

ANALYTICS AND DATA

TechCasts

Data Platform Migrations – Few Learnings

Sujata Balupala – VP, Senior Manager, Data and Analytics sujatarajesh@yahoo.com

Future & Past TechCasts:



Jan 26th

Summit 2023 Preview of
Presentations

Presented by Heli Helskyaho, Tim Vlamis, Melliya Annamalai, Philippe Lions



Feb 16th

Favorite New Features in Jan 2023
OAC

Presented by Dan Vlamis, Wayne Van Sluys, Abi Giles-Haigh, and Philippe Lions

TechCast Archive

2022

2021

2020

2019

Date	Title	Presenter(s)	Replay	Download(s)
Nov 17	Data Mesh Panel	Edelweiss Kammermann + Panel	Video	Slides
Nov 3	OCI Vision and Oracle Analytics: Just like a Box of Chocolates	Ziga Vaupot	Video	Slides

Submit a topic to share at <https://andouc.org/techcasts/>



Formerly called the BIWA Summit with the Spatial and Graph Summit
Same great technical content...new name!

www.andouc.org

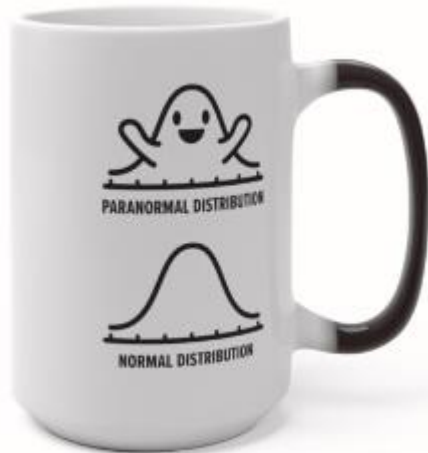




We Have Merch!

Show your "Tech Side" in everything you do!

Visit the AnDOUC Store at ANDOUC.ORG



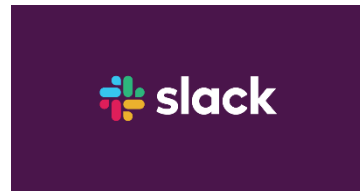


Let's Connect



Website

<http://andouc.org/>



Chat with the Experts

<https://bit.ly/Join-ANDOUC-Slack>



Watch Previous TechCasts

<https://bit.ly/3qmGgHN>



Thumb through our Newsletter

<https://paper.li/e-1587156323#/>



@AnalyticAndData



<https://www.facebook.com/AnDOracleUserCommunity>

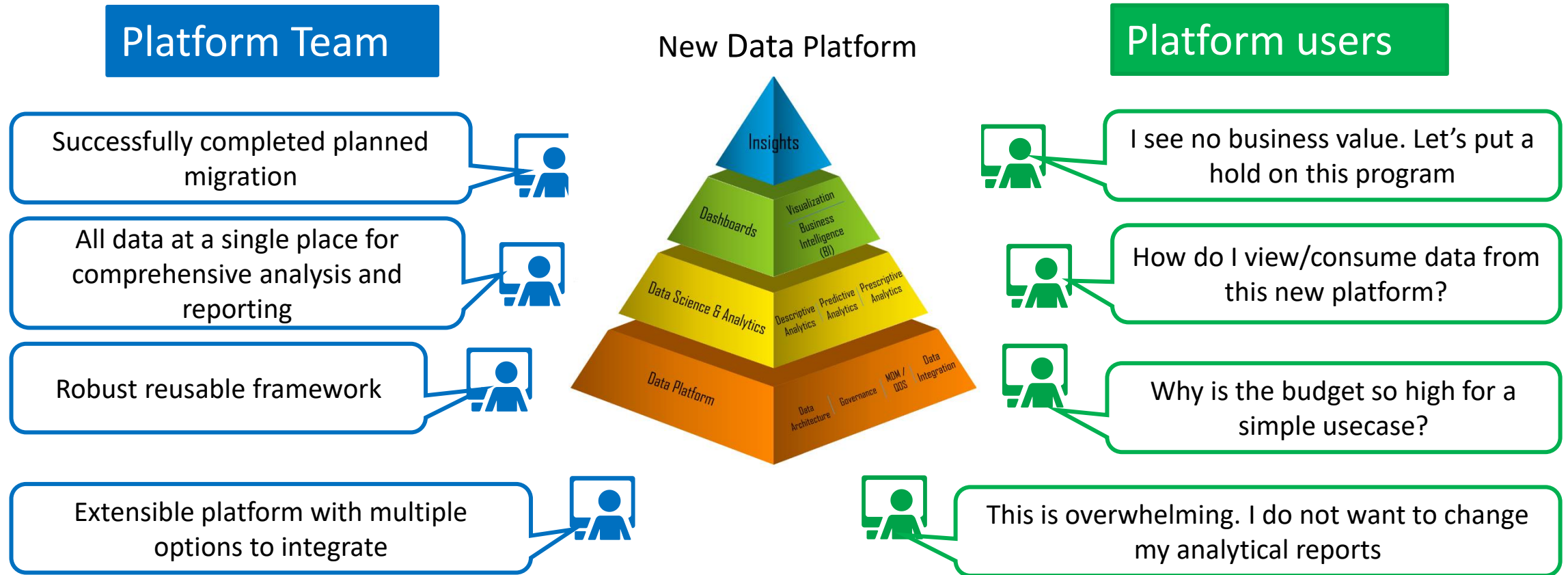


<https://www.facebook.com/AnDOracleUserCommunity>



Spatial + Graph SIG
bit.ly/Spatial-Graph-LinkedIn

Perspective on new data platform



Why and where is the gap?

Data Platform Migration Phases – Learnings


- Initiation
- Planning
- Design
- Build
- BAU

People who contributed

- Nandagopal Kuppusamy, Quality Assurance, Bank of the west (acquired by BMO)
- Kiran Pendurthi, Software Solutions Architect, Bank of the west (acquired by BMO)
- Arun Panneerselvam, Manager Group Senior, Bank of the west (acquired by BMO)
- Sanjay Sabnis, Manager Group, Bank of the west (acquired by BMO)
- Kiran Rakkireddy, Principal Solutions Architect, Bank of the west (acquired by BMO)
- Alexey Trepakov, Manager Group Senior, Bank of the west (acquired by BMO)
- Hardik Gosalia, Project Manager, BNP Paribas
- Heather Palmer-Palavido, Manager Group, Bank of the west (acquired by BMO)
- Hari Krishna Gottipati, Consultant, Bigdata practitioner

Initiation

Context


- How does it begin?
 - Is platform modernization a technology program?
 - Technology modernizations take advantage of storage cost, performance and quicker time to market. But, is there a business value to instigate?
- 

Recommendations

- Clear goal/ vision on need for a new platform tied to a business value
- A road map with short term goals enabling target state/vision
- Continuous review, correction and alignment on roadmap with stakeholders

Planning

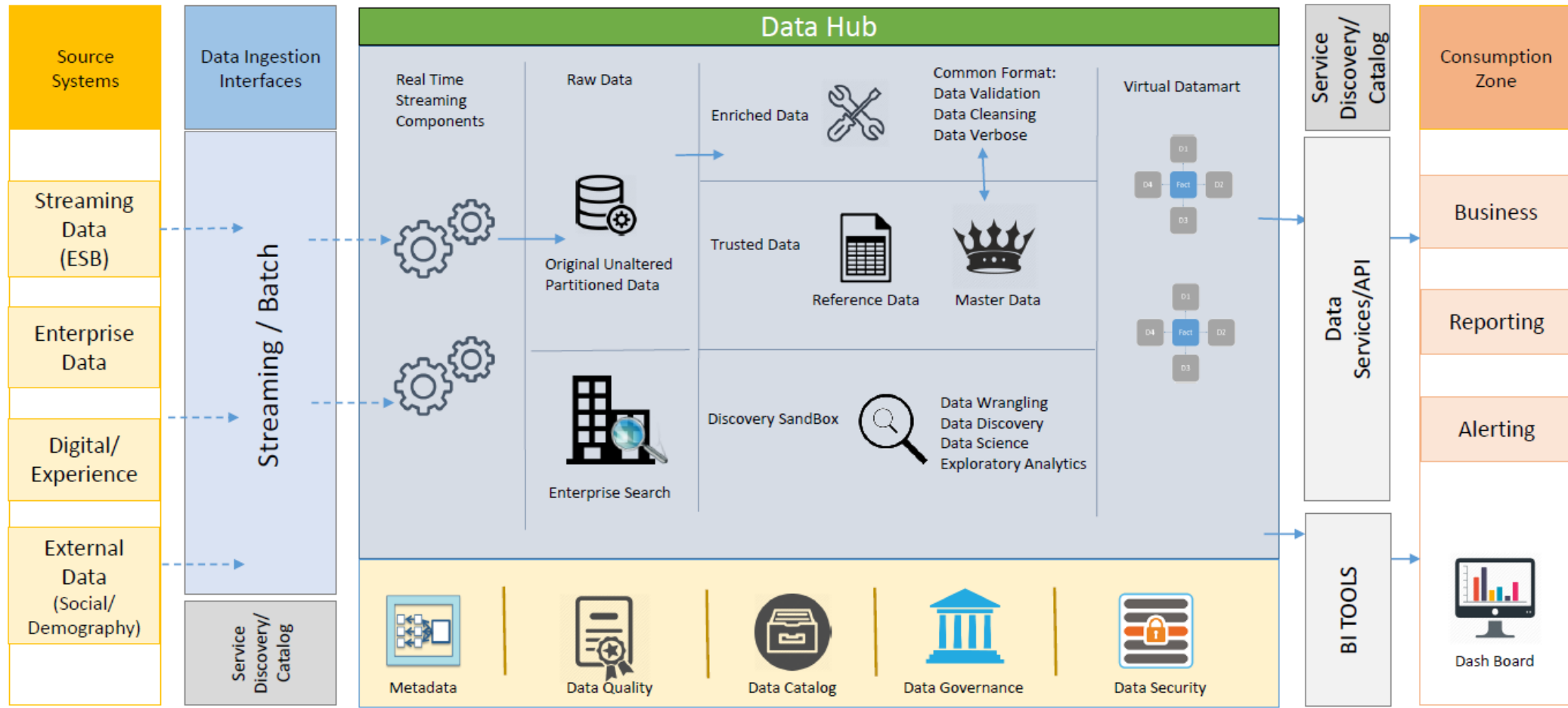
Context

- Is it required to understand current sources on existing platform and data consumption?
 - Is end to end tools set evaluation from data collection to data usage planned?
 - Is team talent on new tools assessed?
- 

Recommendations


- Identify the right use case for MVP
- Tools evaluation need to consider
 - Data growth and customizations for long term vision
 - Current set of tools used to access data
- Data platform migrations are massive in nature. Provide room for data exploration. Allocate R&D budget
- Plan on team talent growth including business team

Data Platform Example



Design

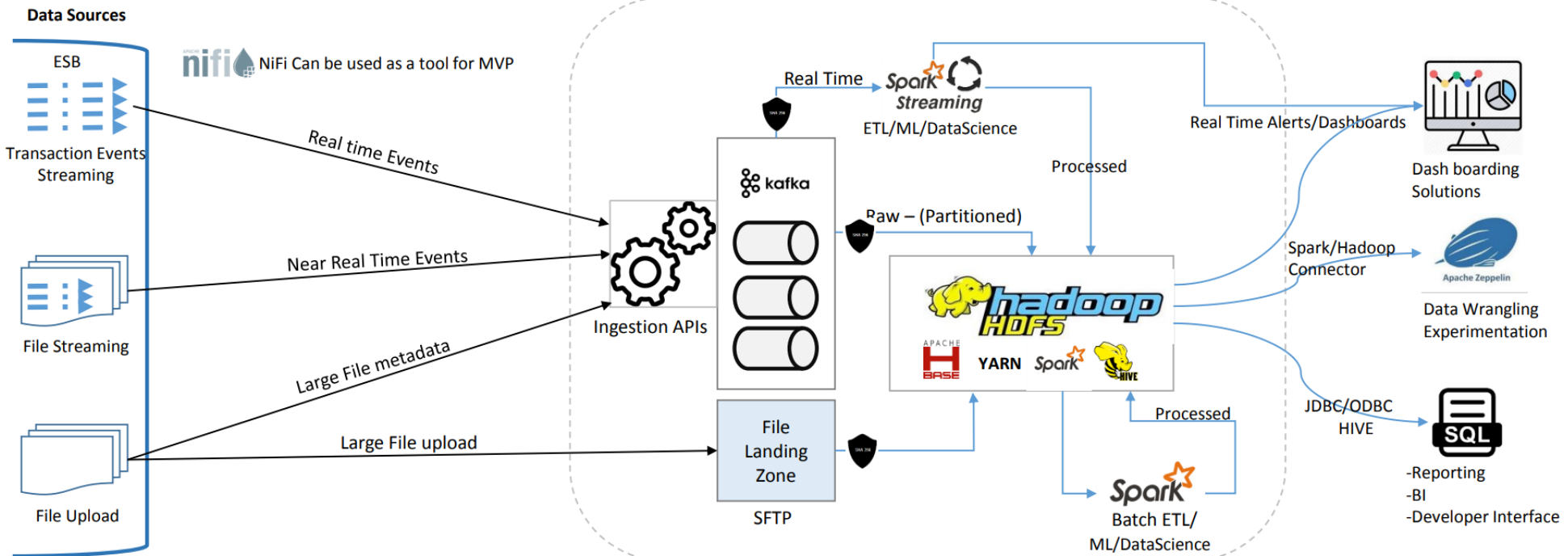
Context

- Are challenges/ drawbacks on current platform the main input for new platform design?
 - Does the design allow easy implementation with required robustness?
- 

Recommendations

- Prioritization of frameworks/components for successful MVP
- Build reusable models and modularization
- Define Access controls

Data Flow Example



Apache Nifi for (MVP):

- Data integration – Source → Sink



Apache Spark for:

- Micro batch - Time Window Based (Real Time ETL)
- Batch ETL
- ML/Data Science
- Data Mining



Apache HBase for:

- Time Series Data
- Tokenization Data




Apache HIVE for:

- SQL Interface for Files
- File Metadata

Build

Context

- Does hiring SMEs on new platform technology help to build faster?
 - Process Vs Timelines. Which one is a priority?
- 

Recommendations

- Identify the right composition of team with experts, data nerds and passionate learners
- Build a sandbox for teams to try outside of development, QA and production environments
- Post MVP, plan on onboarding trainings which help with quick training for large teams

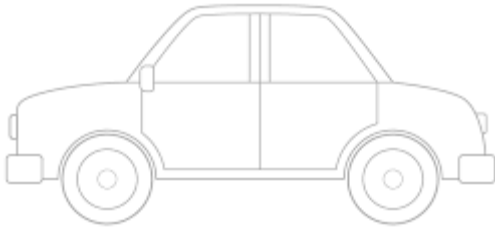
BAU

Due to massive nature of platform migrations, a BAU is always a learning, evolving phase with many more additions and integrations

Governance, Standards, Process, Security and Access

CORE TEAM

Build reusable models for new usecases



INTEGRATION TEAM

Customize and implement based on each usecase

