

IBM outthink tour 2016



IBM Enterprise-Fintech Connect

outthink boundaries

#outthinktour2016

Today's FINTECH Presenters

1. CarlQ
2. Findability Sciences
3. KrypC
4. MRET
5. Oro Wealth
6. Primechain Technologies
7. RapidQube
8. Signzy
9. Stelae Technologies



CarIQ

The one app for all your car needs

Sagar Apte (CEO)

Simple Car management mobile app

Track your vehicle in real time



Significant improvement in safer driving



Notifications about speeding and leaving a particular area



Road side assistance integration



Support for your car queries



Fuel Alerts and location of fuel pumps



Digital documents of your license, PUC / MOT, insurance



Detailed reports of your vehicle performance



Personalized tips to improve vehicle mileage and driving

With a unit to get rich data

Secure with the vehicle

- All vehicles post 2009 supported
- Standard security system control
- Pin-to-pin setup using standard sockets with no changes to the standard wiring

A protected SIM card

- Car not reachable in public GSM network
- Control only through CarIQ server
- Impossible to use the SIM-card in a different device or use a different SIM-card in CarIQ



CarlQ can help drive

- Differential Premium insurances for motor insurance
- Reduce NPA losses in vehicle loans
- Increase loyalty and spend in the online Banking and payment world



Move Beyond traditional plays to a **Smart Insurance**

Information and Data on driving can help insurance companies offer more discounts to car owners who drive better.

CarlQ not only analyses this data for insurance companies but also helps car owners driver better and reduce their insurance premiums



Personalized Driving Score

New revenue streams with **deep analytics**

Big Data allows us to dramatically increase the efficiency of marketing campaigns for:

- ✓ Cross sell customers
- ✓ Find new customers
- ✓ Branding and Loyalty
- ✓ Thought Leadership



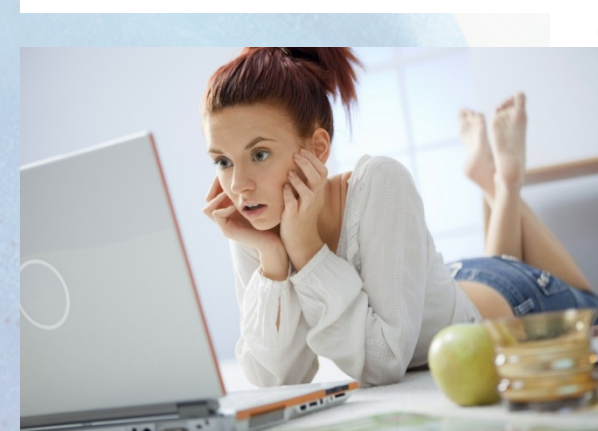


FINDABILITY SCIENCES

Presenter:
Sumit Agarwal
Vice President

Can data 'around' you ... ?

- Tell about customer personality and purchase reasons
- Who will not renew a policy?
- Detect frauds as it happens?
- Effect of external factors on services
- Up sale
- Predict diseases and treatment plan



Education



Agriculture



Insurance



Financial Services



Parking



Non Profit



Legal



Healthcare



Aviation/MRO

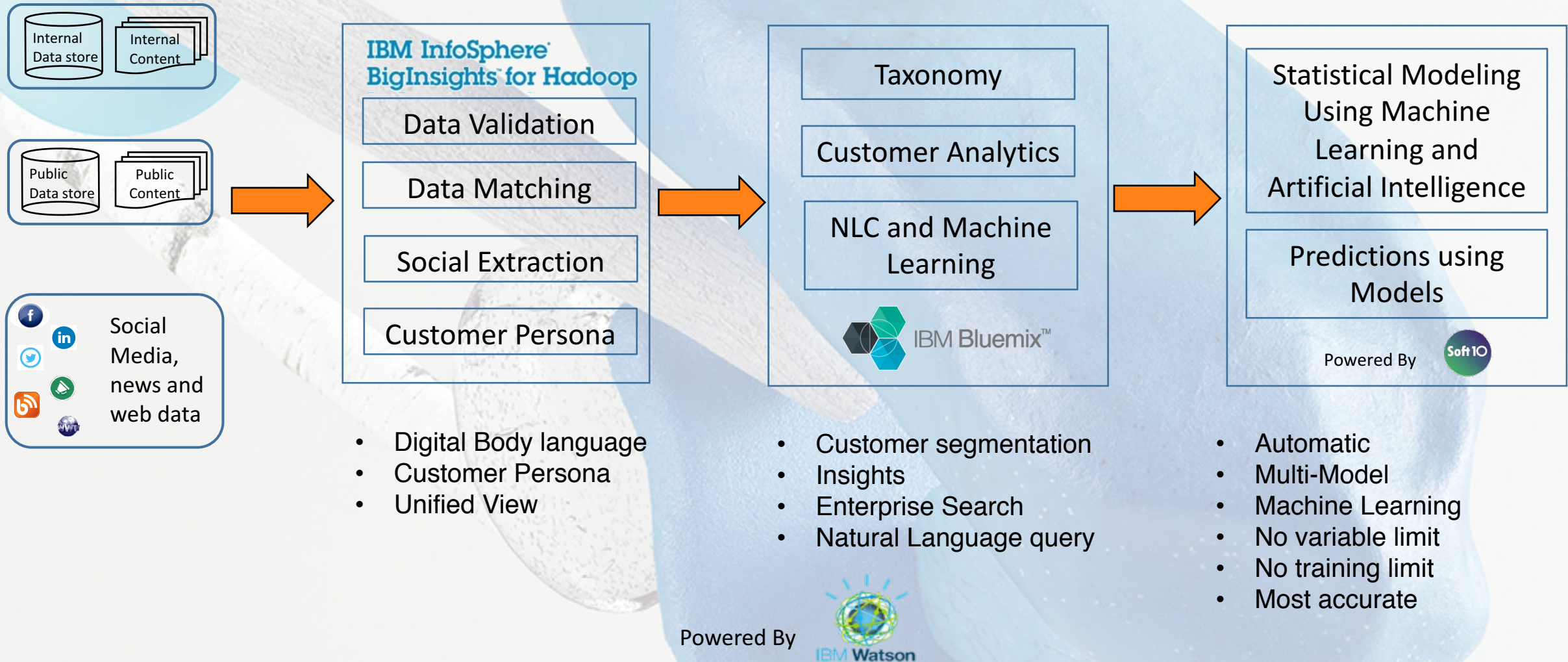


Manufacturing



Banking

FINDABILITY PLATFORM[®]





Every claim or every customer leaves a footprint and every fraudster leaves a footprint and that footprint is in the data

Credit risk and Fraud detection

Predicting Claim fraud in insurance

Overbilling in insurance amount to 900 million dollar every year. Overbilling can be because of higher diagnosis, procedure, multiple billing, similar procedure, prescriptions, treatment plan etc.

Case Study #2



Banking

Banking

Improve customer satisfaction

In new age of technology, does your customer still struggle to connect with you? Or better, can you know their pain before they even realize it? Do you run out of cash at ATM machines? Are they struck at ATM and no one to help?

Are you using their 30 second of undivided attention to offer them something unique, what they need today?

Customer is ONE. Serve as Individual.



FINDABILITY
SCIENCES

Case Study #3



Banking



Insurance

FINDABILITY PLATFORM
Powered by Dr. Mo
Sumit Agrawal
AUTOMATED PREDICTIONS

ID	PROD_NOME	model_number	scenario_number	probability	PROD_NOME_actual	PROD_NOME_is_match
6	T-SHIRT LANDSCAPE	11	1	55.56	T-SHIRT FLOWER	0
5	T-SHIRT LANDSCAPE	11	1	55.56	T-SHIRT RECORDS	0

PURCHASE MOTIVATION AND PREDICTION

For Marketing and Up Sale

Predict in real time what you customer will purchase next? Powered by Dr. Mo and IBM Watson, longitudinal prediction is most complex level to predict along with time. So we can say that 'John Smith' is most likely to require a personal loan of 1L in next 2 week.

FINDABILITY
SCIENCES

Case Study #4



Banking



Insurance

CUSTOMER SEGMENTATION

For Strategic decision making and growth

Customer segmentation based on their interest, personality, belief, motivation, location, influencer and likes.





KrypC

Help businesses understand, explore and adopt Blockchain

Karthik Balasubramanium (Chief Business Officer)

Problem Statement



Is there a better way to handle micro savings than stuffing it under the mattress?



KrypC's Smart Asset Trading Platform



Other Players



Auditor

- Nodal Officer
- Regulator
- Special Interest Group appointed audit body



Gold Vault Service Provider

- Exchange eGold for physical Gold and vice versa
- Store physical gold

Benefits



Low value entry and exit



Transparency and traceability



Security (non-repudiation)

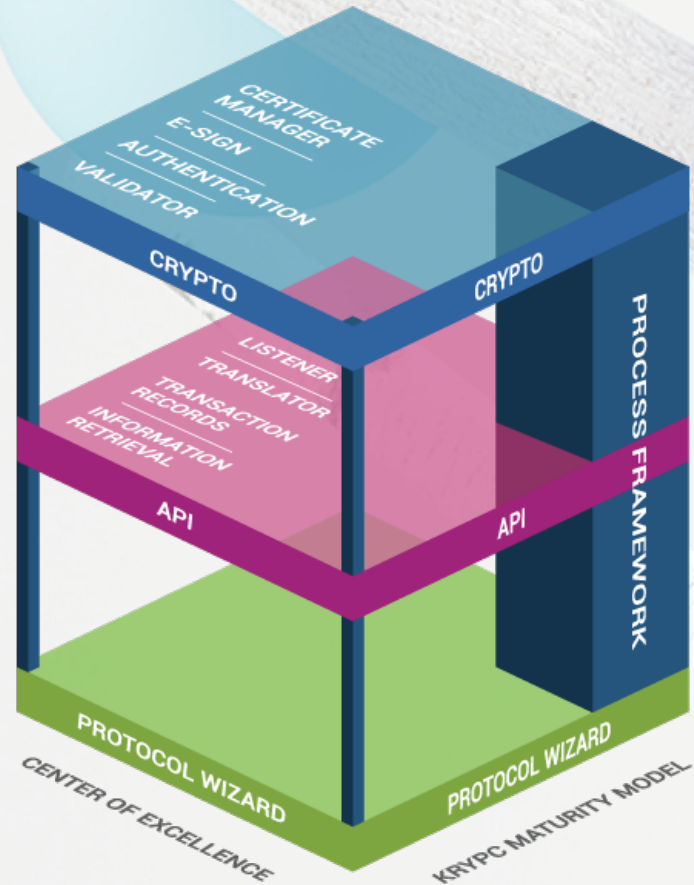


Decentralized data



Ideally suited for consortium innovation to structure Gold as a savings instrument

IBM's HyperLedger + KrypCore



Crypto

Enhances the legal validity of transactions or actions performed in the Block. Module includes Certificate Management, e-Signer Component and Certificate Validator

API

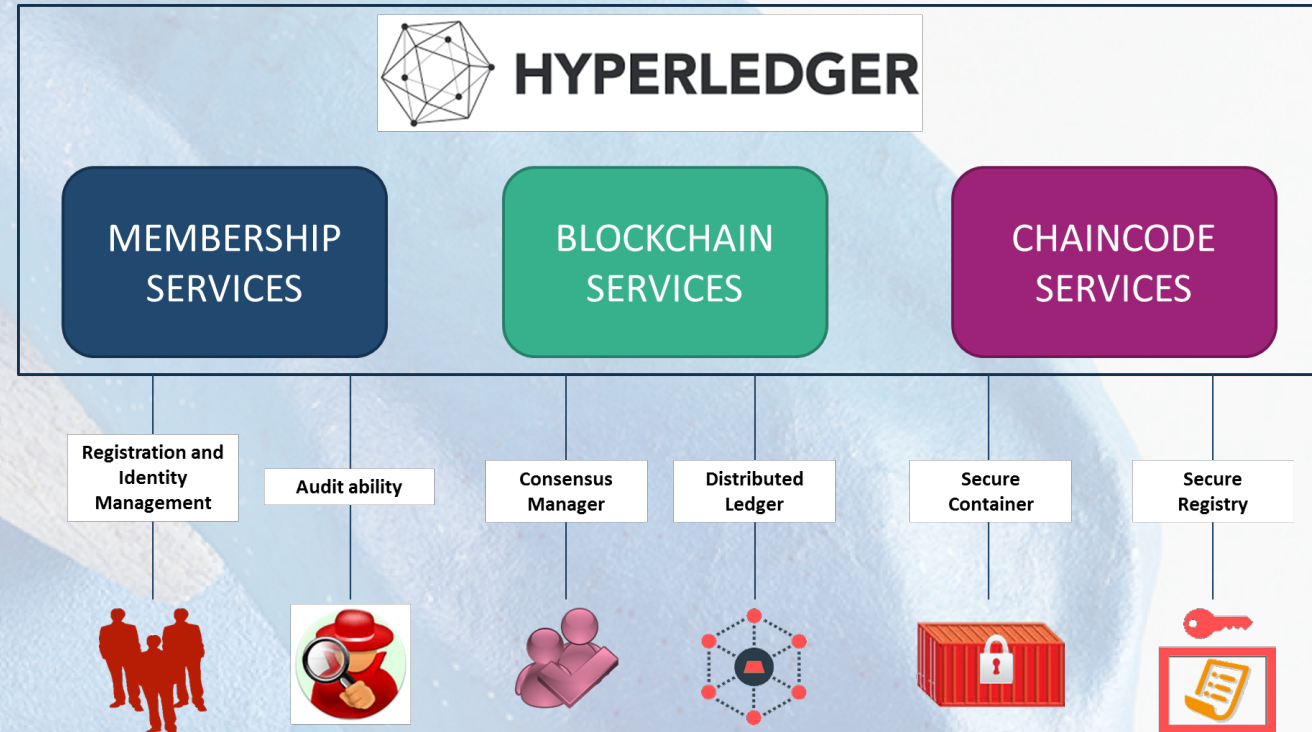
Translates all the messages and actions by various Actors for recording of transactions into Blockchain. Extracts data from Blockchain for reporting and third party API

Protocol Wizard

Enables deployment of Blockchain protocols through user friendly UI driven tool by capturing parameters relating to Nodes, Actors, Block, Assets, Data elements

Process Framework

Enables inclusion of actions, messages, documents relating to transactions in Blockchain by validating access rules, binding rules and business rules defined therein



A hand holding a wooden stick and a blue textured object. The hand is positioned on the left side of the frame, with the thumb and index finger gripping a light-colored wooden stick. The stick extends diagonally across the frame towards the right. In the background, there is a large, blue, textured object that resembles a piece of paper or a small sculpture, with some faint, illegible markings on its surface. The overall scene is set against a light, neutral background.

MRET

Combine collective human and machine intelligence

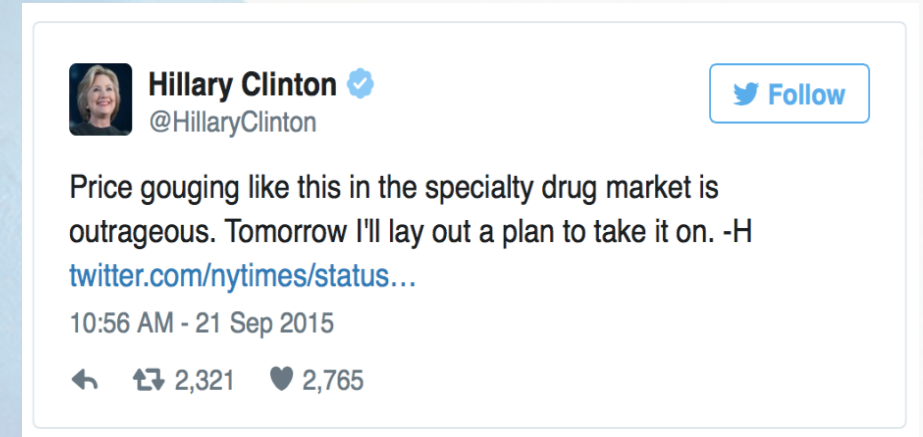
Rahul Jindal (VP Engineering)

MRET

- Microstructure Research & Eng. Tech. LLC (MRET) is a holding company for various ventures involving collective human and machine intelligence
 - Alpha Modus Research (AMR) is an asset of MRET
- Nearly 10 years of domain expertise in high frequency finance, the market microstructure
- Prashant Bhuyan and MRET is training Watson to find alpha in unstructured data.
- Alpha is risk adjusted returns in excess of a benchmark. More alpha = faster growth
 - *Investors should only pay for alpha!*

Why is Generating Alpha so difficult?

- Too many factors affecting asset prices for the human mind to process
- Individual cognitive biases can compound into collective manias
- Hillary Clinton can tank the market with a single tweet (e.g. September 21, 2015)
- Volatility is the enemy of compounding returns



Alpha modus research training a Cognitive System on market microstructure to measure volatility in sentiment, by building custom ontologies

- Create a corpus of training data
- Give raw info an expert perspective by building a custom ontology
- Contextual understanding evolves with over time

Event Performance

earnings-report1.com

Investor Contact: Media Contact: Matt Garth Shona Sabnis (212) 836-2674 (212) 836-2626 Matthew.Garth@alcoa.com Shona.Sabnis@alcoa.com Alcoa Reports Third Quarter 2016 Results Combined Arconic Segments Report Stronger Profit Year over Year Combined Alcoa Corporation Segments Profitable Despite Market Headwinds Company's Separation Scheduled to Become Effective before Market Open on November 1 3Q 2016 Consolidated Highlights • Alcoa completed a 1-for-3 reverse stock split of its common stock; per share amounts in this announcement reflect the reverse stock split • Net income of \$166 million, or \$0.33 per share; excluding special items, adjusted net income of \$161 million, or \$0.32 per share • Revenue of \$5.2 billion, down 6 percent year over year, largely due to the impact of curtailed and closed operations, lower alumina pricing as well as other pricing pressures • Sales of non-essential assets expected to total \$1.2 billion during 2016; \$935 million received year-to-date, strengthening the balance sheet • \$1.9 billion cash on hand • Strong productivity gains of \$377 million, year over year, across all segments Overview of Arconic and Alcoa Corporation Segments: 3Q 2016 Arconic Segments • Revenue of \$3.4 billion, down 1 percent year over year o Reflects customer adjustments to delivery schedules in the aerospace industry, softness in the North America commercial transportation and pricing pressures, partially offset by strong North America automotive volume • After-tax Operating Income (ATOI) of \$267 million, up 4 percent year over year o Global Rolled Products: \$58 million of ATOI, up 23 percent excluding the \$18 million impact of transforming the Warrick rolling mill into a cold metal plant; record quarter for automotive sheet shipments, up 49 percent year over year o Engineered Products and Solutions: record third quarter ATOI of \$162 million, up 7 percent year over year 1 The Arconic segments described in this release consist of Alcoa's existing Value-Add segments: Global Rolled Products, Engineered Products and Solutions, and Transportation and Construction Solutions.

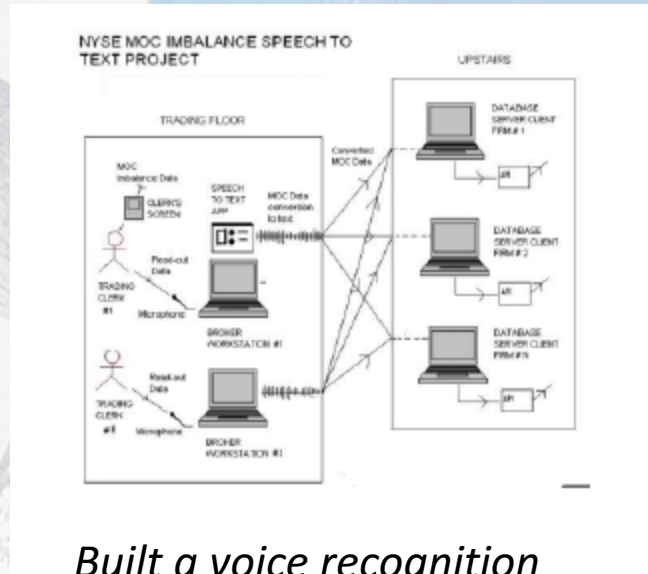
Entity		Mention
Type	Subtype	Role
M	EVENT_MEETING	
P	EVENT_PERFORMANCE	
N	EVENT_PERSON	EVENT_PERFORMANCE
S	EVENT_SPORTS	
V	EVENT_VIOLENCE	
f	FACILITY	
F	FOOD	
g	GEOLOGICALOBJ	
X	GPE	
w	LAW	
I	LOCATION	
k	MEASURE	
m	MONEY	
z	ORDINAL	
x	ORGAN	
o	ORGANIZATION	
•	PEOPLE	

MRET provide APIs - embedded learning systems that asset managers can leverage to better compete in markets

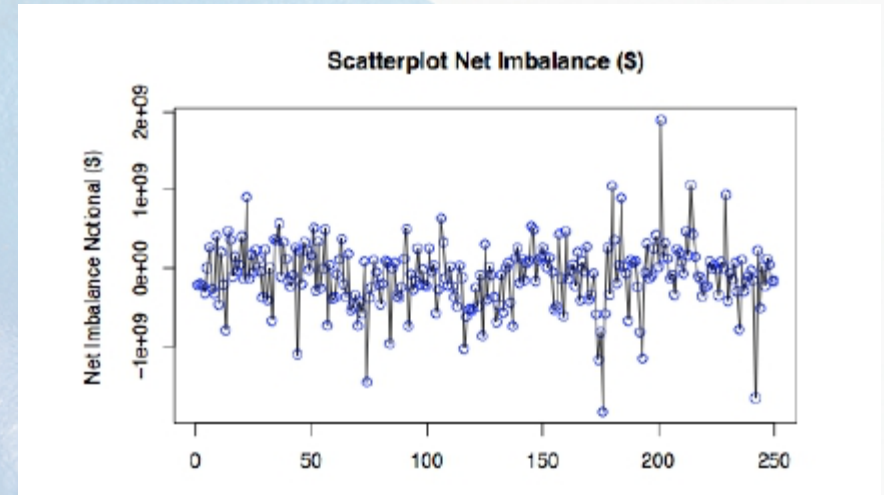
Scaling the Expertise of Floor Brokers with Cognitive Systems



Partnered w/ several floor brokers 5 years ago



Built a voice recognition based data capture system



Collected 2.00pm – 3.45pm EST imbalance indications every day for 5 years

- ***Do imbalance indications predict market direction into the close of trading? (Original question posed ~5 years ago)***



ORO WEALTH

Online Wealth Management Platform

Nitin Agarwal (Co-Founder)

Problem Situation

Low penetration of financial products

Top reasons for low penetration:

- Lack of awareness
- Poor distribution economics

Investing is difficult

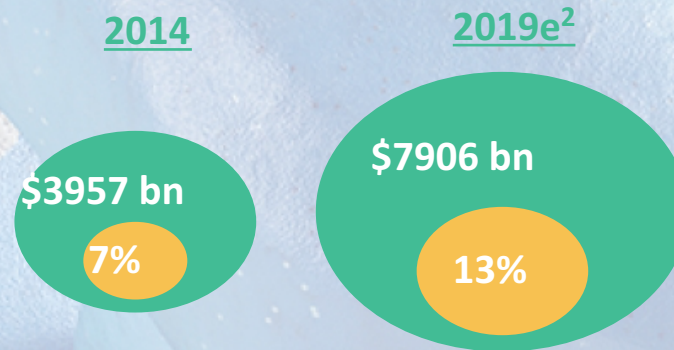
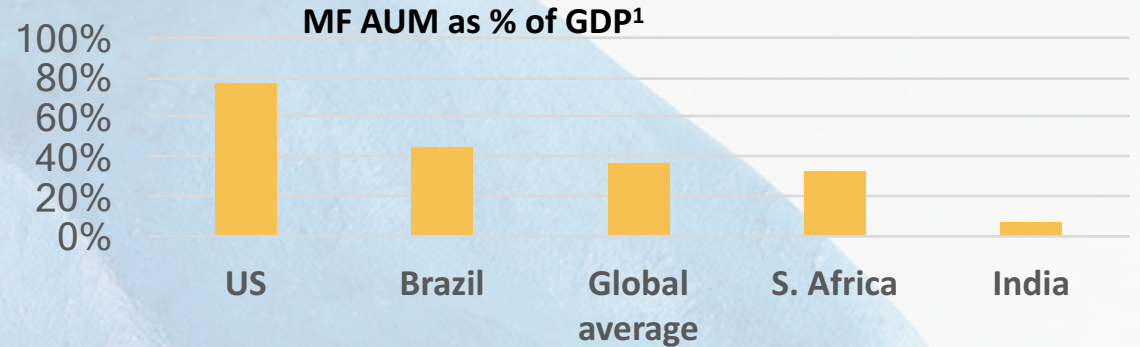
Top hurdles faced while investing:

- Lack of financial knowledge
- Poor investment support



But a massive opportunity

- Increase in wealth
- Financialization of assets 7%



■ Household wealth in India
 ■ Share of financial assets

1. KPMG report on Indian mutual fund industry (2013); 2. Based on Karvy Wealth Report December 2014; USD/INR rate:65

Opportunity Beckons!

Financial advisors should benefit from this situation but they are plagued with problems

Insufficient reach

- Advisors are predominantly offline with lengthy paperwork
- As a result product awareness has remained low

Poor-quality advice

- AMC's rely on 3rd party agents due to poor distribution economics
- Ensuring quality is a challenge especially outside Tier 1 cities

Mis-selling

- For retail, product distributors double up as "advisors"
- Commissions - based compensation leads to mis-selling

Lack of technology

- Wealth will increasingly be with youth who are tech-savvy
- Traditional intermediaries lack consumer-facing technology



Our Solution



“ ORO is an online wealth management platform which enables retail investors and offline intermediaries to access high quality advice and investment services ”

ORO building blocks

Direct to Consumer Platform

Offers 0-commission products and various financial tools for tracking, analysis and advice

Channel Partnerships

Offers digital financial tools to traditional financial institutions and intermediaries with existing client base

Technology platform

For transactions, advisory and value added services in financial products such as MFs, Stocks, Bonds, Insurance etc.

Market Adoption

Current Status

- Direct to consumer platform was launched in January-2016

3000+ registrations

1200+ transactions

10+ cr worth
investments

- Channel Partnerships with 2 large financial institutions with an **upfront revenue of Rs 20L + AUM-linked fee**

Top 3 Broker in India

AMC with \$2bn Aum

- **NDA signed with a Large Private Bank** to evaluate channel partnership
- **Potential to go global** – in talks to partner with a remittance company in Middle East
- Exclusive tie up with a **top 10 IT company** to serve their employees
- Selected among the **top 10 early stage fintech start ups** by IBM SmartCamp in August 2016
- **Winner, Dell Start-up Challenge** in August 2016



PRIMECHAIN TECHNOLOGIES

Building blockchains for a better world

Rohas Nagpal (Chief Blockchain Architect)



z3

A highly secure
blockchain for financial
communication.

PBSS-1

Security standards for
private blockchains.

The problem



- Money moves slowly
- Moving money is costly
- High risks of hacking

The solution - z3



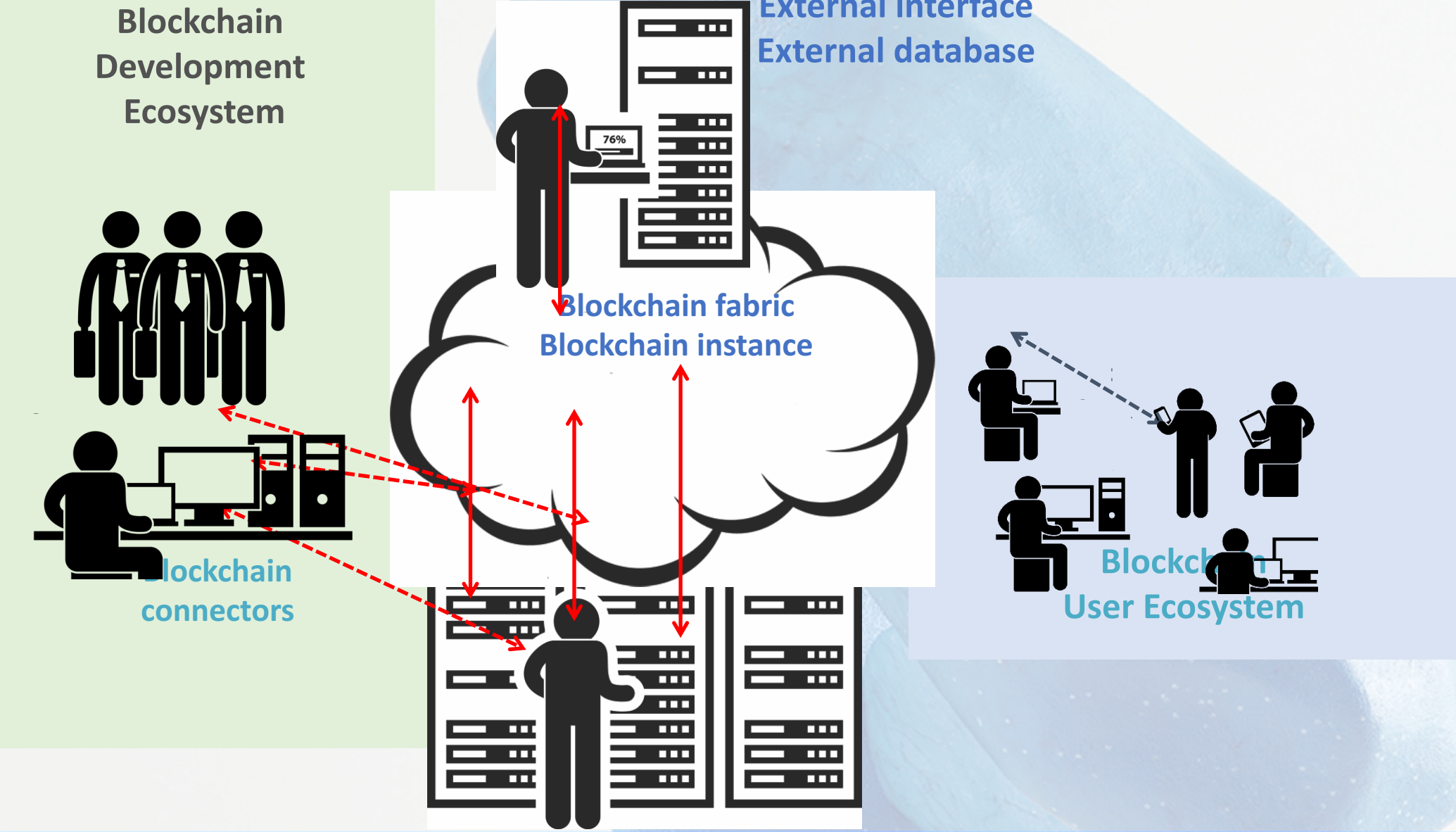
Highly secure blockchain:

1. Payments
2. Securities
3. Trade Services
4. Cards
5. Foreign Exchange
6. Virtual Currencies

Industry Problem

1.	There are various security controls and for the technology and payment ecosystem.
2.	There are <u>NO</u> security standards / frameworks / controls or blockchain implementations.
3.	Lack of security controls is the #1 obstacle for widespread blockchain implementation in the BFSI sector.
4.	Primechain Technologies – Blockchain Security Controls (PT-BSC) prescribes security controls and minimum standards.

Primechain Blockchain Security Standard





RAPIDQUBE

Digital implementation of Smart Contract

Lokesh Reddi (Co-Founder)

RapidQube with YBL

- We @Rapidqube are aimed at
 - exploring futuristic and radical innovations
 - solve some of the most difficult problems in technology today.
- With Block chain, we have developed a vision
 - on the evolution of modern commercial transactions
 - and the change in fundamentals
- Partnered with IBM and YBL have
 - designed and built a settlement and clearing system
 - enabling YBL to transact through permissioned distributed ledgers

Figure 1. Hype Cycle for Emerging Technologies, 2016



Source: Gartner (July 2016)

Source: Gartner (August 2016)

Blockchain – the Future



REGISTER LOGIN CUSTOMIZE + SELECT ALL ARGENTINA AUSTRALIA AUSTRIA BRASIL CANADA FRANCE GERMANY INDIA ITALY MEXICO NETHERLANDS NEW ZEALAND SPAIN U.K. U.S. blockchain

Commonwealth Bank's cotton bale blockchain experiment could change trade forever

From BHP Billiton to Nasdaq, blockchain is booming

Insurance industry incumbents form Blockchain initiative

South Korea plans national digital currency using a Blockchain

Blockchain platform developed by banks to be open-source

GFT firma parceria com Google para habilitar testes de blockchain

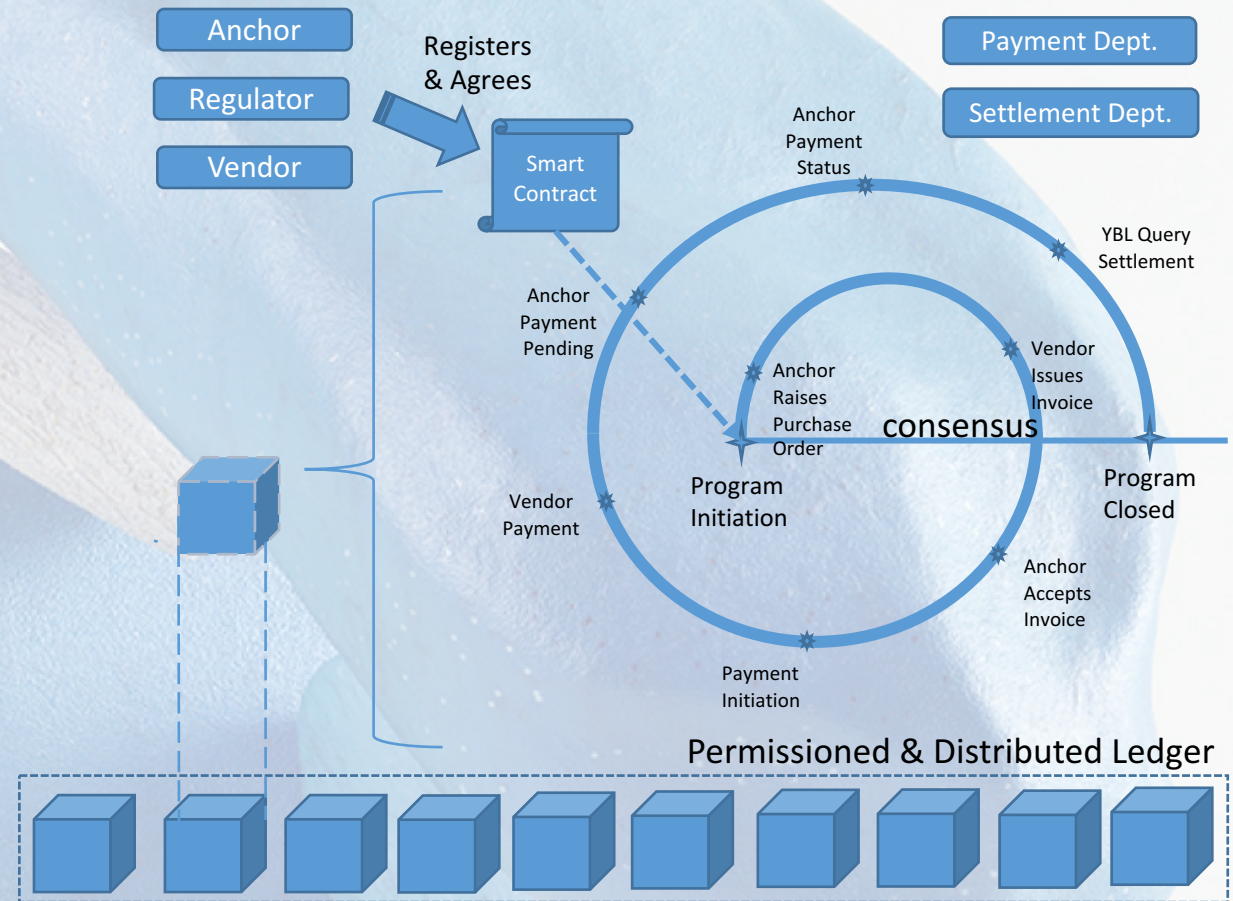
newsmap
Fri November 11, 2016 14:10:51
powered by Google™ hosting by htcml

SELECT ALL WORLD NATIONAL BUSINESS TECHNOLOGY SPORTS ENTERTAINMENT HEALTH LESS THAN 10 MIN. AGO MORE THAN 10 MIN. AGO MORE THAN 1 HOUR AGO

Blockchain – YBL Solution

- Validated among separate nodes creates a platform which promises to remedy existing pain points such as:
 - Supplant major middle and back-office functions
 - Introduce unprecedented cohesion to the internal bookkeeping processes
 - Show a record of consensus with a cryptographic audit trail of transactions
 - Create near real-time settlement
 - Strengthen risk management through stronger auditability and counterparty ties

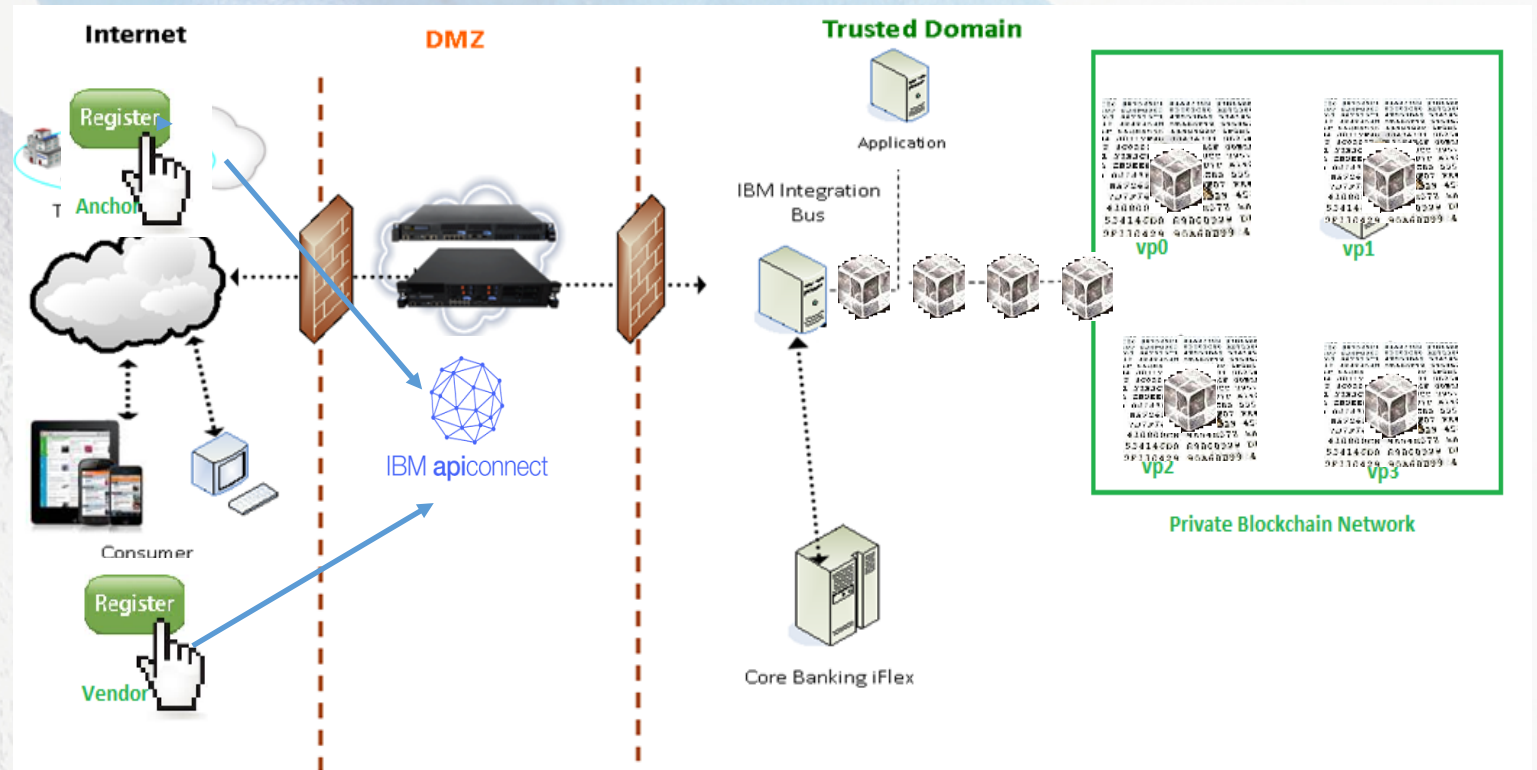
Our Solution entails creation of a vendor financing solution using smart contracts and building a shared transaction ledger between Anchor, Vendor and YBL to validate transactions



Solution Architecture

Leverages IBM Hyperledger fabric 0.7.0 version connection in supply chain network -

- IIB for middleware integration
- APIM for the APIs
- IBM Datapower





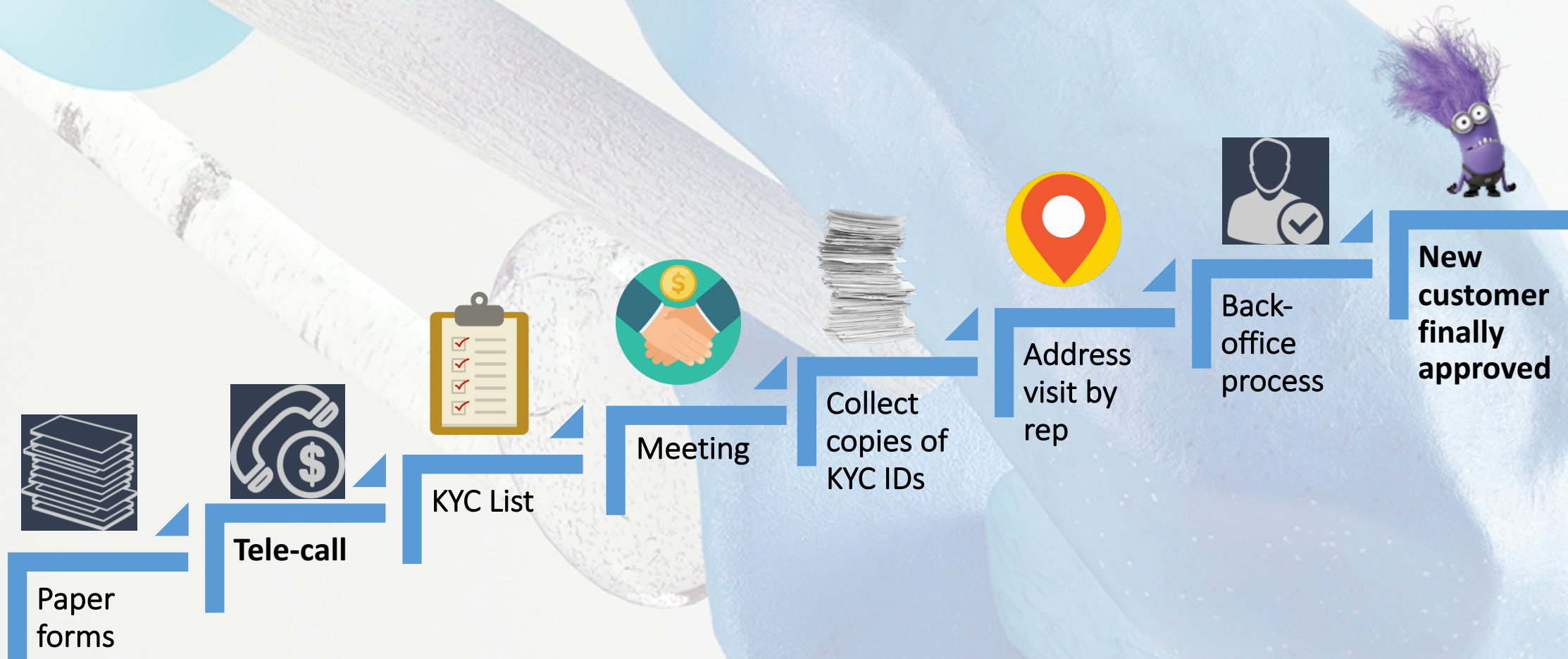
SIGNZY

Digital KYC and Contracting made easy

Arpit Ratan (Co-Founder)

Trust 1.0 – Offline

Paper based verification is time consuming, costly and frustrating



Trust 2.0 Economy

Signzy's APIs deliver digital trust ,
wherever identity & background verification is at the core of the transaction.



Winner of RBI's payments systems
Innovation Contest 2016

Signzy APIs simplify digital trust

Improving lending decision using digital data



Confirmation of **employment** from verified datasets



Financial history from bank account and other sources



Social media APIs to authenticate education, employment etc.



Social media APIs help create psychological profile and customized scores using public posts



Eliminating fraud in digital regulatory compliance



ID/Document Verification for PoI and PoA requirements of KYC



Background due diligence for satisfactorily meeting AML/CFT guidelines



Secure digital contracts using Aadhar and biometric evidence



Company verification from government records

Overview of technology

Artificial Intelligence



- Visual Recognition of ID
- Face biometrics
- Data extraction from documents

Cryptography



- Storage of sensitive documents
- Executed transactions audit trail
- Secure sharing



Stelae Technologies

Transform your Content using Artificial Intelligence!

Aruna Schwarz (CEO)

Unstructured Content – the biggest problem in a Data value chain

Table 1. Retailer Cash Sales and After-Sales Service for the Retail and Retailer Sectors

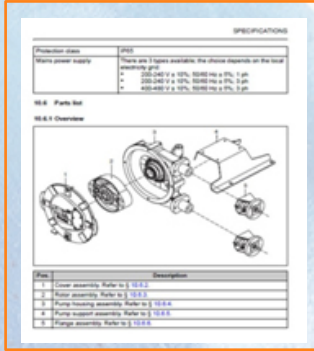
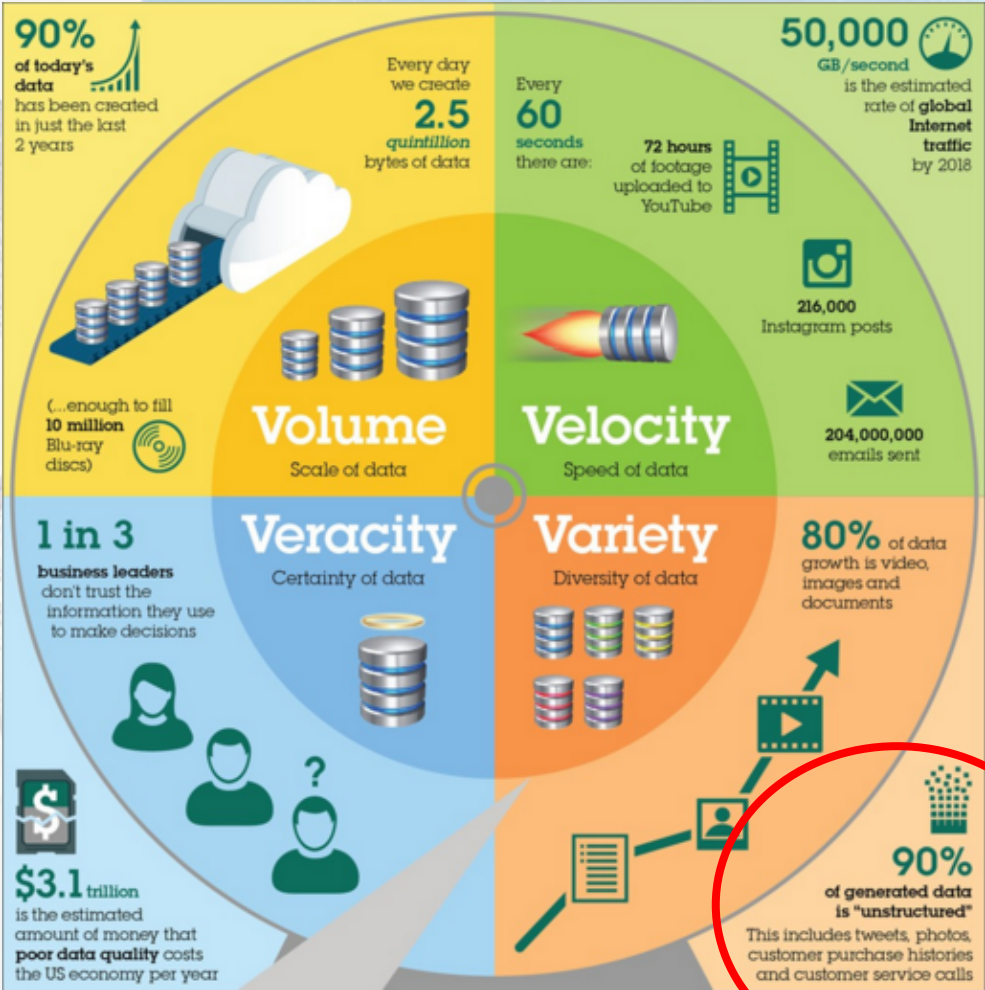
Year	Sales	Customer Service	Rate of Return (%)
2010	10.1	1.1	10.9
2011	10.1	1.1	10.9
2012	10.1	1.1	10.9
2013	10.1	1.1	10.9
2014	10.1	1.1	10.9
2015	10.1	1.1	10.9
2016	10.1	1.1	10.9
2017	10.1	1.1	10.9
2018	10.1	1.1	10.9
2019	10.1	1.1	10.9
2020	10.1	1.1	10.9

Statistical Analysis

The statistical analysis of the data of the 10 years of operation... (text continues with analysis details)

Product Specifications

Parameter	Value
Model	...
Capacity	...
Power	...
Dimensions	...
Weight	...
Material	...
Finish	...
Accessories	...
Warranty	...
Compliance	...
Other	...



Consolidated Income Statement for the year ended 31 December 2009

		Year Ended 31 December 2009	Year Ended 31 December 2008
	Notes	£	£
Continuing Operations			
Revenue	2	3,027,151	3,075,875
Cost of sales		(243,753)	(162,855)
Gross profit		3,583,368	2,913,020
Administrative expenses		(2,280,979)	(2,283,973)
- including exceptional items	3	(584,143)	(71,215)
Other operating income		-	57,174
EBITDA		1,302,425	706,221
Amortisation & depreciation	3	(1,572,198)	(1,759,363)
Operating loss		(269,773)	(1,053,142)
Investment income		4,168	25,025
Interest payable	7	(352)	(78,944)
Loss on continuing activities before taxation		(265,957)	(1,114,023)
Tax on loss on continuing activities	8	(910,423)	(60,520)
Loss on continuing activities after taxation		(676,380)	(1,205,143)
Discontinued Operations			
Profit from discontinued activities	9	188,873	43,367
Loss for the year		(487,507)	(1,161,776)

Company Accounts – Inputs for Loan Assessments, Analytics, Statutory Filings

Inputs:
Multi Format/ layout &
Multi type (xls, pdf,
doc...)

Read: Rules to
Interpret Terms

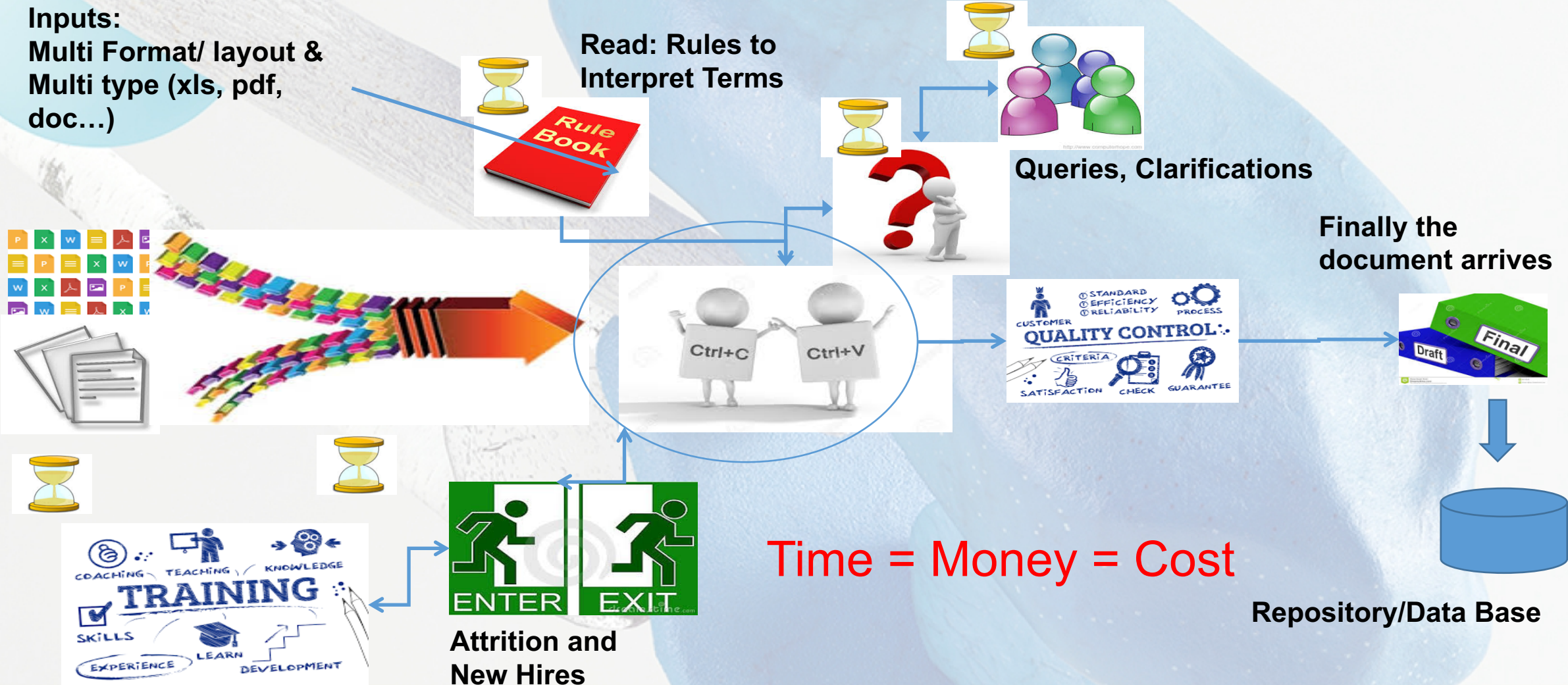
Queries, Clarifications

Finally the
document arrives

Time = Money = Cost

Attrition and
New Hires

Repository/Data Base

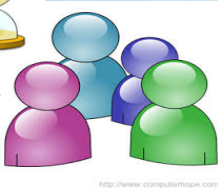


An end to end automated work-flow with Khemeia™

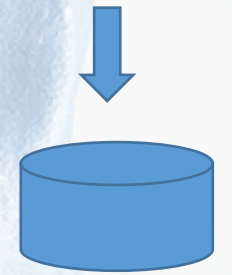
Inputs:
Multi Format/ layout &
Multi type (xls, pdf,
doc...)


Read: Rules to Interpret Terms





Queries, Clarifications

Finally the document arrives



Repository/Data Bases



Attrition and New Hires



Khemeia™ : One platform for Multi Format, Content Type, Language & Outputs



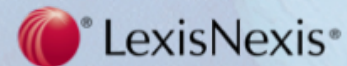
UKI



US



France



India



IBM outthink tour 2016



IBM Enterprise-Fintech Connect

outthink boundaries

#outthinktour2016