



# **BLOCKCHAIN IN ACTION**

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# OBJECTIVES AND AGENDA

**Present an introduction to the disruptive technology, discuss emerging use cases and showcase real-world examples of blockchain in action**

**1 What is Blockchain?**

**2 Emerging Use Cases**

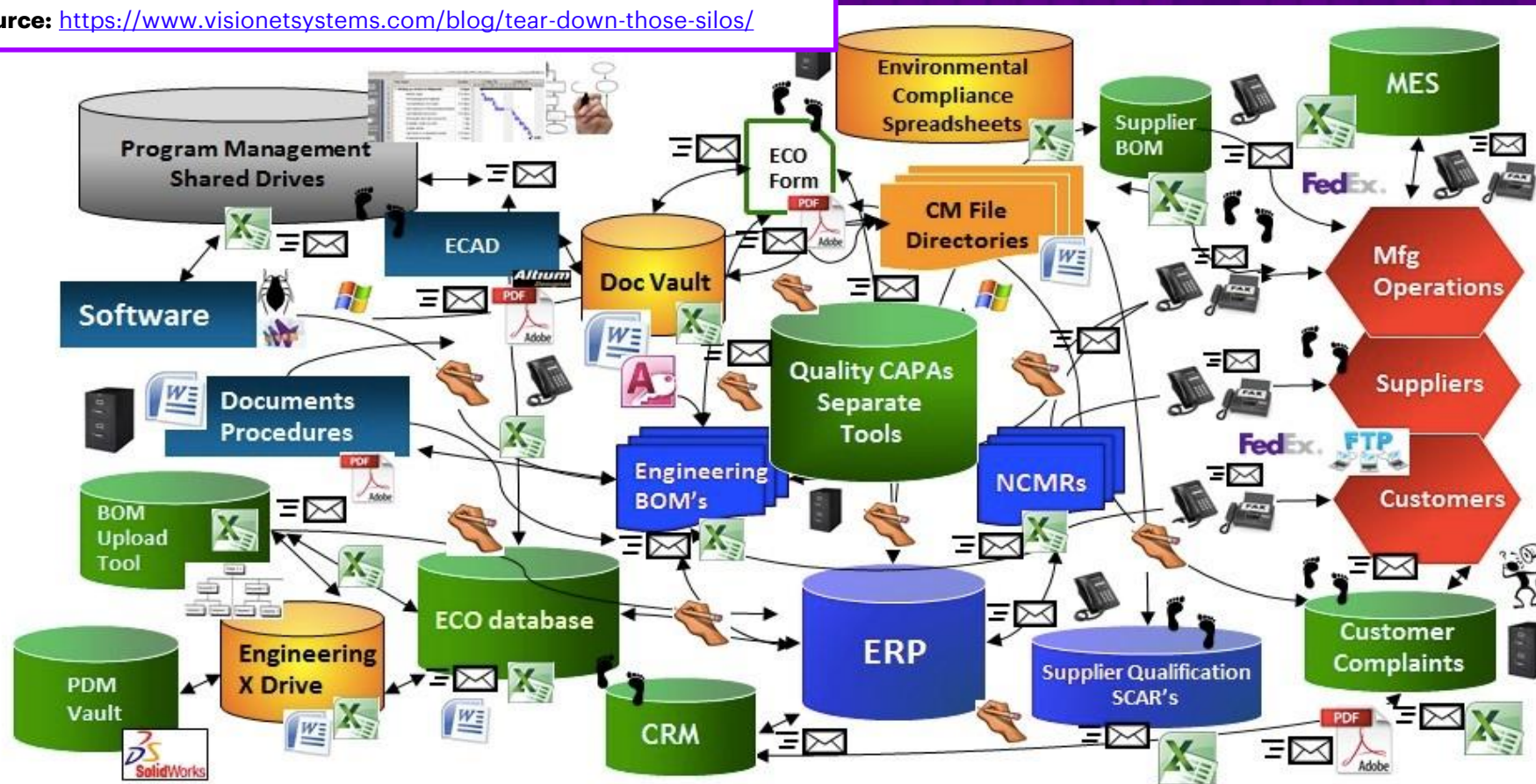
**3 Blockchain in Action**

# WHAT IS BLOCKCHAIN?

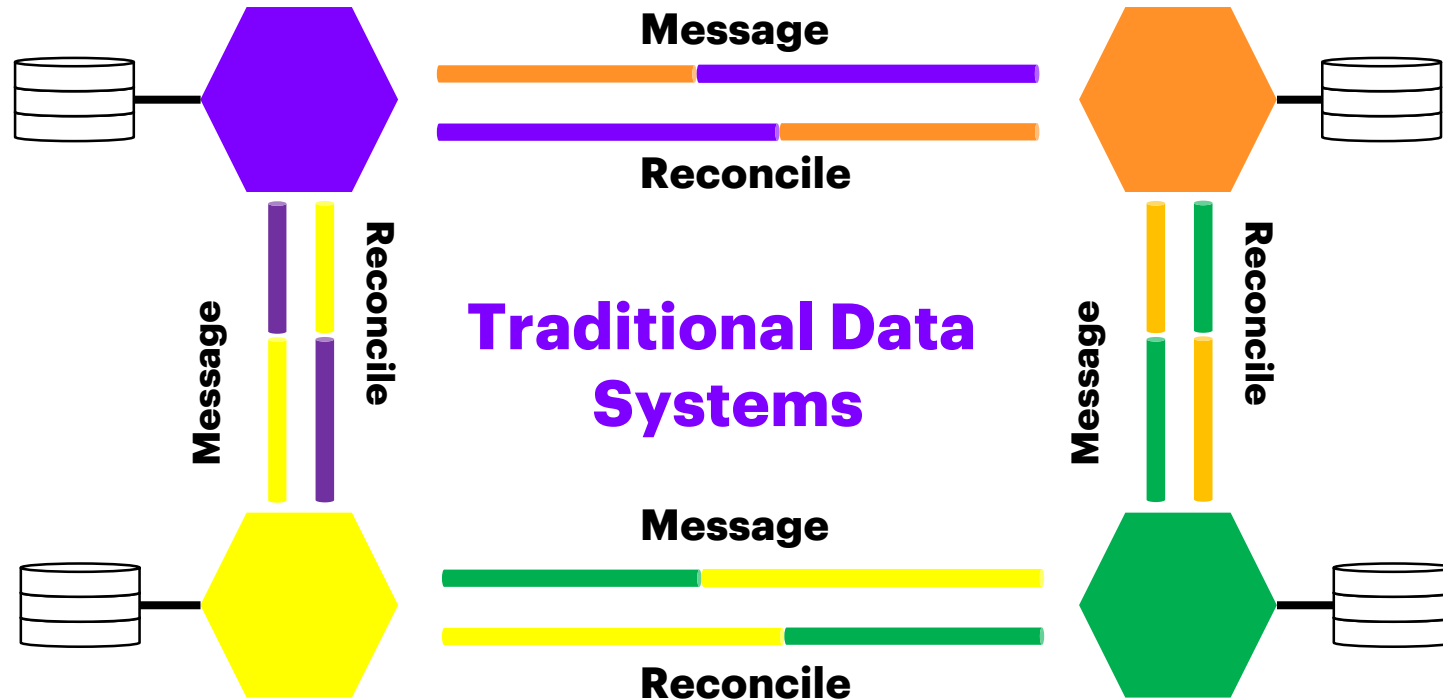


# WE ESTIMATE >30% OF A BUSINESS COST BASE IS LOCKED UP IN DATA MESSAGING & QUALITY ISSUES

Source: <https://www.visionetsystems.com/blog/tear-down-those-silos/>

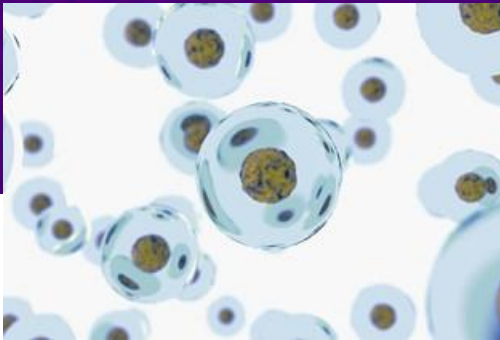


# TODAY: MESSAGE BASED BUSINESS MODEL



**“Can you send me what I need?”**  
**“Here’s what I know, what do you know?”**  
**“Did you receive it?”**  
**“Is it right?”**

# CHALLENGES WITH TRADITIONAL DATA SYSTEMS



## REDUNDANCY

Many copies of data maintained by many participants; constant reconciliation



## COPY & PASTE

We don't know where data came from or how it may have been changed



## CONTROL

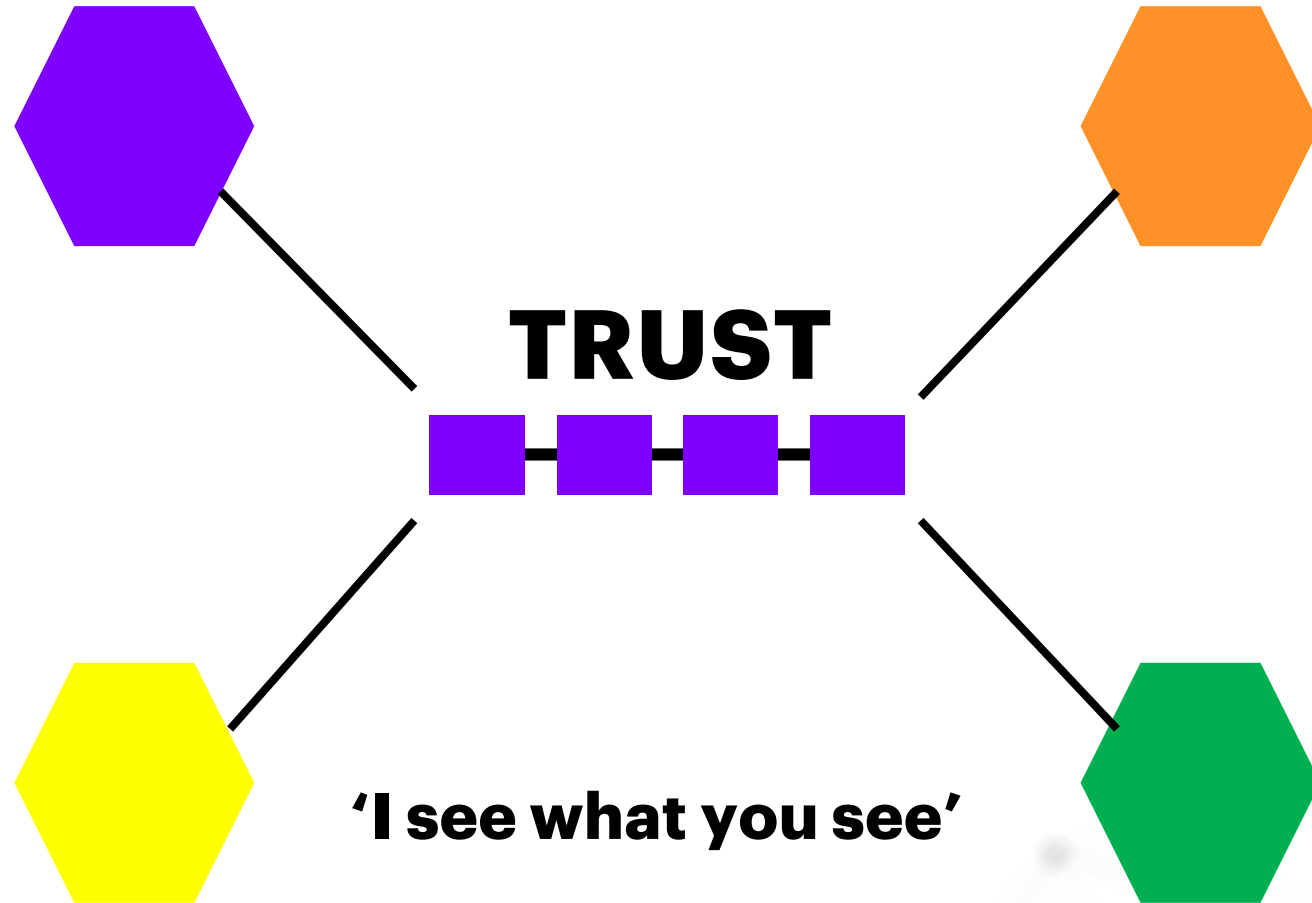
Blunt control mechanisms; database, table, and row access control



## SECURITY

Perimeter based security models regularly breached

# TOMORROW: BLOCKCHAIN BASED BUSINESS MODELS



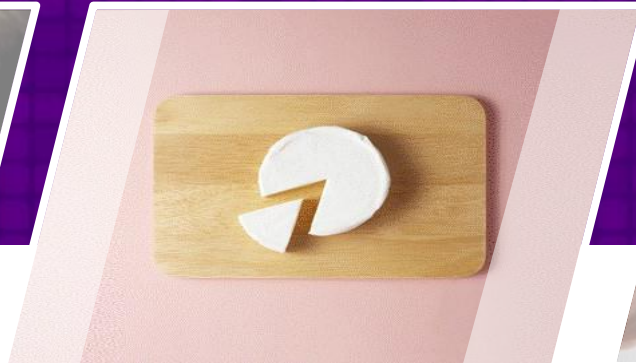


# FOUR KEY FEATURES CREATE THE CONFIDENCE



## PROVENANCE

We know where it came from and can trace its' complete history



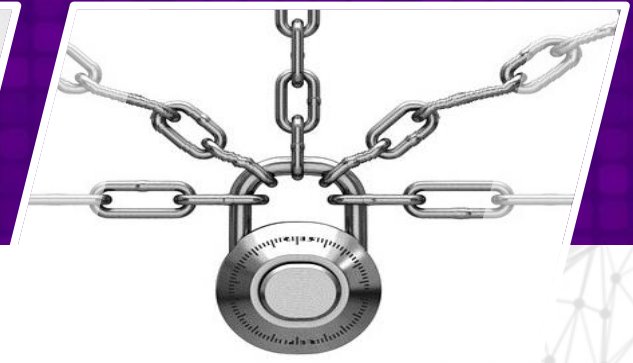
## TAMPER EVIDENCE

We know if someone has tried to change it



## CONTROL

We can control what someone can see and do at a data element level



## SECURITY

We can encrypt and segregate data at a data element level



# EMERGING USE CASES

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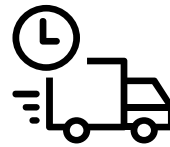
Use cases are emerging across a number of areas and industries with active experimenting to transform processes across ecosystems and entire industries



**LOYALTY POINTS  
& REWARDS**



**DIGITAL  
IDENTITIES (KYC)**



**SUPPLY CHAIN  
MANAGEMENT**



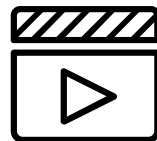
**ASSET LIFECYCLE  
MANAGEMENT**



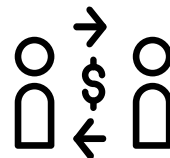
**REAL-TIME  
PAYMENTS**



**REAL  
PROPERTY**



**MEDIA  
RIGHTS**



**CROSS BORDER  
TRADE**

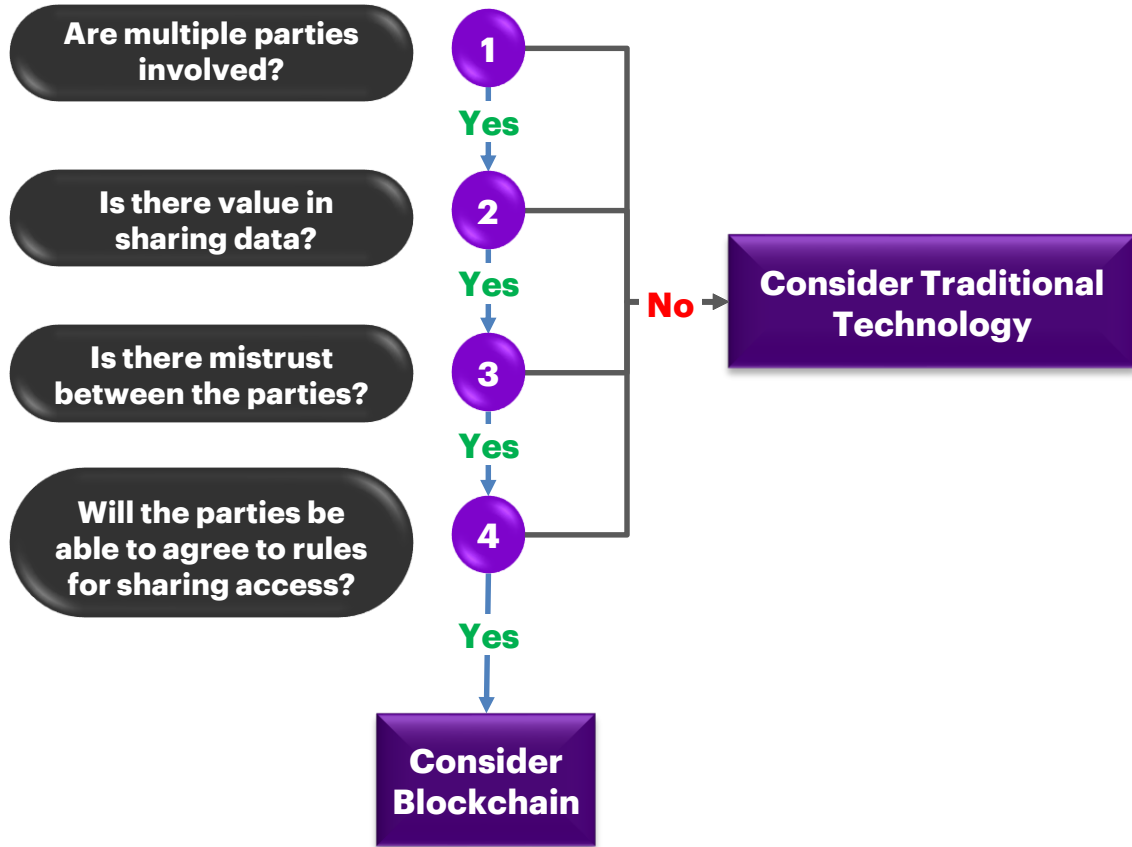


**ENERGY  
TRADING**



**CONNECTED  
MOBILITY**

# WHAT MAKES A VALID BLOCKCHAIN USE CASE?



***Multiple parties in the ecosystem***



***Value in shared access to data***



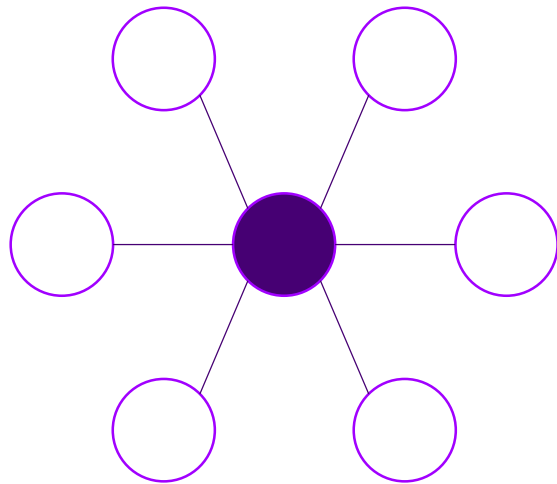
***Agreement on business rules, governance, standards, etc.***



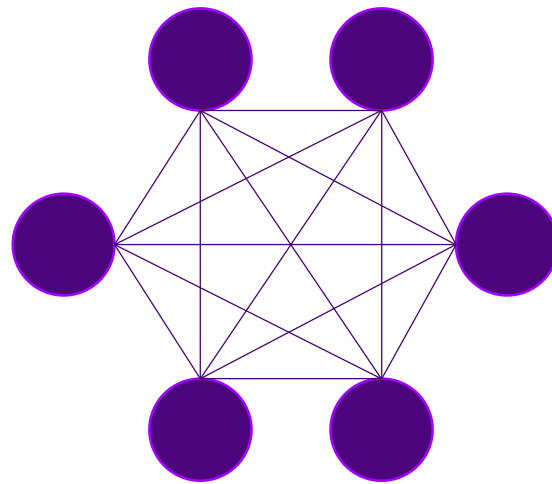
***Value in data provenance / audit trail***

# THREE BLOCKCHAIN DEPLOYMENT PATTERNS

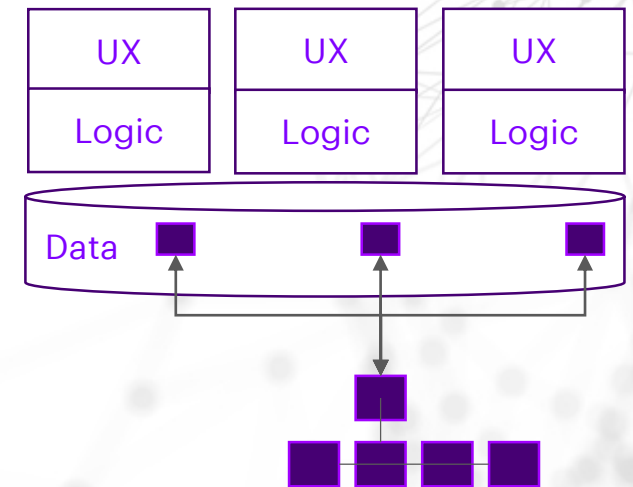
**CENTRAL INFRASTRUCTURE LEADER**



**CONSORTIUM OF PEERS**



**PLATFORM INSTALL BASE CONVERTED TO NETWORK**





# BLOCKCHAIN IN ACTION

## BLOCKCHAIN CLIENT CREDENTIAL

# AB INBEV | APL | KUEHNE + NAGEL



INDUSTRIES  
**LOGISTICS, SHIPPING**



APPLICATION  
**TRACEABILITY**



TECHNOLOGY  
**HYPERLEDGER FABRIC**



STAGE  
**PROTOTYPE**



COUNTRY  
**BELGIUM, SINGAPORE  
SWITZERLAND**

## EXECUTIVE SUMMARY

AB InBev, Accenture, APL and Kuehne + Nagel demonstrated how blockchain will create huge efficiencies for the industry

### OVERVIEW

An international shipment of goods for companies in areas such as the automotive, retail or consumer goods industries typically requires more than 20 different documents, many of which are often paper-based, to enable the goods to move from exporter to importer. Across these documents, up to 70% of the data can be replicated. The result is compromised data quality and lack of real-time visibility to all parties involved in the trade and potential delays in the financial settlement on goods.

A consortium comprising AB InBev, Accenture, APL, Kuehne + Nagel and a European customs organization successfully tested a blockchain solution that can eliminate paper-based shipping documents and save the freight and logistics industry hundreds of millions of dollars annually.

The consortium tested Accenture's solution on 12 real-world shipments, all of which were sent to a different jurisdiction that each carried its own particular regulatory requirements. The results confirmed that blockchain can reduce operating costs and increase supply chain visibility.

Accenture provided the technological and consulting expertise on the blockchain technology and developed the technical architecture required to support a blockchain solution, leveraging the capabilities of its Singapore Internet of Things practice to rapidly build the prototype.

The solution can:

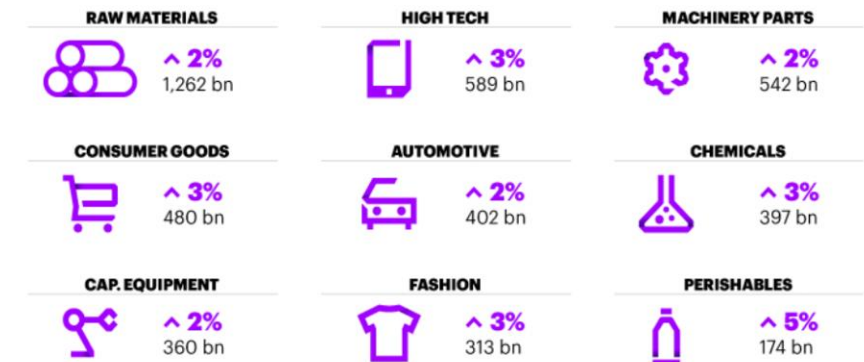
- speed up the entire flow of transport documents,
- reduce the requirement for data entry by up to 80%,
- simplify data amendments across the shipping process,
- streamline the checks required for cargo,
- reduce the burden and risk of penalties for customs compliance levied on customers.

accenture



## GLOBAL CONTAINER TRADE SUMMARY BY INDUSTRY, 2017

Value of trade (billion usd), 6-year growth rate (%)



### External Sources

[Accenture Press Release](#)

### Accenture Contacts

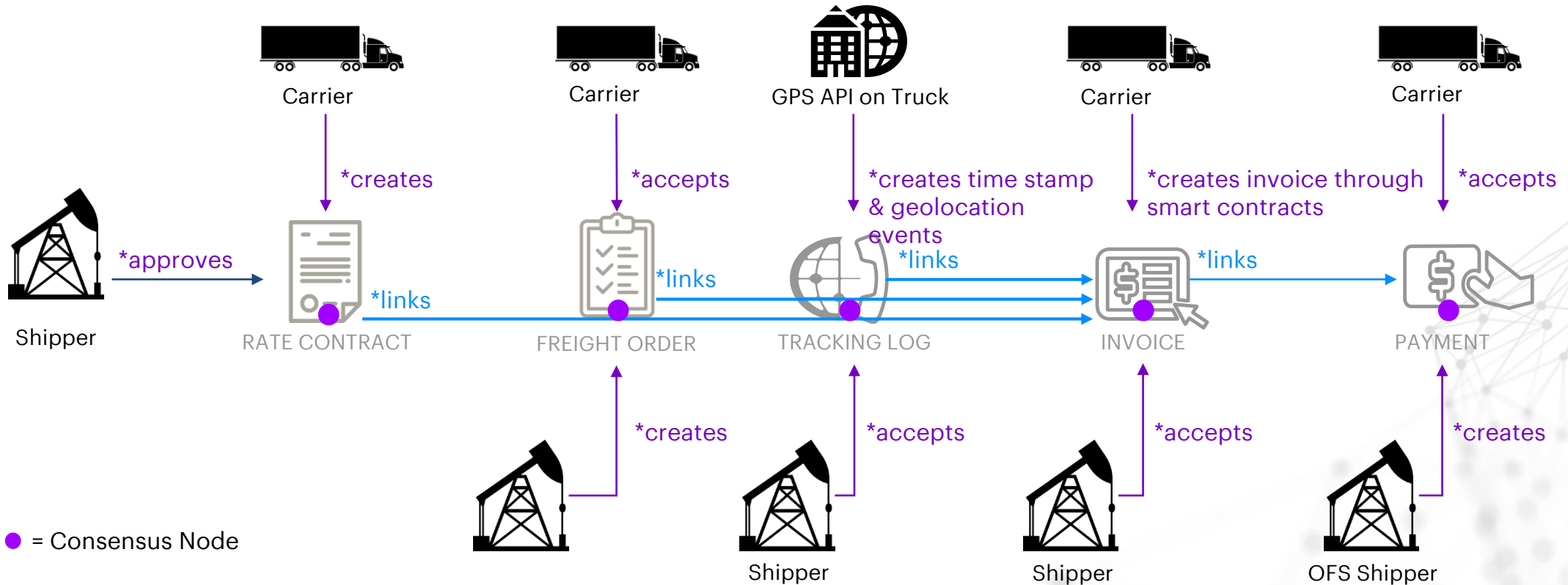
Adriana Diener



## BLOCKCHAIN USE CASE

# Freight Bill Audit and Pay

## DATA APPENDED ONTO THE BLOCKCHAIN



# BLOCKCHAIN USE CASE

## Well Site Logistics

### BLOCKCHAIN ENABLED PROCESS

- › **Store rates** and match them to the correct invoices
- › Real-time **track and trace** of movements of carrier and goods
- › **GPS verification** for posting and receiving goods
- › Confirmation at every step **acts as digital auditor**
- › **Invoices** and payments are **automated** with fewer discrepancies

### BENEFITS

#### Reduced Invoice Processing Costs

- Third Party Management Fees
- Third Party Reprocessing Fees

1-2%

3 - 5 %  
Cost Savings

#### Accurate and Timely Invoicing

- Accurate Freight Rates
- Accurate Accessorial Charges
- Duplicate Payments Eliminated
- Late Fees and Interest Charges Eliminated
- Tolerance Overpayments Eliminated

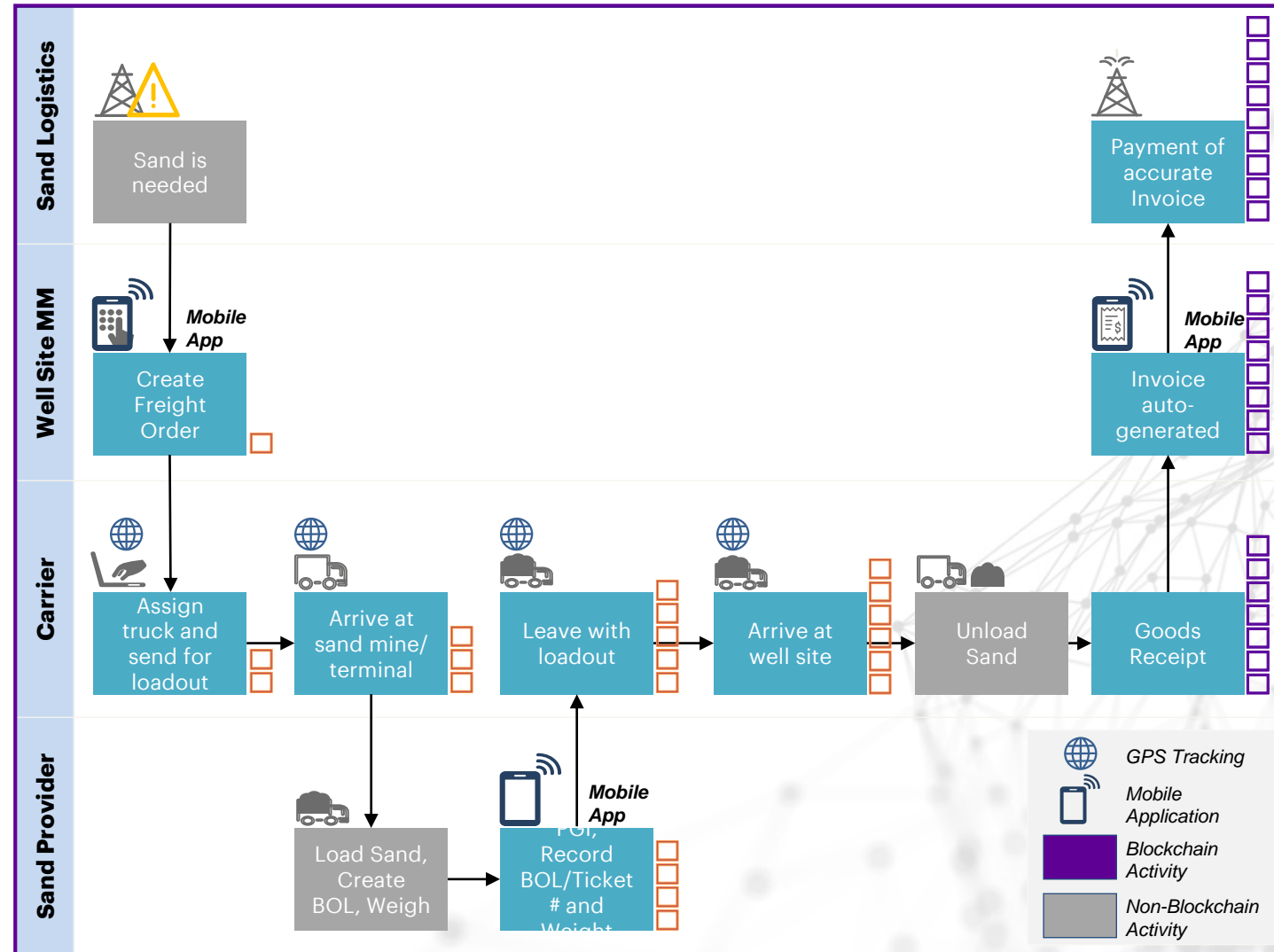
2-3%

- ✓ Fewer discrepancies to reconcile
- ✓ Electronic verification
- ✓ GPS Validation
- ✓ No more manual auditing
- ✓ Reduce unknown idle time and disruptions
- ✓ Easier to do business with

#### Accurate and Timely Payments

- Freight and Sand Cost Reduction

2-3%





# BLOCKCHAIN IDENTITY SOLUTION: ID2020

ID20  
20



INDUSTRIES  
**ALL -  
HEALTH & PUBLIC  
SERVICE**



APPLICATION  
**IDENTITY, SECURITY**



TECHNOLOGY  
**QUORUM**



STAGE  
**PROTOTYPE**



COUNTRY  
**GLOBAL**

## EXECUTIVE SUMMARY

Accenture's digital ID network using Technology, as part of ID 2020, a global public-private partnership dedicated to solving the challenges of identity faced by more than 1.1 billion people around the world.

### OVERVIEW

Today, approximately one-sixth of the world's population lives without an officially recognized identity. ID2020 is a public-private consortium promoting the UN 2030 Sustainable Development Goal of providing a unique digital legal identity for everyone on the planet through a technology-forward approach that will leverage secure and well-established systems.

Accenture, in partnership with Microsoft and Avanade, developed an identity prototype based on Technology and unveiled it on June 19, 2017 at the UN headquarters in New York during the second summit of ID2020.

The project aims to help individuals such as refugees prove who they are in order to gain access to basic services such as education and healthcare.

The new platform will connect existing record-keeping systems of commercial and public entities through blockchain, allowing users to access their personal information wherever they are, and to present their IDs via an app on their smartphones when required.



### External Sources

- [Accenture.com ID2020](#)
- [ID2020 Story video](#)
- [ID2020 Tech Demo](#)
- [Client Credential KX](#)
- [ID2020.org](#)

### Accenture Contacts

Christine.C.Leong  
Daniel Bachenheimer



# FINAL THOUGHTS

**Have a  
Point of  
View**

**A strategic point of view  
needs to be informed by what  
blockchain can do**

**Be Value  
Led**

**Don't get caught up in  
the hype, the jargon,  
the marketing.**

**Prioritize  
Investments**

**Prioritize investment  
decisions alongside  
other important needs.**

**Not just a  
Technology  
Topic**

**Selecting the right  
partners in your  
ecosystem is key to  
success; it is a team sport!**



# THANK YOU

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