Matt Kumar

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RESO for India

Making a Global Impact with the RESO Data Dictionary and Exploring Real Estate Ontology

An initiative by Indunia

www.indunia.com

Snapshot of emerging Indian Real Estate Market

900M mobile internet & **500M** social users

20M homes, **170M** people

Affordable Housing for **all** by 2020

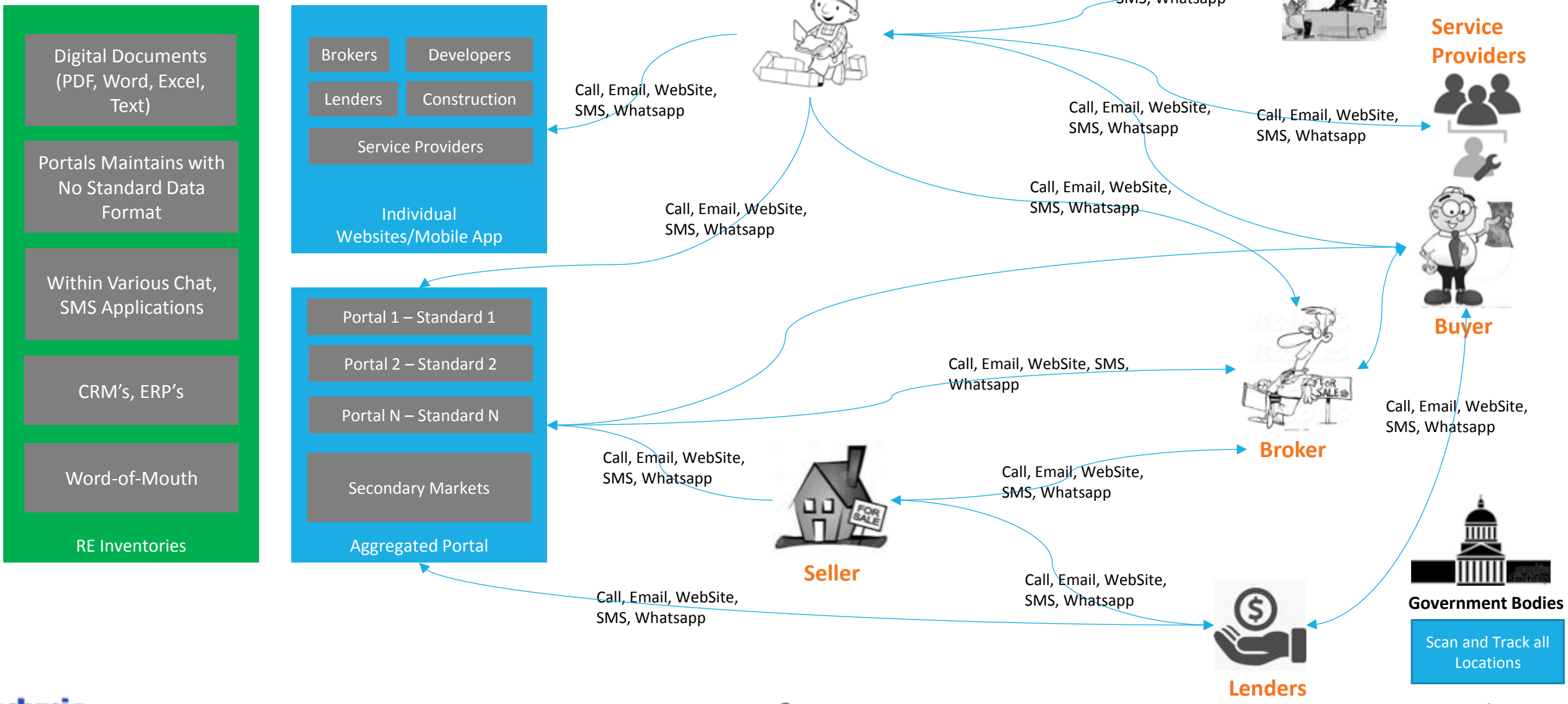
100 Smart Cities & **55M** new homes (now 300M, 110M in urban)

BigData Standardization

For ARCs, $20B REITS, millions of Developers, Lenders, Brokers/Agents, …

A Typical Day in an Indian Real Estate

RESO 2015 FALL CONFERENCE
OCT 27-29, 2015
AUSTIN TEXAS



Drawing parallels from USA RESO initiatives

Time to Market

Same real estate data is unnecessarily being reprocessed multiple times by developers, brokers, listing sites and others in the real estate value chain. Inventory remains in various formats, digital and non-digital, waiting to be processed into a transferable and usable format

Cost

Repetitive and redundant work and IT infrastructure results in wastage of funds, resources and efforts.

Data Accuracy, Reliability & Transparency

Unnecessary and non-standard data reprocessing as well as difficulty to extract data from non-standard formats result in outdated and inaccurate data. This hampers regulatory bodies to intervene and make appropriate decisions in a timely manner

Empowered Value chain

Lack of transparency breed new business models that try to cut off the Realtor

Accelerated Innovation

Breakthroughs like IOT, SmartCities are not covered from a Data Standards / API perspective

What is indunia?

The next generation Indian real-estate marketplace for buyers, sellers, brokers, developers, service providers & lenders.

indunia

One of the largest real estate data player in US

- More than 15+ years of real estate expertise
- Aggregator of Terabytes of real estate Data
- Data supplier to many real estate ecosystem players

SMC - One of India's Largest Financial & Real Estate Services Company

- More than 7,20,000 investors using their brokerage platform
- More than 2500 offices spread across 500+ cities in India
- More than 25 Years in stock broking, real estate & capital market

Founders

Matt Kumar

Antony Satyadas

DK Aggarwal

Jacob Cherian

Core Team

Anshad Ameenza
Chief Architect

Ajith Kavirajan
Product Lead

Abhilash Kumar
User Experience

Santhosh Kumar
Development Lead

Sunitha G
Usability Analytics

Suresh Kumar
Core Product

Partners

innovation

RESO
REAL ESTATE STANDARDS ORGANIZATION

IBM

What is unique about indunia?

RESO 2015 FALL CONFERENCE
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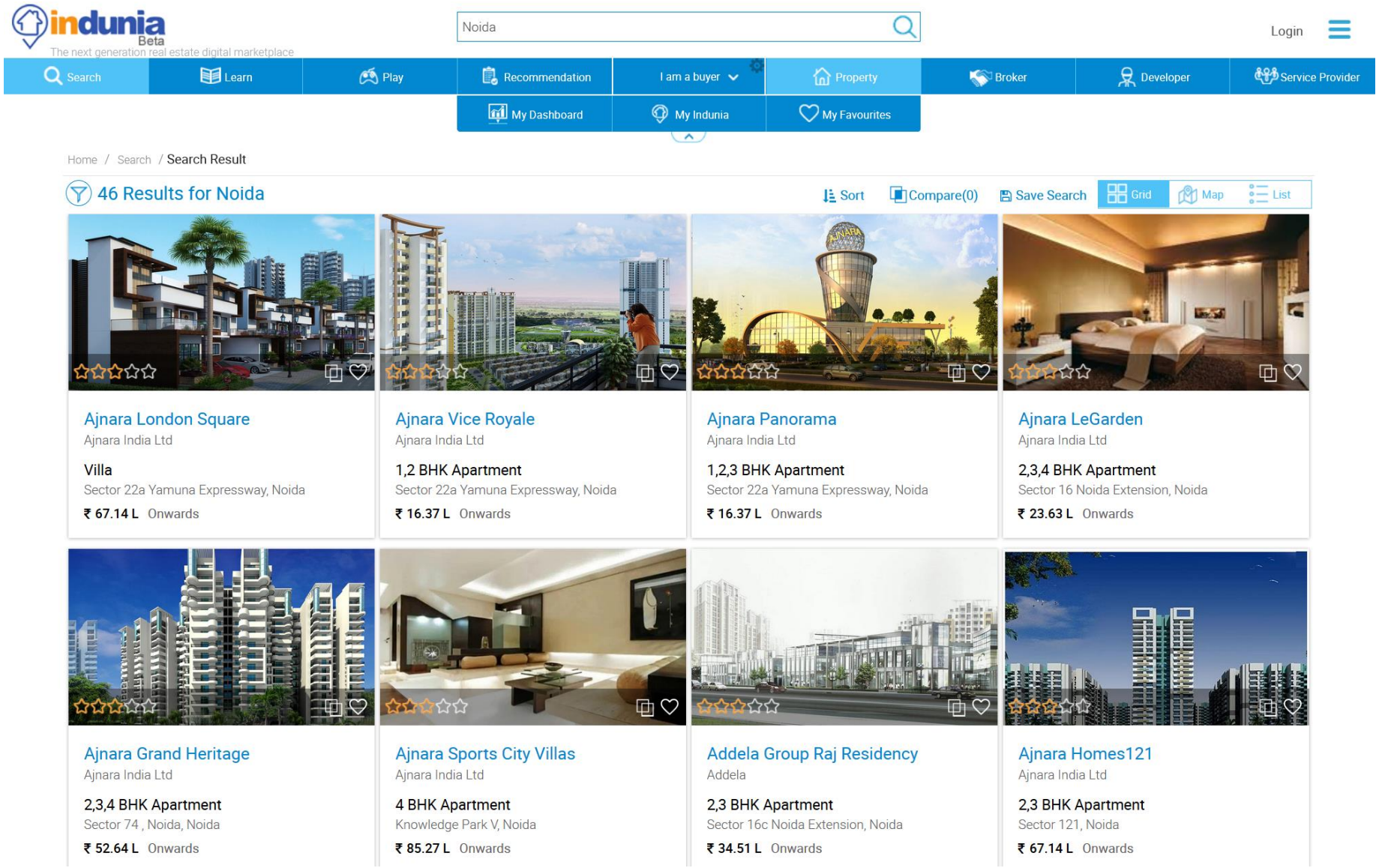
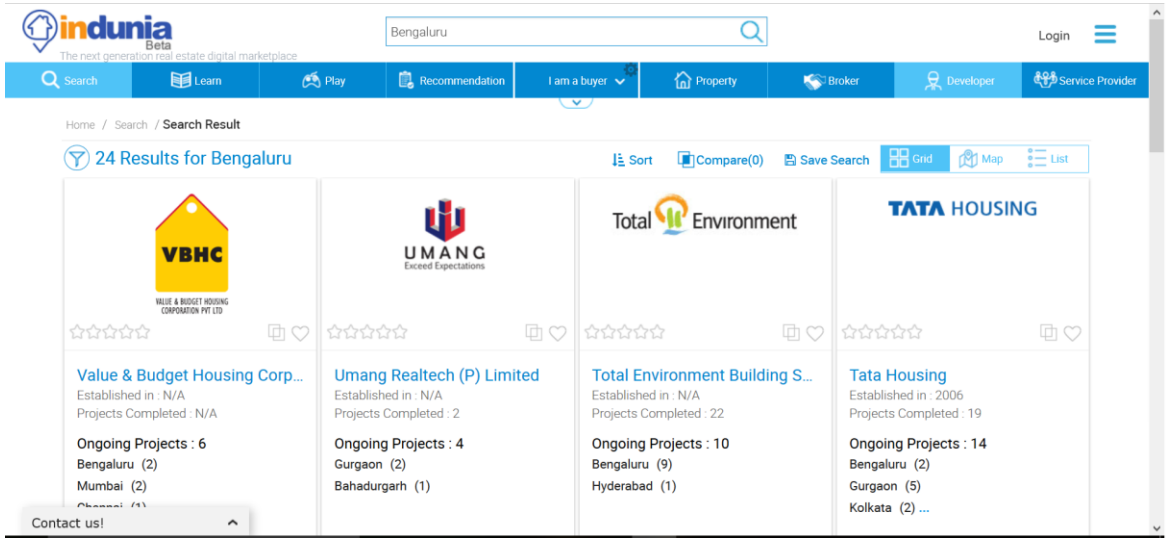
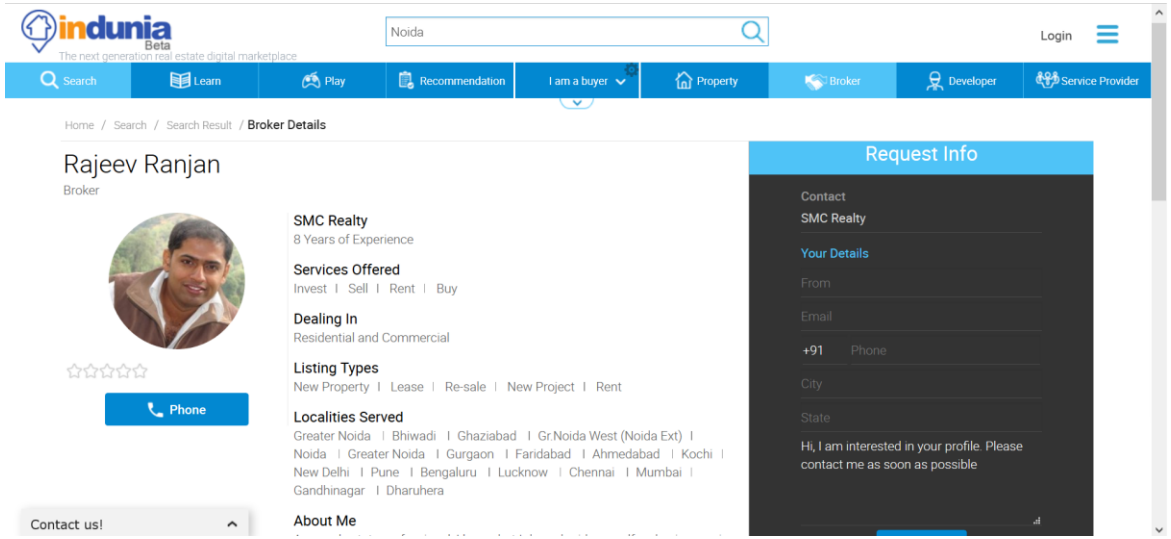
Chat, Learn, Play, Get Recommendations, Discuss" and consume via "Mobile, Web, TV, VR"

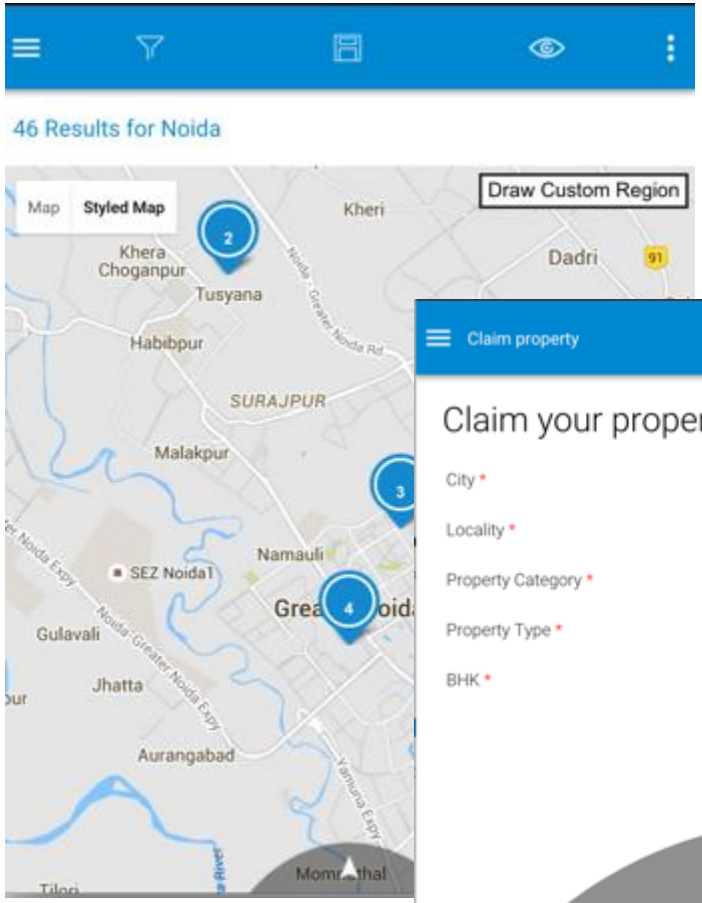


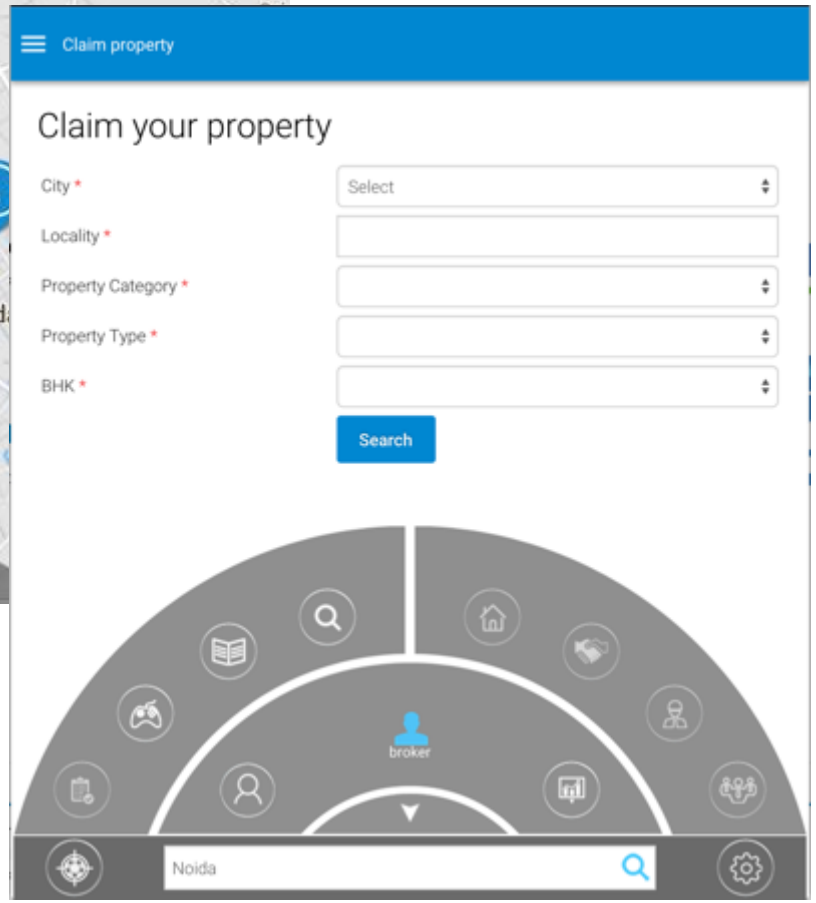
600+ GB Data lakes Growing 1T+ In 2015

One stop shop for India Real Estate data









India Real Estate RESO based Dictionary v 0.1

Derived from RESO Standards

Modified for Indian RE Market

Full Range of Meta Data Support

Property: Derived from RESO but customized for India RE. **No.Fields: 586**

Project : Created by Indunia by taking few fields from RESO. **No.Fields: 610**

User : Created by Indunia for India RE Market. **No.Fields: 74**

Broker : Derived from RESO but but customized for India RE. **No.Fields: 56**

Developer : Created by Indunia for India RE Market. **No.Fields: 51**

Data Dictionary v-0.1

indunia

RESO
REAL ESTATE STANDARDS ORGANIZATION

Property	Member	Office	Contacts
Media	History Transactional	Saved Search	Open House
Teams	Team Members	Enumerations	Deleted Elements
Deleted Enumerations			

US RESO Data Dictionary – v 1.4

Property	Project	Developer	User	TBD - Commercial
TBD - Media	TBD – Life Cycle Transactional	TBD - Locations	TBD - Visualization	TBD – Land & Plot
TBD - GIS	TBD - Team Members	TBD - Enumerations	TBD - LifeCycle	TBD – Insights
TBD - Social	TBD – IOT Data	TBD – Service Provider	TBD – Lender	TBD – SmartCities

India RESO based Data Dictionary – v 0.1

Open standard based indunia Data API

- RESTful Service with HTTP based accessibility
- Ability to auto generate API's from Data Models
- JSON Format
- Fully Open Source stack including OAuth
- NoSQL based Data Store
- Storage & Transport Specifications
- Built on top of NODE.JS high speed framework
- Multi-level data privacy and security controls

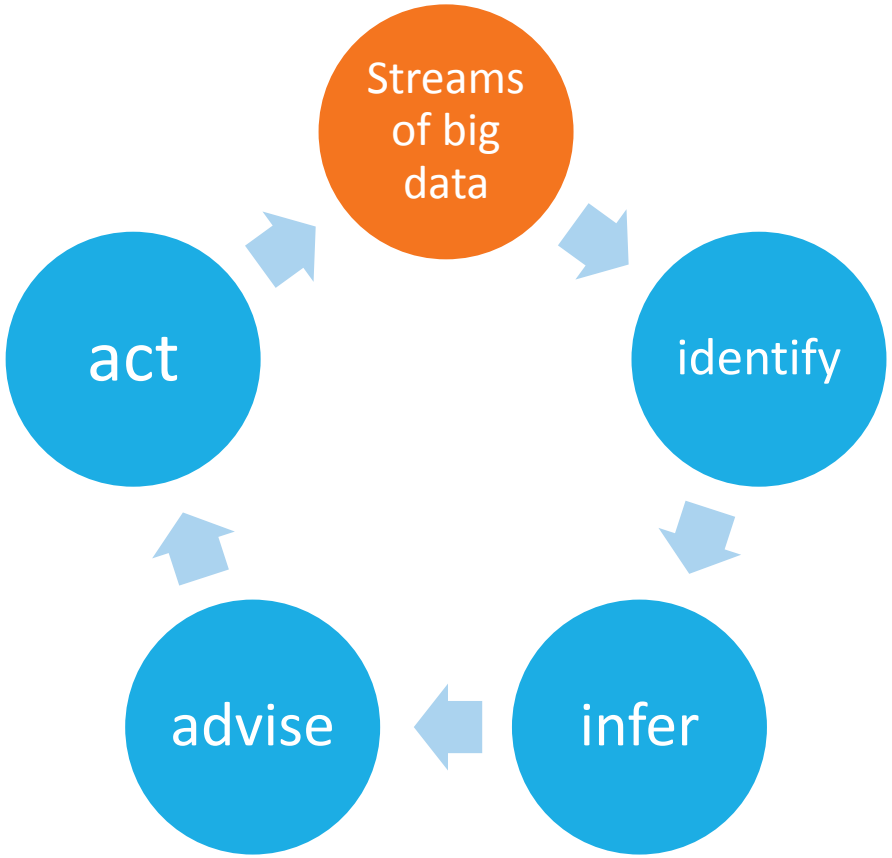
Indunia API Examples

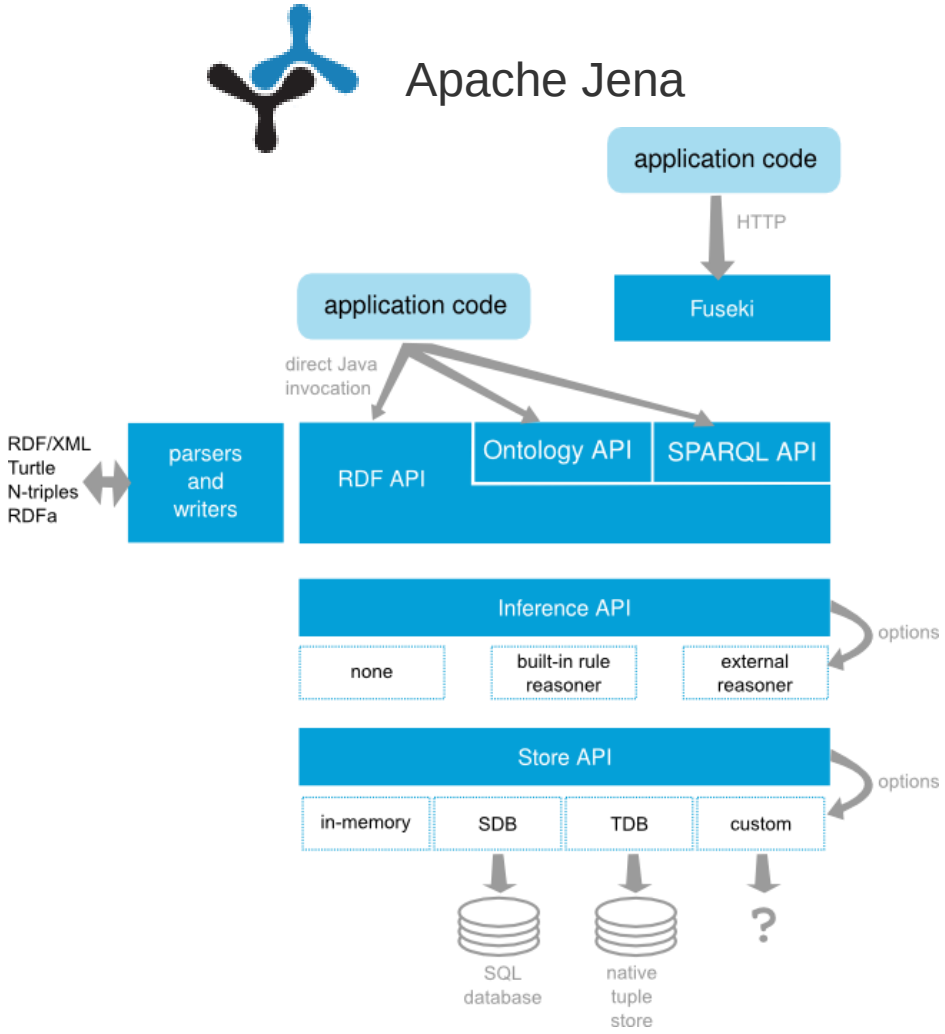
Search for all properties within the system	Search for properties within the City NOIDA
http://api01.qa.sdc.indunia.com/api/Properties	http://api01.qa.sdc.indunia.com/api/Properties?filter[where][City]=NOIDA&filter[limit]=5

Search for properties where State is Uttar Pradesh	List All Resale Properties
http://api01.qa.sdc.indunia.com/api/Properties?filter[where][StateOrProvince]=UP	http://api01.qa.sdc.indunia.com/api/Properties?filter[where][TransactionType]=Resale

RE Ontology in the world of Drones and IoT

Relationships Attributes → Semantics





Next Steps

1. **Certify** indunia Data Standard v1 for India through RESO
2. **Expand Partnerships**: RESO, CREDAI, IBM, RE ecosystem
3. **Innovate:** Real Estate Ontology – drones, IoT, videos …
4. iRESO (India RESO) **certification** program for Indian RE ecosystem

Questions?

THANK YOU
GRACIAS
ARIGATO
SHUKURIA
DANKSCHEEN
BÏYAN
SHUKRIA
TINGKI
TASHAKKUR ATU
YAQHANYELAY
SUKSAMA
EKHMET
MEHRBANI
GRAZIE
JUSPAXAR
GOZAIMASHITA
EFCHARISTO
KOMAPSUMNIDA
MAAKE
BOLZÏN
MERCI
PALDIES
SPASSIBO
SNACHALHUYA
NUHUN
CHALTU
WABEEJA
MAITEKA
YUSPAGABÀTAM
HUI
GUI
HATUR
SPASIBO
DENKAUJA
NENACHALHYA
UNALCHÉESH
EKOJU
SIKOMO
MAKETAU
MINMONCHAR
DHANYABAAD
ANIHA
ATTO
MERSI
SANCO
MERASTAWHY
GAEJTHO
LAH
TAVTAPUCH
MEDAWAGSE
AGUYJE
FAKAAUE
BAIKA