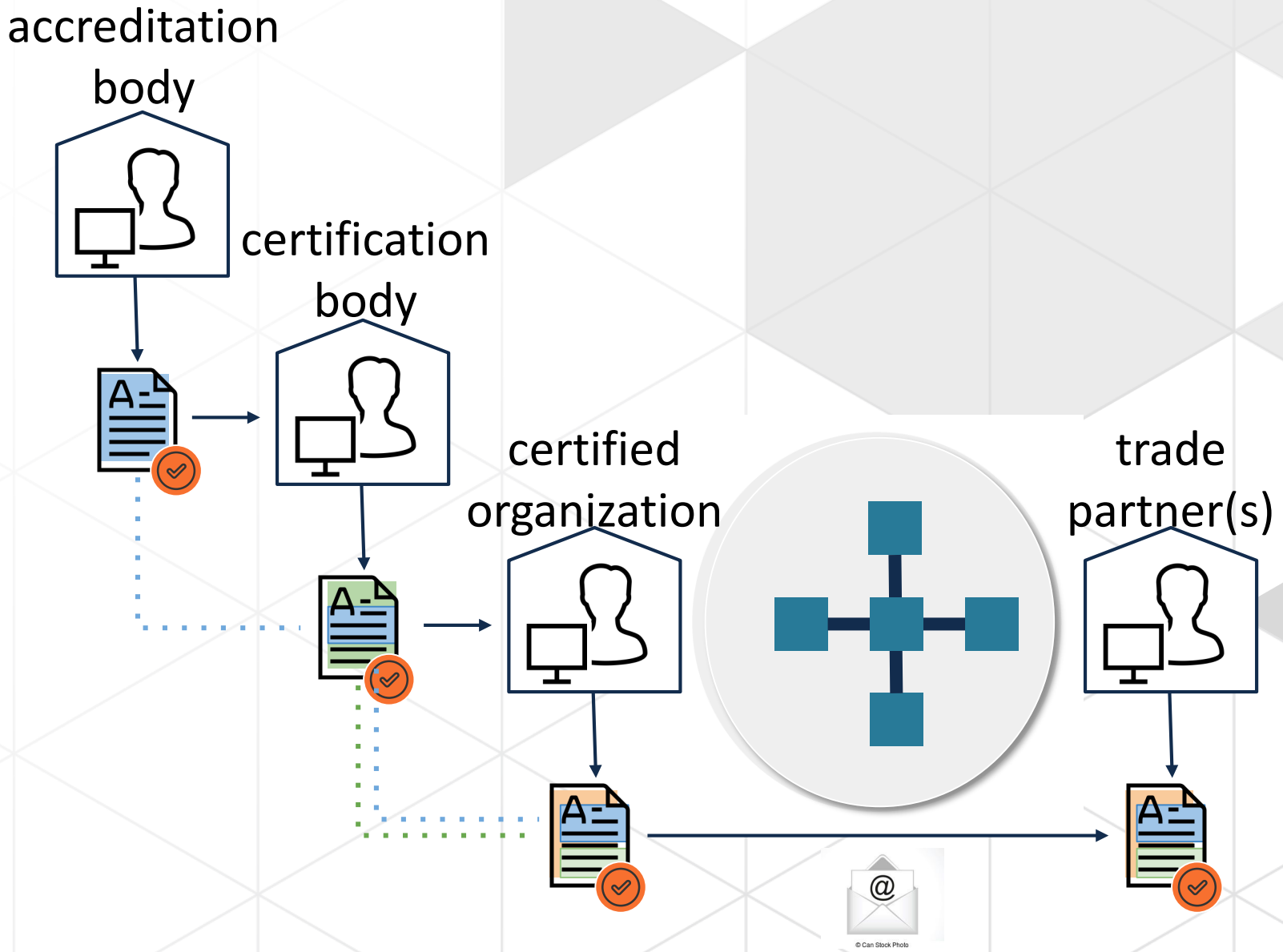


# Explanation

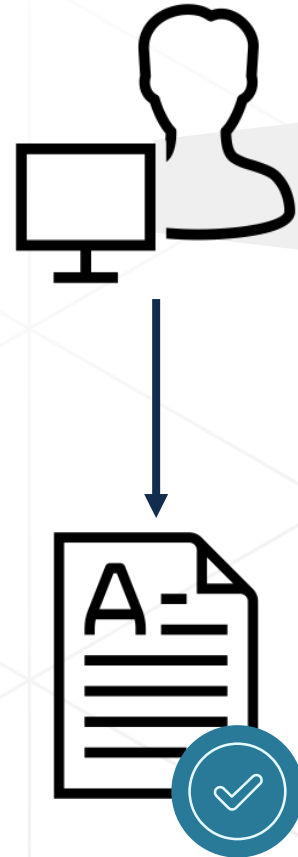
**invalidate / Revoke** a digital original, when the original is invalidated - then all copies will also be invalid



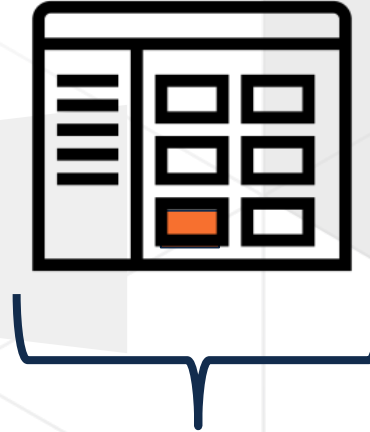
# Explanation



# Application



WEB  
application



create certificates  
exchange certificates  
combine certificates  
amend certificates  
add smart context  
(include certificate details)



# Use Cases of Digital Certificates



Trusted Person  
Construction worker



Construction



# Use Cases of Digital Certificates



Trusted System  
Logistics and Transport chain



# Use Cases of Digital Certificates



Trusted Product  
Organic Combined Product

Farming



# Use Cases of Digital Certificates

**Digital Certificates can  
transform the way we are  
doing business.**



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