MAD ABOUT IDEAS

eGovernance Simplified

Idea Presentation by Krishna Kartik Darsipudi

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Company Purpose

To Simplify eGovernance:

- To aggregate the data of various govt departments and provide Analytics-As-A-Service to various other departments, startups and for research

- To provide a single pane identity view for every citizen of Andhra Pradesh and to ensure awareness of govt schemes & benefits to every citizen

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Problem

Common Man:

- While AP Government and our beloved CM, Sri. Chandrababu Naidu, have a great vision in establishing transparency and e-governance in the state of Andhra Pradesh, today I believe some of these services and information are **not reaching every corner of the state**, especially to the people in remote villages/towns & tribal areas

- Illiteracy and ignorance of people **are exploited by the middlemen** and this gives room for corruption

- Too many discrete websites are confusing. People **do not have a single pane view** of their identity, assets, bank a/cs, policies, applicable schemes, service requests etc

Discrete Govt Databases:

- I assume all the various govt departments are having their respective IT Portals also have discrete databases. This **doesn't allow to create holistic views of opportunities and threats and predictive models** to help the citizens of AP.

  For example:

  - A futuristic map that shows which crop should be cultivated in which parts of AP over the next 3 to 6 months based on climate and soil conditions and help estimate the yield a farmer can expect

  - Prediction of a specific tax collection to the govt of AP based on various climatic and geo-physical conditions over the next 6 to 12 months
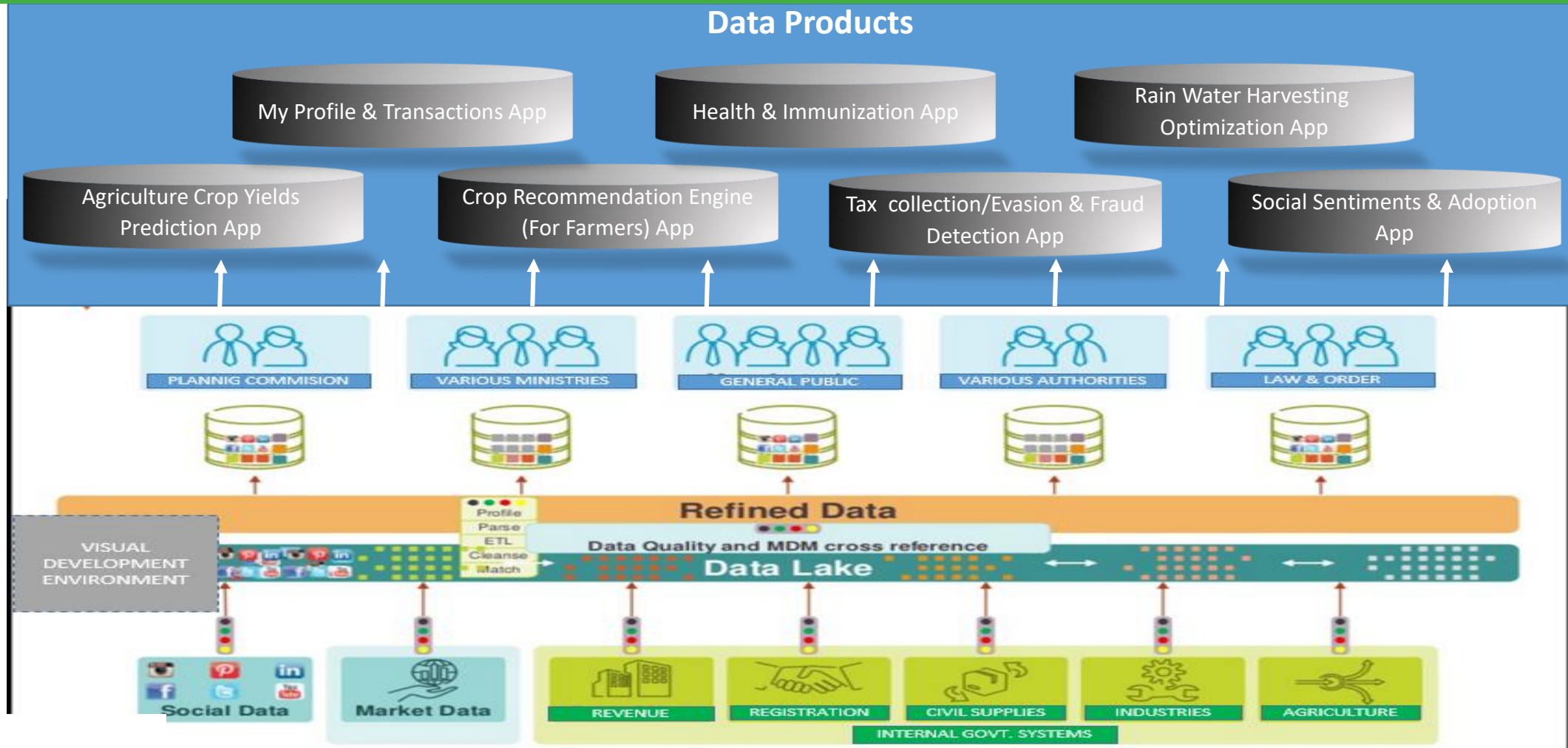
Solution

Common Man:

- Build a consolidated platform/Next-gen UI that sits on the top of existing e-governance portals and *offers a single pane view into a person's socio economic profile* and the status of on-going service requests

- The front-end to be both a *mobile and a web app* that can be accessed through any device

- To handle the internet and connectivity issues, internet kiosks can be established in remote locations with devices larger screens that *can work on low or no bandwidth*

- These kiosks should have applications that are built with very *user friendly UI* and are usable to even illiterates.

Govt. Depts & Research Orgs:

- *Aggregate* the data from various govt. departments at a district/state level into a *Big Data Lake*

- Expose the non-sensitive data to other departments and to research organizations in the form of *Analytics-As-A-Service* and through visual dashboards

- This data lake can help in producing *meaningful analysis and new innovative ideas* that help the common man

Solution – Product for data analytics

Data Products

- My Profile & Transactions App
- Health & Immunization App
- Rain Water Harvesting Optimization App
- Agriculture Crop Yields Prediction App
- Crop Recommendation Engine (For Farmers) App
- Tax collection/Evasion & Fraud Detection App
- Social Sentiments & Adoption App

PLANNIG COMMISION · VARIOUS MINISTRIES · GENERAL PUBLIC · VARIOUS AUTHORITIES · LAW & ORDER

Profile · Pase · ETL · Cleanse · Match

Refined Data

Data Quality and MDM cross reference

Data Lake

VISUAL DEVELOPMENT ENVIRONMENT

Social Data · Market Data · REVENUE · REGISTRATION · CIVIL SUPPLIES · INDUSTRIES · AGRICULTURE

INTERNAL GOVT. SYSTEMS

Solution – Products for Common Man

My Profile

PHOTO

NAME: << XYZ >>	
Aadhar	
PAN	
Voter ID	
Driving License	
Passport	
Banc A/c linked to Aadhar	
Mobile phone	
Landline phone	
Email	
Present Address	
Permanent Address	

NAME: << XYZ >>	
Electricity meters	
Vehicle Reg. Nos.	
Firms/Industries	
Agricultural land	
Commercial land	
Residential land	
Subsidies availed	
Other properties & assets	
Property Tax	
Income Tax	
Availed Cetificates	

Click here for OTHER SERVICES

Click here for Status of existing Requests

Mee-Seva / Mee-Kosam Next-Gen UI & Low/No internet kiosks

Mobile App   Self-Service Kiosks   Other Devices   Mee Seva Centers
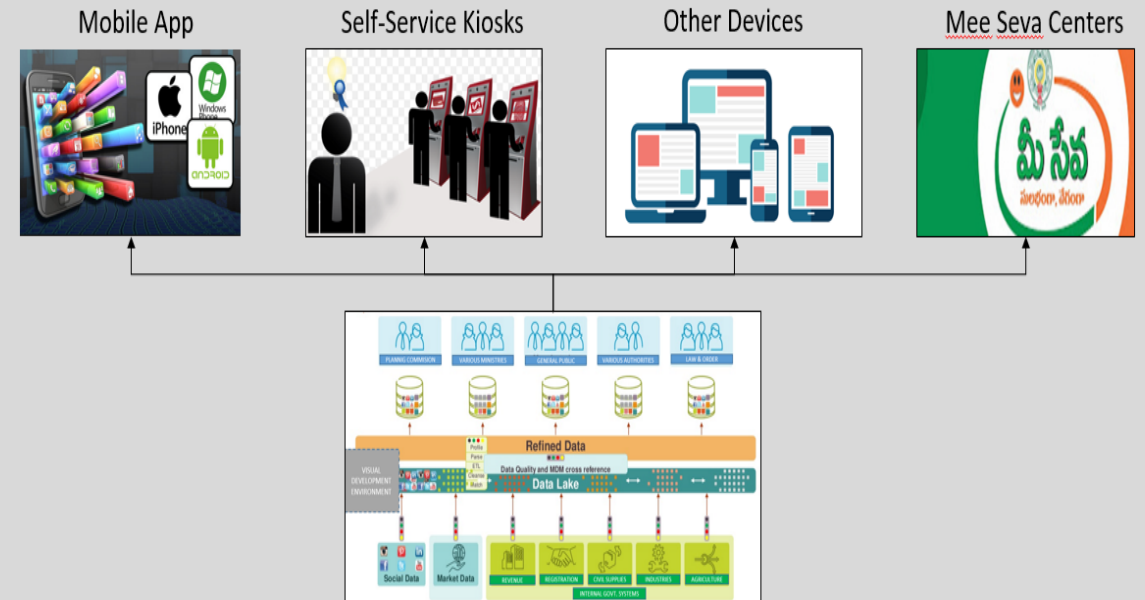
Business Data Lake Architecture – Explained in the next diagram

Why Now

Our CM Sri. Chandrababu Naidu's vision can be realized sooner

I strongly believe anything that benefits people shouldn't be delayed

Business Model

- Work with the AP Govt's IT department on:
  - Developing the next gen UI, single pane view of the common man's identity, kiosks in rural areas that work with low or no internet bandwidth
  - Create a data lake with aggregating all the govt department's data to a single lake and provide a visualization layer and expose analytics as a service to other govt organizations, universities, research, start-up companies etc

- Engagement with the AP Govt's IT department can be on a
  - *Managed Service Model* – Provide, implement the solution & manage the service
  - *Fixed Price Model* – Provide, implement the solution

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Team

- Krishna Kartik Darsipudi – VIT 4th Sem CSC student
- Rajesh Kumar Darisipudi – IT Director in a MNC
- Will include others depending on the financial model

Financials
(High Level Estimates)

Hardware	Type	Cost
Storage/Compute (2PB)	Dell/Nutanix, Amazon Cloud, Cisco UCS	Rs. 1,70,00,000
RAM (1 TB)	Dell/HP/AWS	Rs. 90,00,000

Software	Type	Cost
Apache Hadoop/Hbase/Hive (1 PB)	Open Source	Nil
Apache Spark (data processing & transformation engine)	Open Source	Nil
MY SQL Db (1 PB)	Open Source	Nil
MemSQL Db (in memory DB)	Open Source	Nil
D3.js (Reporting)	Open Source	Nil
Python (Anaconda)/R (machine learning)	Open Source	Nil
Total (HW & SW cost)		**Rs.2,60,00,000**

Platform Dev/Support	Cost
Big Data Dev/Support	Rs 5,00,000/Month
Database Dev/Support	Rs 2,00,000/Month

Software Development	Cost
ETL Development	Rs 10,00,000
Data Base Modeling Dev	Rs 5,00,000
Data Cleansing/ Validation	Rs 5,00,000
Security	Rs 4,00,000
Machine Learning APIs Dev	Rs 25.00,000
Product Dev	Rs.4,00,000 each
Dashboard Reporting	Rs 10,00,000
Total Dev Cost (with one product)	**Rs.63,00,000**

THANK YOU