PRIMATICS FINANCIAL

THINK big.

Smart Data Webinar

Presenters:
John Lankenau- VP, Product Management, Primatics Financial

Craig Lovell- VP, Software Development, Primatics Financial

Please tweet @Primatics during the webinar using #SmartData.

Banks Face Demanding Environment

- **Rapid changes**
- **Tighter regulation**
- **More complexity**
- **Increased demands for information**

More demands combined with today's powerful technology means trouble

Many Loan Processes Are Conceptually Straightforward

- **General reserve**
- **Impairment**
- **Stress testing**
- **Non-accrual**

Conceptually simple, but operationally hard. Why?

Data!

- **27** of 28 surveyed last year said they were not satisfied with data and data management
- **23** of 24 surveyed this year said they were not satisfied with data and data management
- February 2015 RMA Journal survey
  - Majority of U.S. institutions surveyed disagree with statement that risk data is "clean, comprehensive, accessible and timely"
  - Highest level of concern about "difficult integration among systems"
  - High level of concern about "lack of integrated risk and finance reporting"

Despite heavy investment, data remain a challenge nearly everywhere

Symptoms of Data Challenges that Need to be Addressed:

- Inability to do desired analysis because data architecture does not support it
- Many sources for reports – inconsistent answers depending on whom you ask
- Emailing, phone calls or other manual movement of data from one function or process to another
- Multiple sources for the same data elements require significant reconciliation efforts or cause inconsistencies
- Calculations require data from unwieldy number of sources
- Making data “application-ready” happens in many places
- Etc…

Data challenges lead to inefficiency, lack of ability to do desired tasks, lack of control

Handy Guide to Troubled Data Projects

1. **Never-ending**
   - Two years into a scheduled two-year project with little benefit and 18 months remaining to finish

2. **Non-adoption**
   - Project is done but no processes actually use it

3. **Attic**
   - Data are all in one place but processes use different data for the same thing

Having a successful data project requires addressing root cause of challenges

Data Challenge is Foundational with Multi-Faceted Issues

Data challenge starts at the front end of all processes (sourcing)

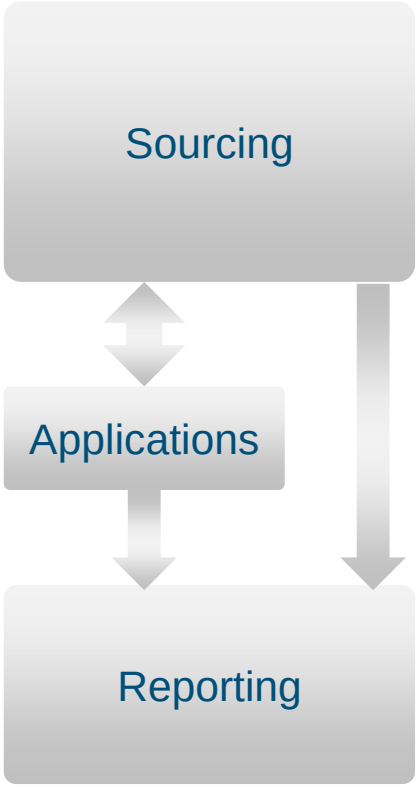
- Reconciliation, timing differences, “bad” data, etc…
- Identification and segregation important parts of process

Data and applications must be synchronized

- “Application-ready” data must be accessible to applications
- All applications must link to reporting data mart in native way

Back end reporting also a data challenge

- Aggregation
- Multiple views and ad hoc analysis need to be supported

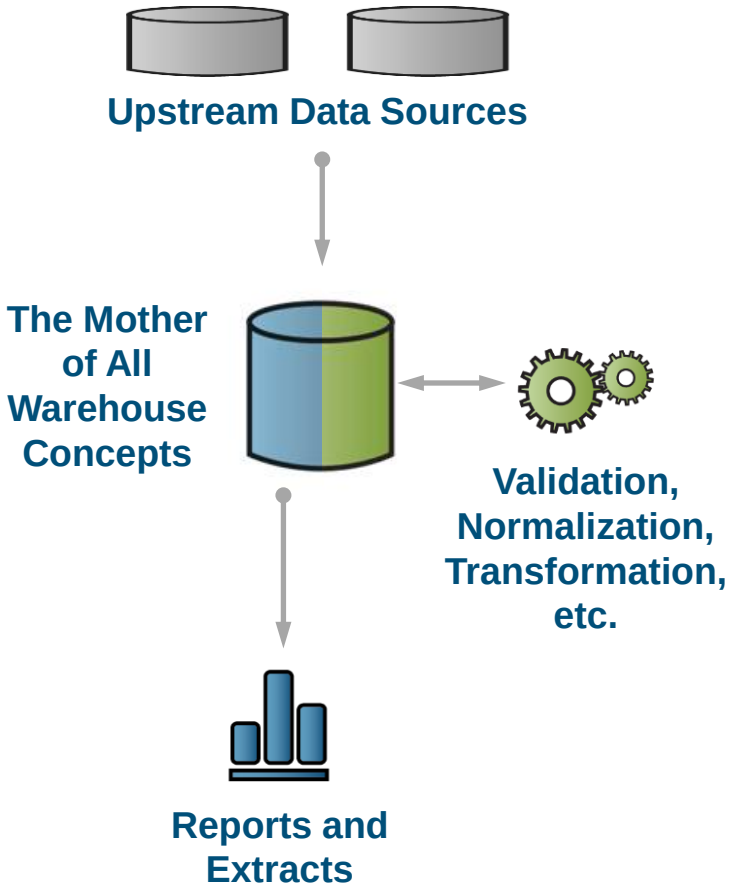


! Addressing the data challenge successfully requires addressing sourcing, applications, and back-end reporting holistically

Elements of a Comprehensive Data Architecture

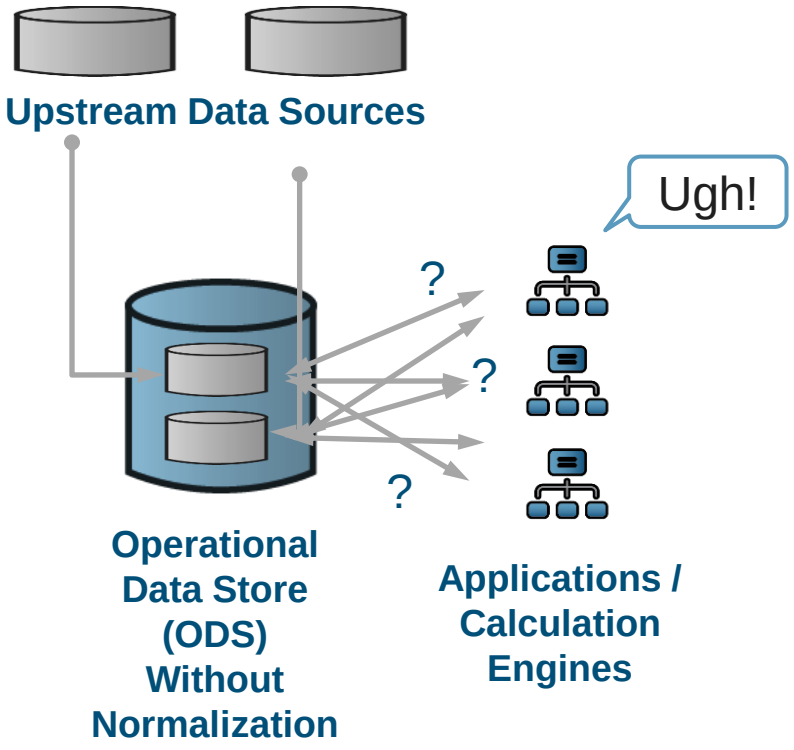
1. Integration of multiple upstream data sources
2. Integration of human data
3. Data validation, normalization, enrichment, and population identification
4. Integration with Calculation Engines
5. Warehouse Design and Population
6. Reports, Analytics, and Extracts

Pitfall #1: Conflating Operational Data with Reporting Warehouses



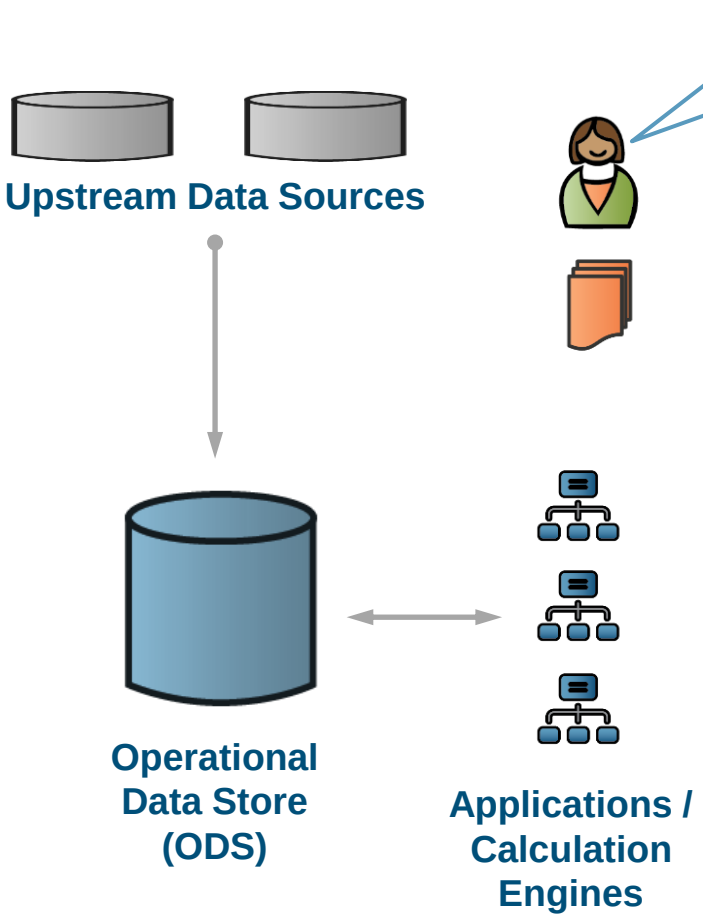
- Operational Data Store (ODS) design is completely different than a Reporting Warehouse design
  - An ODS will have multiple data sources and multiple applications integrated
  - A modern reporting warehouse is designed and optimized for read-only reports
  - The warehouse should not have to share resources with an active ODS
- For the best dining experience, cook your data in the kitchen (Operational Data Store) and eat it in the dining room (Reporting Warehouse)

Pitfall #2: Failing to Normalize



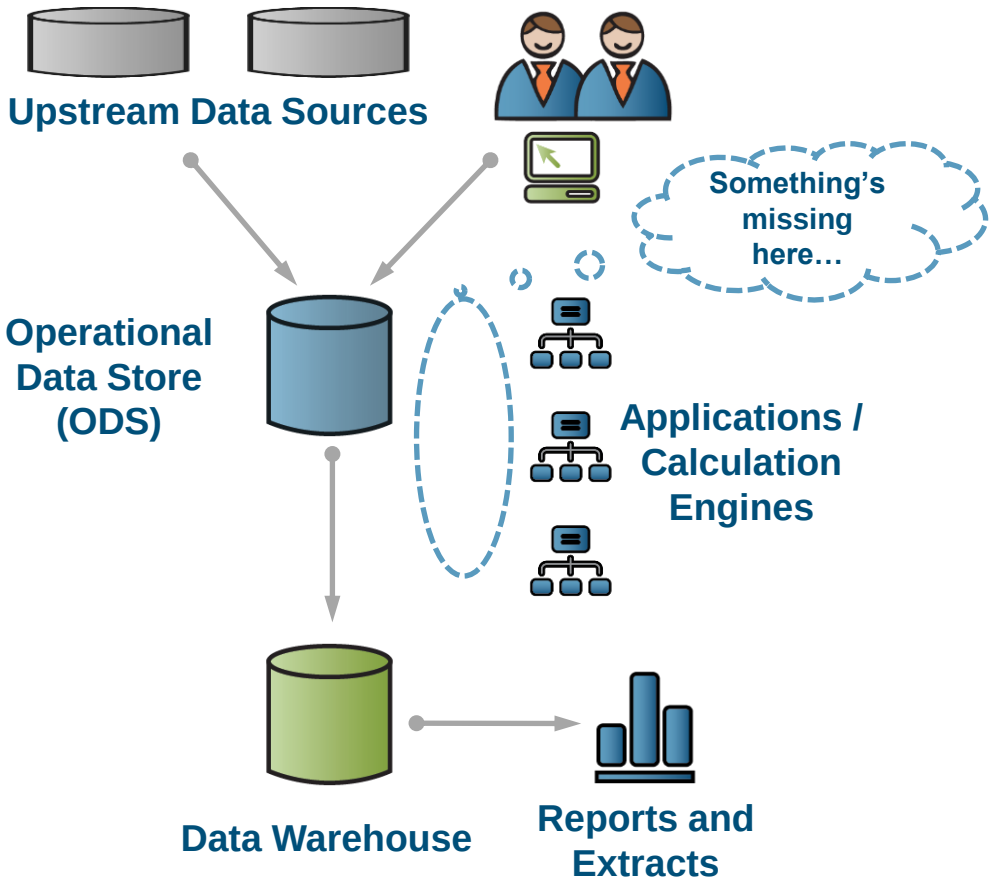
- Bringing upstream data into an ODS without normalizing means the applications will never see a consistent view of the data across sources
- Applications and calculation engines should not have to deal with multiple data formats
- Reporting across data sources becomes extremely difficult if not impossible
- Your ODS should not be a dumping ground for disparate formats
- A loan is a loan is a loan – represent it that way no matter where it's from

Pitfall #3: Don't Forget the Humans!



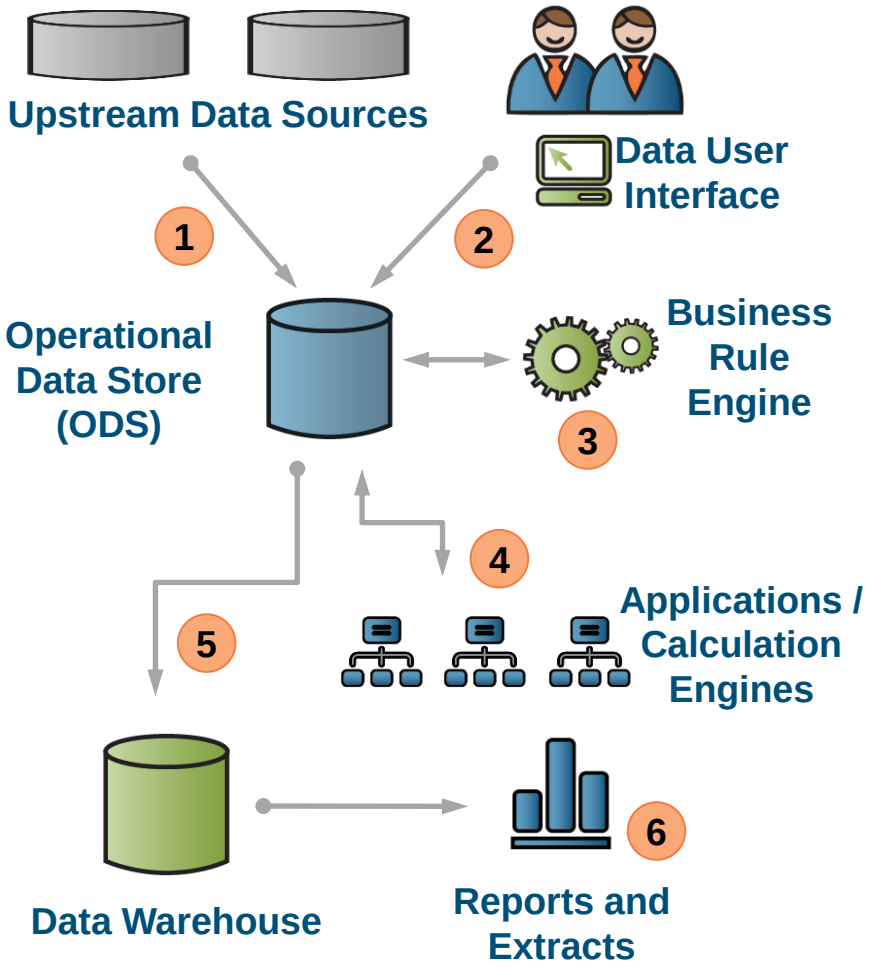
- Your data architecture must integrate both upstream systems and data from human processes
- Spreadsheets abound – bring them into the system
- Humans should be able to reconcile, correct, and augment data in a controlled and auditable fashion
- Humans need to be able to stop the train and re-load data if they spot problems

Pitfall #4: If You Build It, They Will Come

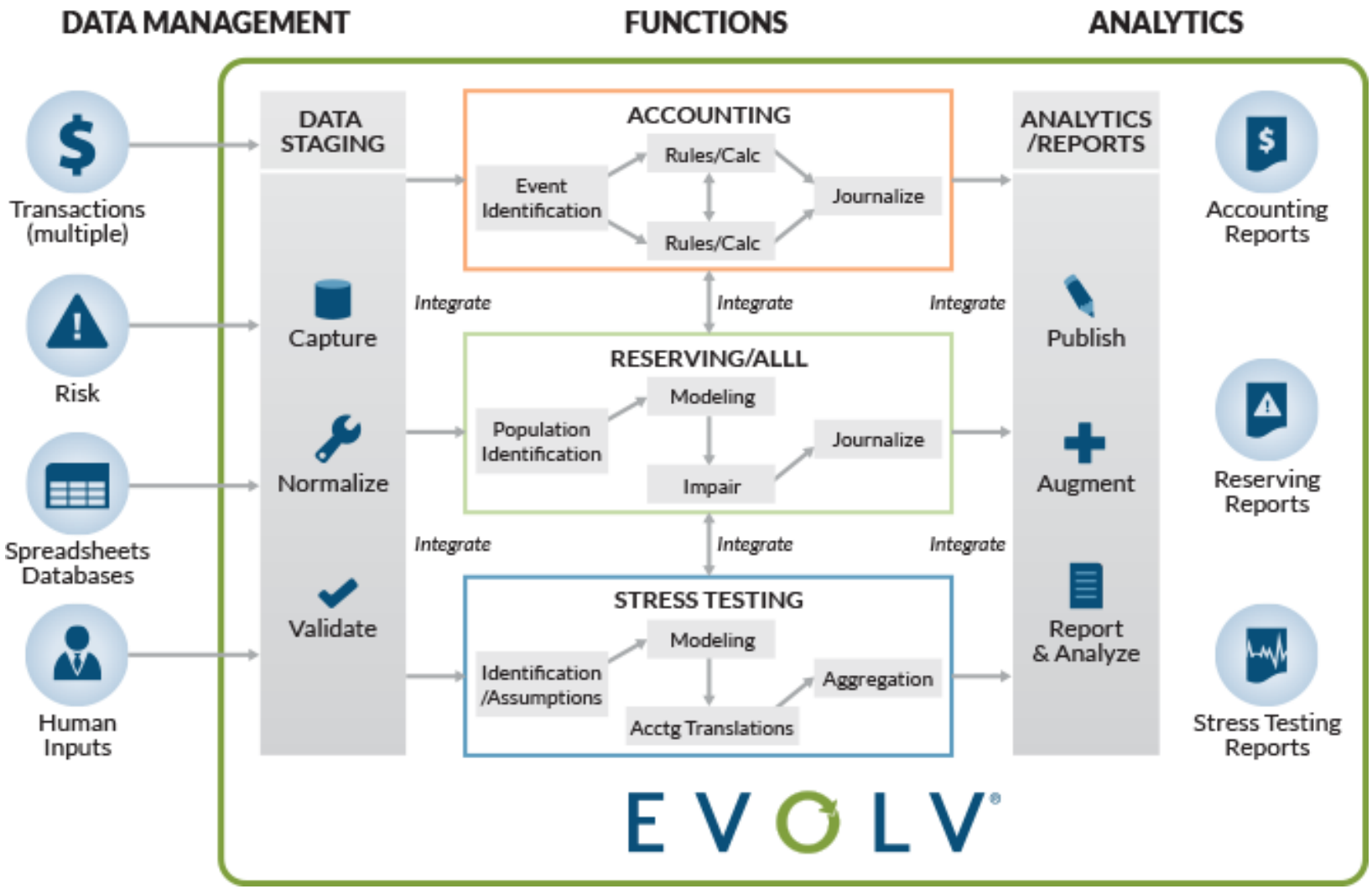


- Very nice architecture for consolidating and reporting, but no applications integrated!
- Applications left to fend for themselves
  - Input to each application needs to be copied from somewhere else and transformed
  - Reconciliation nightmare
  - Applications have to provide their own reporting of outputs
- Can happen when IT throws a data warehousing party and doesn't invite the business

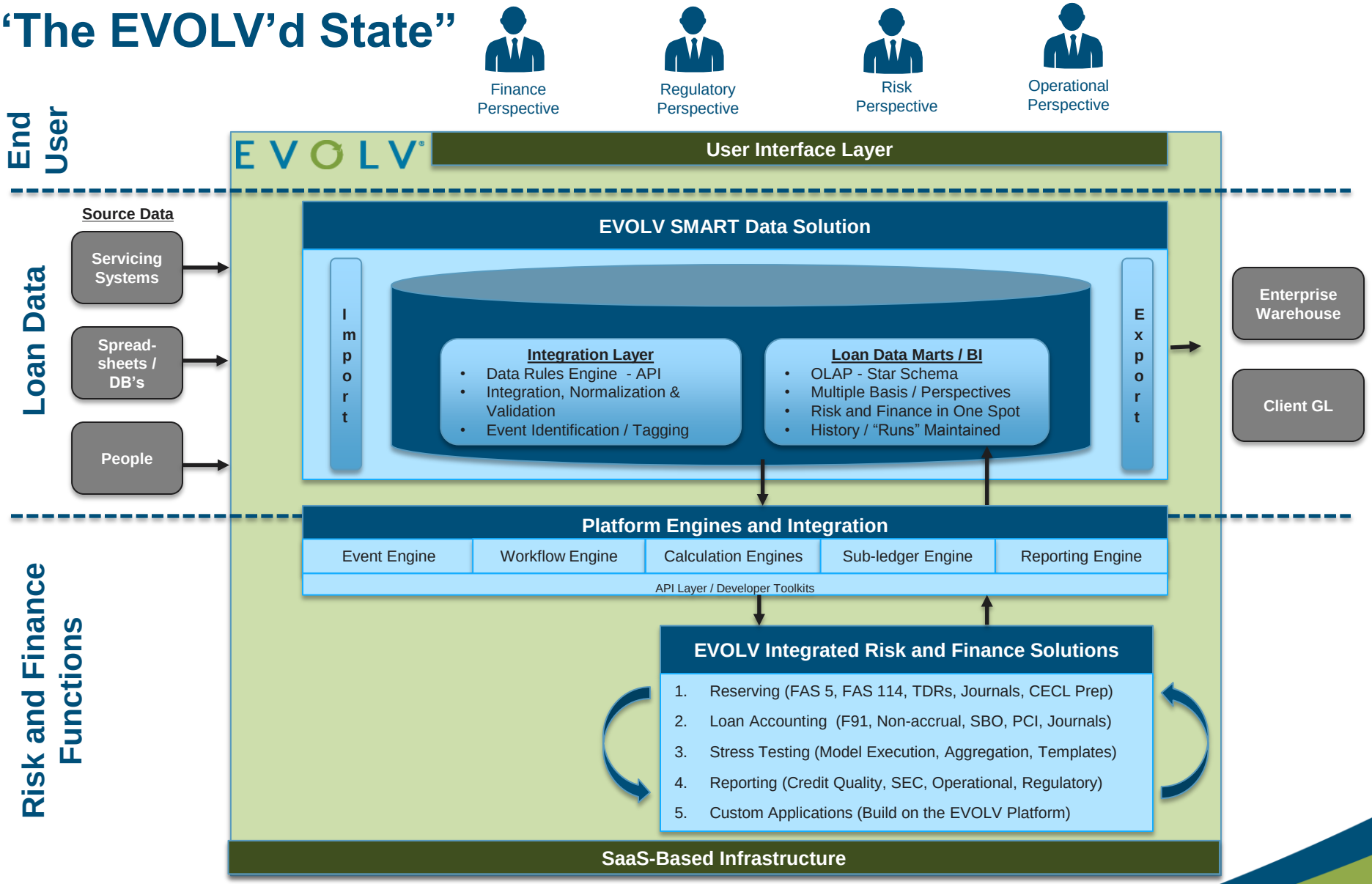
Putting it All Together: Smart Data Architecture



1. Integration of multiple upstream data sources
2. Integration of human data
3. Data validation, normalization, enrichment, and population identification
4. Integration with Calculation Engines
5. Warehouse Design and Population
6. Reports, Analytics, and Extracts


DATA MANAGEMENT
FUNCTIONS
ANALYTICS
Transactions (multiple)
Risk
Spreadsheets Databases
Human Inputs
DATA STAGING
Capture
Normalize
Validate
ACCOUNTING
Event Identification
Rules/Calc
Rules/Calc
Journalize
Integrate
Integrate
Integrate
RESERVING/ALLL
Population Identification
Modeling
Impair
Journalize
Integrate
Integrate
Integrate
STRESS TESTING
Identification /Assumptions
Modeling
Acctg Translations
Aggregation
ANALYTICS /REPORTS
Publish
Augment
Report & Analyze
Accounting Reports
Reserving Reports
Stress Testing Reports
EVOLV

"The EVOLV'd State"



One Platform

Unified Source Data

Integrated Reporting Data Mart

Integrated Applications

The EVOLV Difference

Q&A Session

Contact Us

If you would like to hear more,
please reach out to us!

info@primaticsfinancial.com
703.342.0040