

IBM Watson is the AI Platform for Business

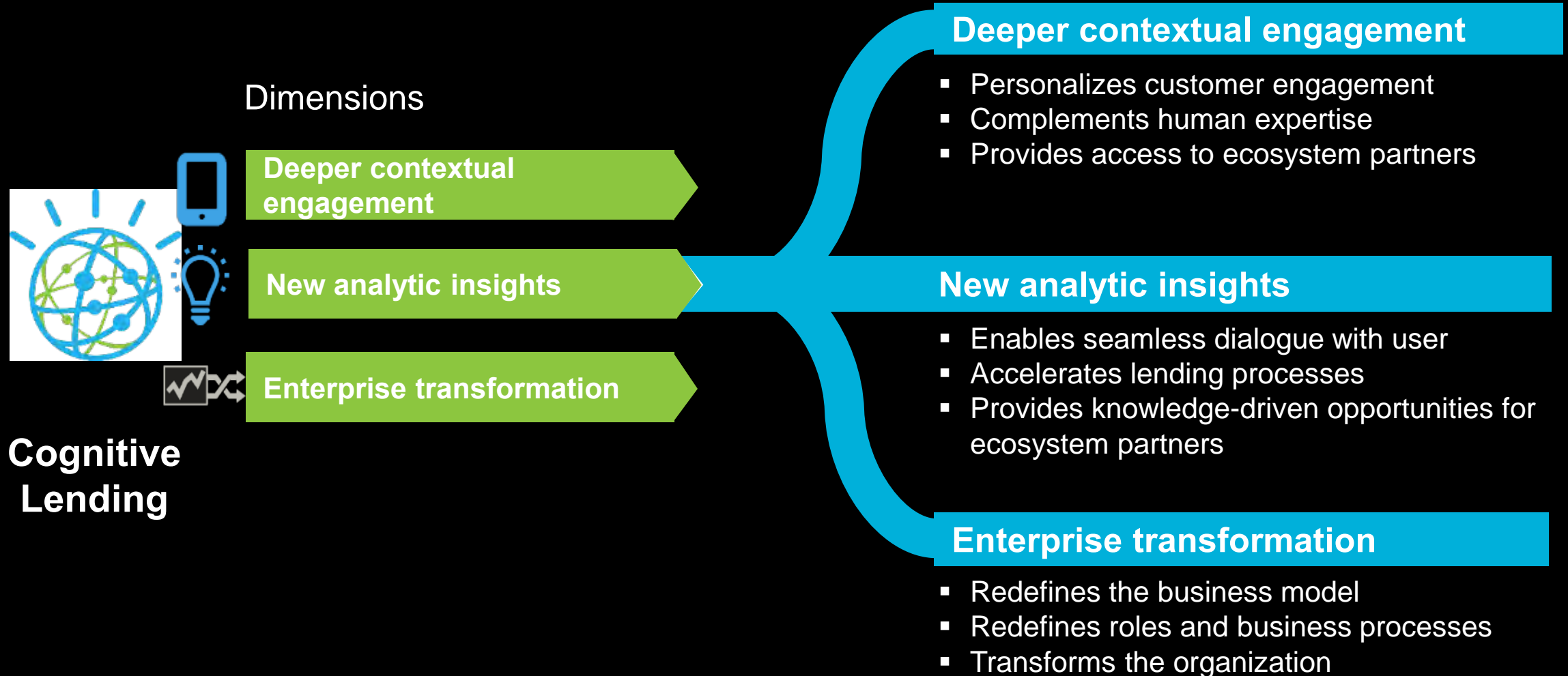


<https://www.ibm.com/blogs/watson/2016/05/popular-trends-cognitive-computing/>

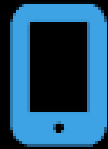
Sample of 500+ Applications in 30+ Industries



Cognitive computing transforms the entire lending industry across three key dimensions



Cognitive computing is helping financial services institutions in improving engagement, generating new analytical insights and transforming enterprise



Deeper contextual Improved engagement



A bank in Japan pioneers the building of a cognitive based customer service robotic platform that understands customer words and even expressions *



New analytic insights



A bank in Spain exploits cognitive to trawl more data more quickly than ever imagined *



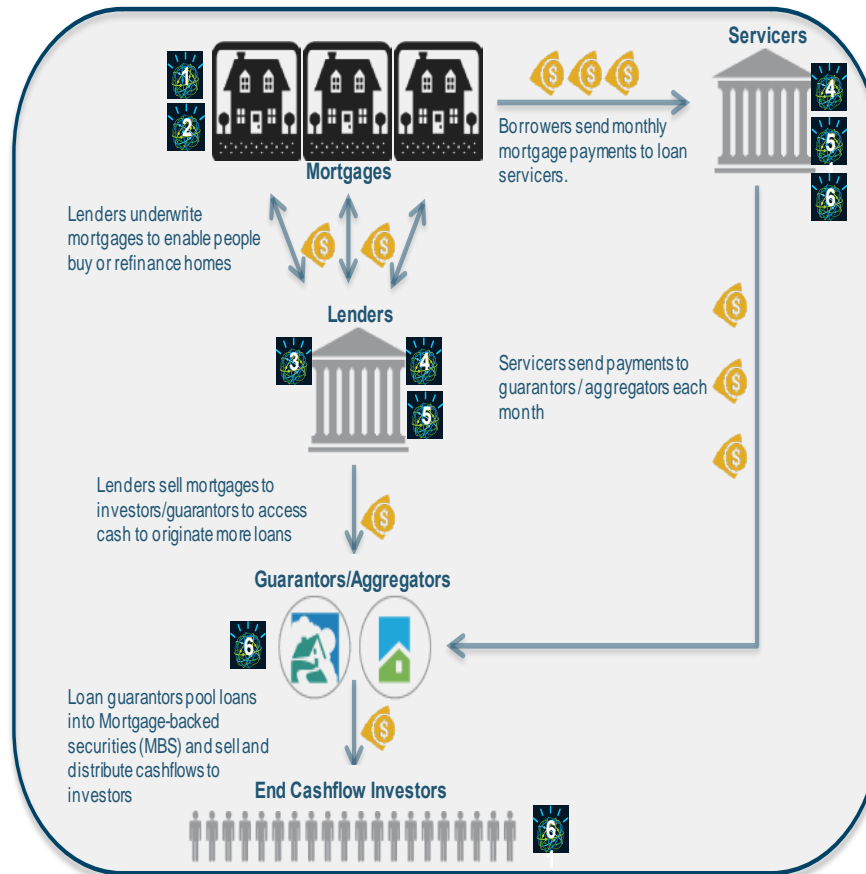
Enterprise transformation



A global financial services organization uses cognitive computing to manage business proactively *

End to End Cognitive View for the Mortgage Industry

- **Customer Experience Transformation**
 - Enhance the quality, consistency and handling of customer interactions across mortgage processes
- **Manage risk and cost proactively and holistically**
 - Optimize mortgage operations based on regulatory complexity and compliance costs
- **Enhanced risk monitoring and loan asset management**
 - Customized servicing strategies



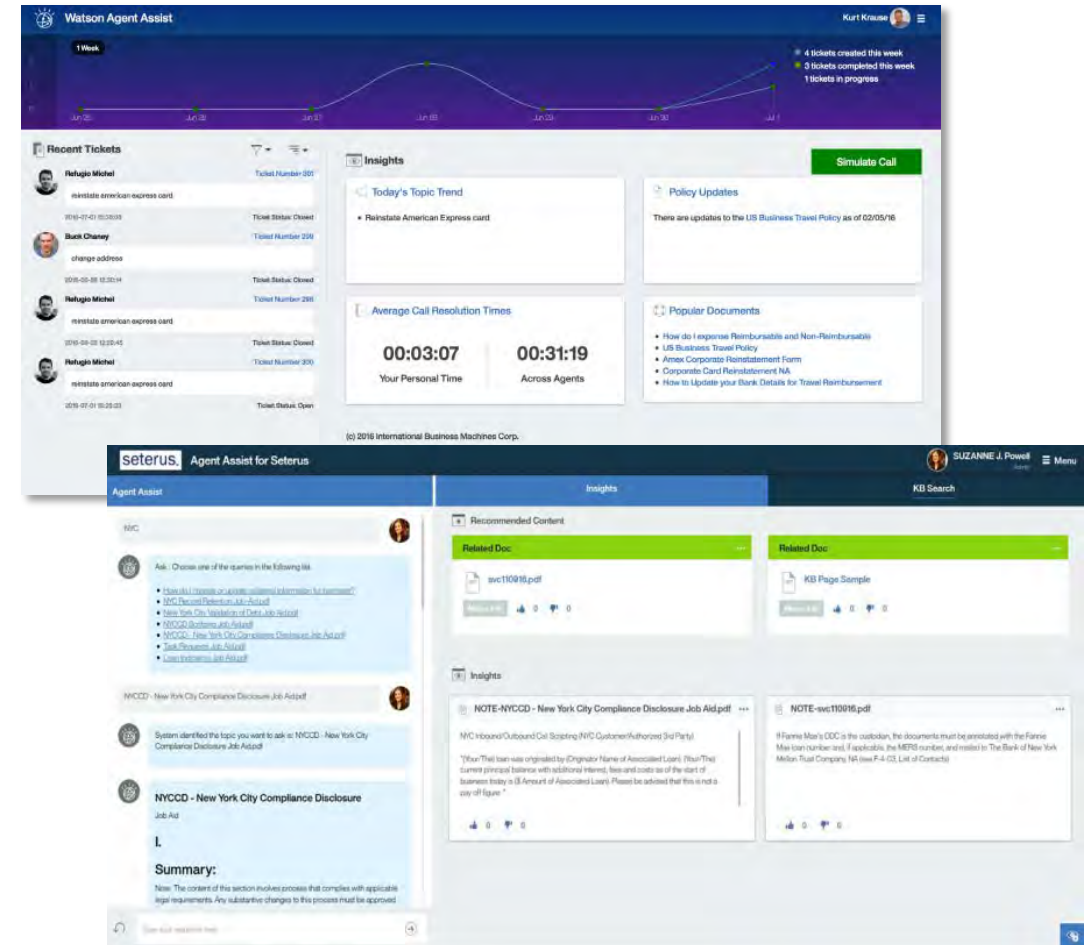
1 Engagement Advisor Trainable cognitive front end to support deeper customer engagement from property search, to loan application, product selection and process, and closing. Buyer: Lender <i>Drives revenue due to higher pull through, customer satisfaction</i>	2 Credit Advisor and Coach Transform highly manual and inconsistent credit and budget counseling processes involved in loan pre-qualification and distressed servicing. Buyer: Lender, Servicer, Guarantor <i>Better data, lower cost, improved quality control</i>	3 Preferred Relationship Manager Match prequalified customers to real estate listings from preferred agents/brokers. Strengthens referral network while decreasing cycle times. Buyer: Lender, Agent/Broker <i>More financing referrals, reduced cycle time</i>
4 Compliance and Brand Manager Intelligently distill regulatory changes, consent orders, lending guidelines, audit results, and customer escalations to reduce process defects. Buyer: Lender, Servicer <i>Cost savings, reduced financial, regulatory and reputational risk</i>	5 Cross-Sell Optimizer Manage and optimize the value of customers over the lifetime of the relationship via identification of cross-sale of banking, financial and insurance products. Buyer: Depositories <i>Increased/diversified revenue, deeper customer relationship</i>	6 Portfolio Surveillance Combine Big Data and market intelligence to dynamically predict credit or prepayment behaviors for valuations and customized servicing strategies. Buyer: Guarantors, Investors, Servicers <i>Enhanced risk monitoring and asset management</i>

Cognitive Agent Assist for Mortgage

Optimize call center performance with cognitive guidance and information retrieval that improves accuracy and efficiency

Features:

- **Real-time Dashboard:** Trending topics, policy updates and performance trends are displayed for the call center representative – *surfacing important information so that it is readily available*
- **Assisted Dialog:** Watson guides the conversation with responses that are tailored to the employee seeking help – *driving improved accuracy and higher success rates*
- **Content Retrieval:** Relevant forms and documents are identified and can be quickly emailed as conversation progresses – *resulting in faster resolution and better employee experience*



Mortgage Agent Assist

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Agent Assist

NYC

Ask : Choose one of the queries in the following list.

- How do I change or update collateral information for borrower?
- NYC Record Retention Job Aid.pdf
- New York City Validation of Debt Job Aid.pdf
- NYCCD Scripting Job Aid.pdf
- NYCCD - New York City Compliance Disclosure Job Aid.pdf
- Task Requests Job Aid.pdf
- Loan Indicators Job Aid.pdf

NYCCD - New York City Compliance Disclosure Job Aid.pdf

System identified the topic you want to ask is: NYCCD - New York City Compliance Disclosure Job Aid.pdf

NYCCD - New York City Compliance Disclosure Job Aid

I.

Summary:

Note: The content of this section involves process that complies with legal requirements. Any substantive changes to this process must be

Type your response here

Insights

Recommended Content

Related Doc

svc110916.pdf

Macro Info

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Related Doc

KB Page Sample

Macro Info

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Insights

NOTE-NYCCD - New York City Compliance Disclosure Job Aid.pdf

NYC Inbound/Outbound Call Scripting (NYC Customer/Authorized 3rd Party)

"(Your/The) loan was originated by (Originator Name of Associated Loan). (Your/The) current principal balance with additional interest, fees and costs as of the start of business today is (\$ Amount of Associated Loan). Please be advised that this is not a pay off figure."

0 0

NOTE-svc110916.pdf

If Fannie Mae's DDC is the custodian, the documents must be annotated with the Fannie Mae loan number and, if applicable, the MERS number, and mailed to The Bank of New York Mellon Trust Company, NA (see F-4-03, List of Contacts)

0 0

SUZANNE J. Powell

Admin

Menu

Query search of topic or key word brings back all job aid options

Learns with feedback

Job aid displays in Agent view reducing time to locate information

Proactive Insights

27

Mortgage Agent Assist Query Dashboard

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SUZANNE J. Powell Admin Menu

Agent Assist

Insights

KB Search

Change Address

Ask : what address info do you want to change to the loan?

- Property Address Change
- Mailing Address Change
- Borrower saving info in system doesn't match

Mailing Address Change

Ask : Could you please go to MAS1/ADD2 to update mailing address DLQ8 to update/remove contact #'s IF ONLY 1 contact# DLQ3/FINA to obtain POE (place of employment)

Also does borrower still occupy the property?

- Yes
- No

Yes

Proceed to MAS1/PRP1 to verify

Proceed to MAS1/USR2 to upda

Type your response here

Recommended Content

Related Doc

svc110916.pdf

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Related Doc

KB Page Sample

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Insights

Collateral Information Change Preconditions

Borrower is authenticated & their account is verified

Borrower data is available from MSP

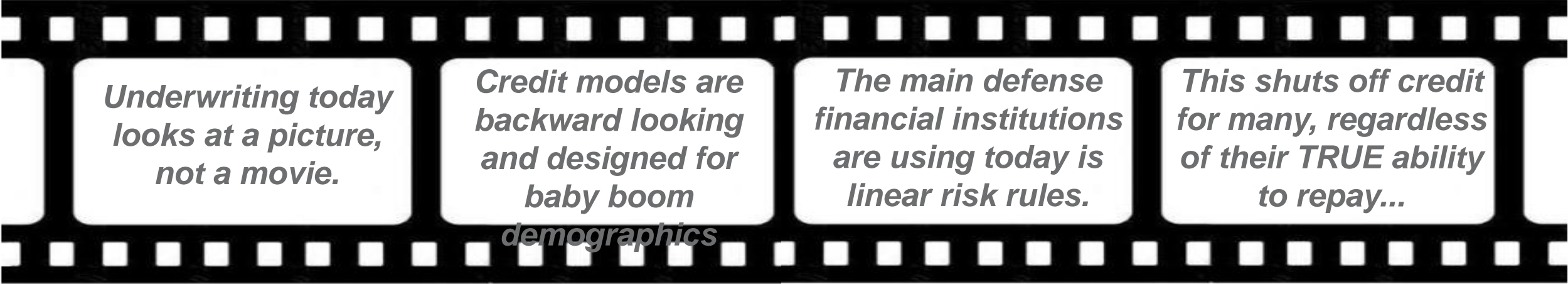
Related Doc

Occupancy Verification Job Aid.pdf

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Proactive Insights

Cognitive Credit Risk



*Underwriting today
looks at a picture,
not a movie.*

*Credit models are
backward looking
and designed for
baby boom
demographics*





*The main defense
financial institutions
are using today is
linear risk rules.*

*This shuts off credit
for many, regardless
of their TRUE ability
to repay...*

There exists a massive opportunity to reinvent credit risk management using cognitive and big data capabilities to provide a continuous, future-looking, 360 degree view of risk.



Moving past static credit scoring: Some examples

	<ul style="list-style-type: none"> Janalakshmi is a financial institution that provides microfinance services to the low-income population in India using soft financial data and psychometrics Branchless operation with advanced technology support for risk assessment
	<ul style="list-style-type: none"> M-Shwari is a banking product for Kenya's M-Pesa customers that allows to save and borrow money through simple mobile phones Credit limit management is based on machine learning approach using phone usage data
	<ul style="list-style-type: none"> Alibaba's escrow service Alipay processes 50% of all electronic payment services in China Alifinance provides loans to online vendors based on online activity (\$17.2B, 2013) More data and higher liquidity than that of Bank Credit Consulting System.
DemystData	<ul style="list-style-type: none"> Demyst Data provides comprehensive profiles and refined customer predictions Helps financial institutions optimize customer interactions based on social and corporate data
	<ul style="list-style-type: none"> Cignifi uses a big data approach to analyze cell phone use of loan applicants Non-traditional data is used as a predictor of creditworthiness

Challenges Managing Regulatory Compliance – a journey

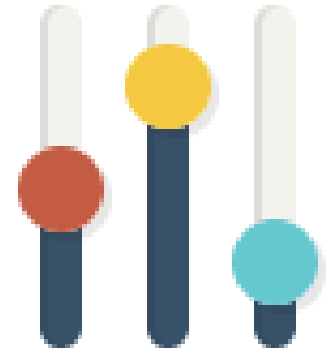
Managing high
volume of regulatory
change



Determining scope &
materiality



Identifying impacted
policies, procedures,
and controls



Creating a holistic
view of compliance
requirements

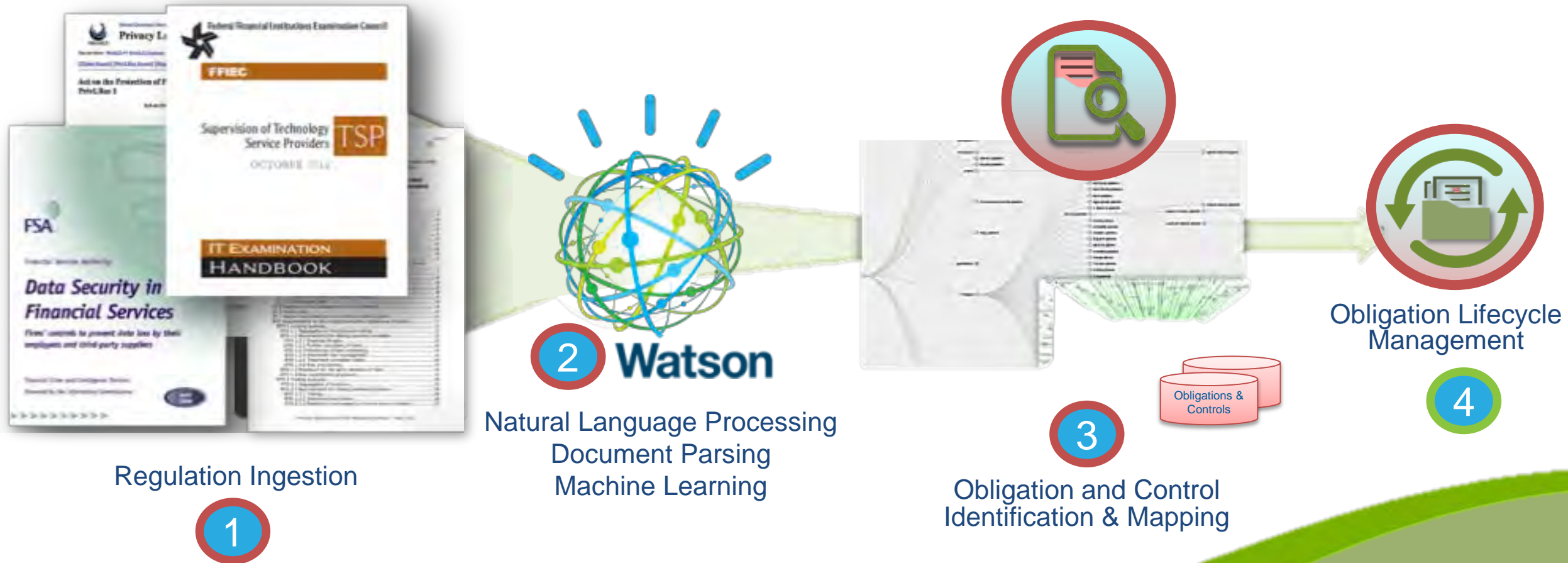
Limited resources
engaged in “highly
complex” routine
tasks

Ineffective quality
assurance process
with poor traceability

Limited audit trail

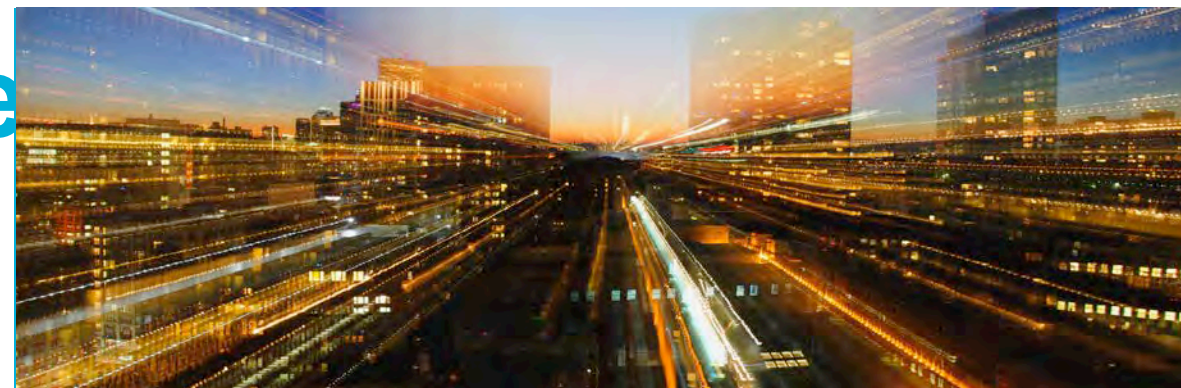
Siloed views of
compliance
obligations

Helps compliance specialists streamline the identification of potential obligations and controls required to address constantly changing regulations and manage the lifecycle of implementing those controls



A global financial services organization uses cognitive computing to manage business proactively

Cognitive compliance service



Improved Productivity

Elimination of manual regulatory evaluations

72% accuracy

Demonstrated during proof of concept*

Lower churn

Due to associated loss of institutional knowledge

First-of-a-kind cognitive compliance service

Identifies and predicts regulatory obligations

Understands the cascading impact of regulatory changes

Maps changes across business units, IT systems and processes

*Source: IBM Institute for Business Value Report

Opportunities to Improve Regulatory Compliance End to End



Regulatory Change Management



Address constantly changing regulations and manage control requirements more effectively

Training Watson on obligation identification & tagging

Know Your Customer



Streamline customer due diligence and remediation activities

Assisting with solution design, providing IP accelerators based on customer engagements & PRR BPO, applying processing expertise

Anti-Money Laundering



Enable more effective identification and investigation of suspicious transactions

Conduct Surveillance



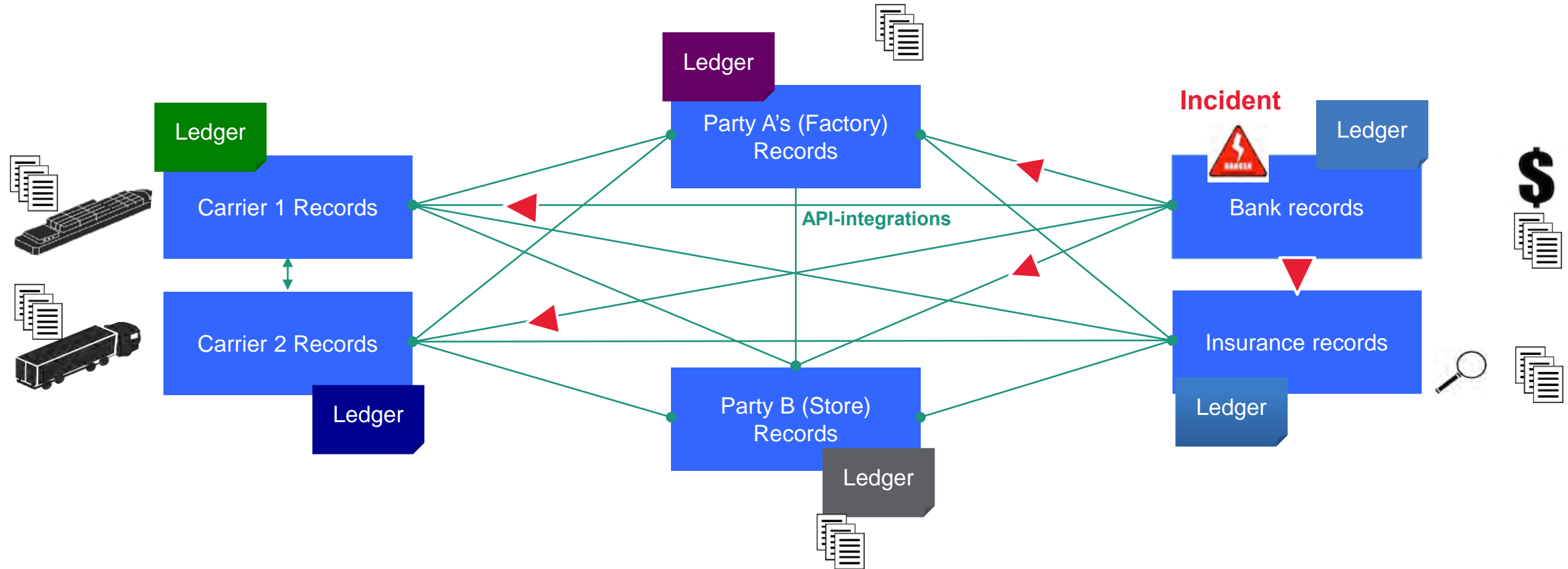
Identify potential misconduct more effectively

Guiding expansion beyond trade to broader conduct issues

PROMONTORY

Blockchain for Mortgage

Problem: Difficult to monitor asset ownership & transfers in a trusted business network



Inefficient, expensive, vulnerable

Business Value of Blockchain



A blockchain is a transaction processing system that:

- Enables transparency of shared business transactions across multiple parties through the use of a secure, **shared ledger**.
- Improves business efficiency by enabling multiple parties to participate in secure, **smart contracts**.
- Ensures the truth and security of all transactions without the need for a trusted 3rd party by using **Distributed Consensus**. All parties have immediate access to a shared view of the “Truth”.



Blockchain in a nutshell

Diamonds in a blockchain Demo

- Records all transactions
- Each participants build his own copy
- **Append only**
- **Immutable** and cannot be changed
- THE shared system of record



Shared Ledger



Smart Contract

- **Business rules** specified by the contract
- **Embedded** in the blockchain
- **Executed** with the transaction
- **Verifiable, signed**
- Encoded in programming language

- Ledger is **shared**
- **Transactions** can be **authenticated**.
- **Transactions** can be associated with an **Identity**.
- In the future – transactions can be encrypted to **control read access**.
- **Cryptography** central to these processes



Privacy and Confidentiality

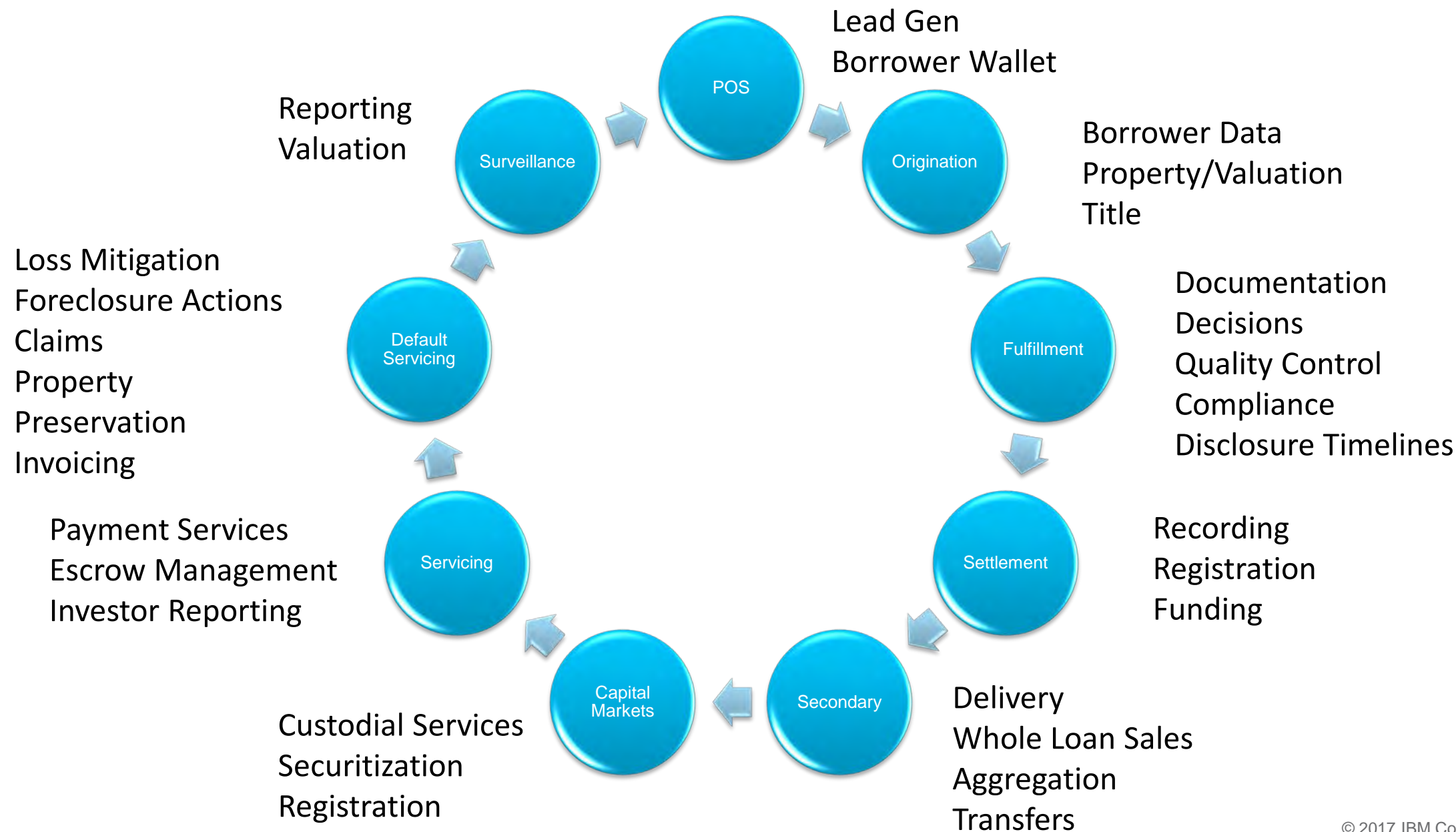


Consensus

- Transaction validation & commitment
- Different than Bitcoin
- **Byzantine fault tolerance**
- Scalable
- **“Pluggable” consensus** for different use cases

Broader participation, lower cost, increased efficiency

Mortgage BlockChain EcoSystem – Potential Use Cases in the Loan Life Cycle



Example: Continuous QC

Loan Data QC Powered by Blockchain

Blockchain can be used throughout the mortgage ecosystem to improve quality and transparency and cut costs.



E-VAULT

E-VAULT

POWERED BY BLOCKCHAIN



Disruptive technologies are leading to an increased focus on digital operating models

- Emergence of the 'Chief Analytics Officer'
- Digital Reinvention
- Digitization / Robotics / Automation
- Advanced Analytics / Predictive / Prescriptive
- Cognitive Computing
- Blockchain
- Cloud / Business Process as a Service... Rise of 'as a service'

Which all call for a strong focus on:

Talent & skills



Thank you!

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Acknowledgements

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