



Rosendin's Journey from OBIEE to OAC

TechCast Days -
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Analytics Hierarchy of Needs

(adapted from Maslow's hierarchy of needs)

Prediction and automation

AI
ML

Enrichment and Feature Engineering

Comparisons
and Visualization

Modeling and organization

Aggregation and
conformed dimensions

Governance Process

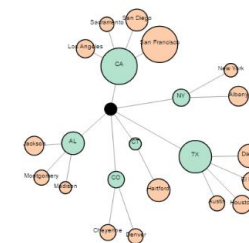
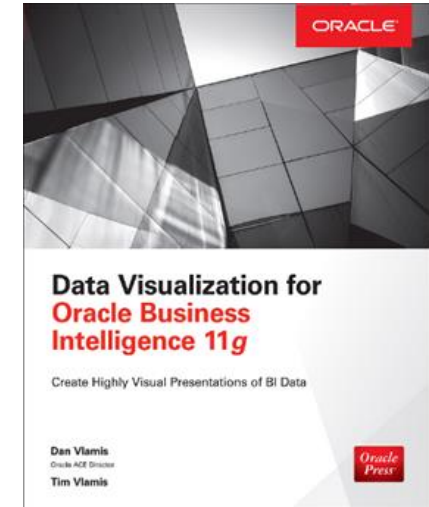
Consistency and Trust

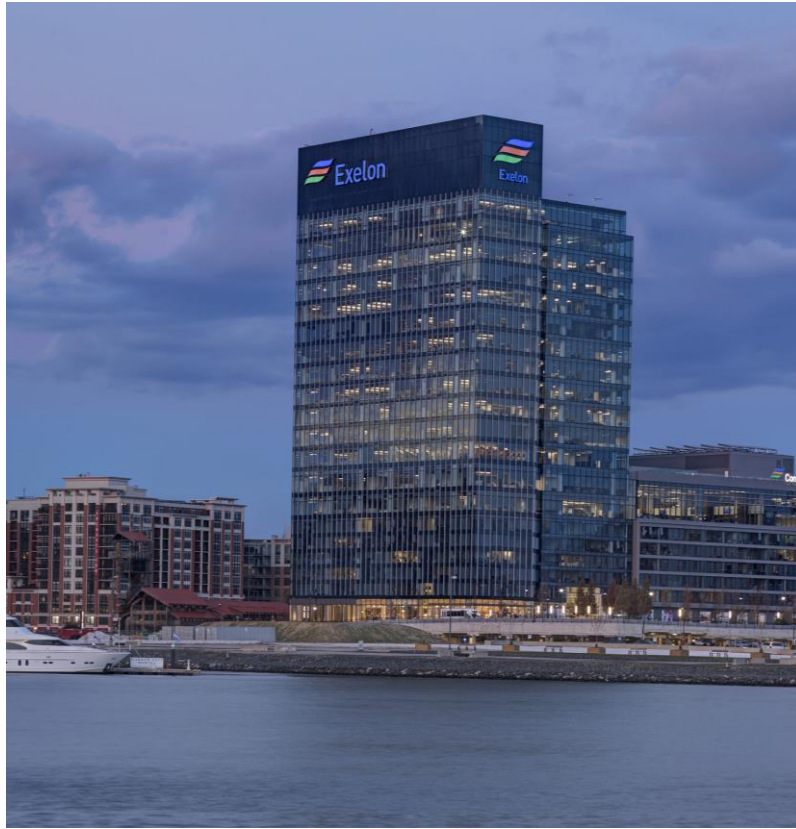
Acquisition

Clean, Accurate Data

Vlamis Software Solutions

- Vlamis Software founded in 1992 in Kansas City, Missouri
- Developed 400+ Oracle BI and analytics systems
- Specializes in Oracle-based:
 - Enterprise Business Intelligence & Analytics
 - Analytic Warehousing
 - Machine Learning and Predictive Analytics
 - Data Visualization
 - ETL and data integration
- Multiple Oracle ACEs, consultants average 15+ years
- Creators of the [Force Directed Graph Plugin](#) on [Oracle Analytics Library](#)
- www.vlamis.com (blog, papers, newsletters, services)
- Co-authors of book “Data Visualization for OBI 11g”





What we build

 ROSENDIN



Rosendin Background

- Situation at Rosendin
 - Large legacy OBIEE system
 - Had “Dashboards”
 - Migrated OBIEE 11.1.1.7 to OAC
 - Tried rebuilding data structure to increase load performance etc.
 - Had a revolving door of OAC people – no better than OBIEE stuff
 - Realized needed help, especially with integrating visuals and reorganizing/optimizing our data structure.



Rosendin Needs October 2020

- We wanted to modernize analytics
- Get business to use the data regularly (be more modern)
- End users had lost confidence in data integrity, frustrated with load times, stakeholders irritated with long development times

- Asked Oracle sales rep for suggestion
 - “Find me someone that can do what you promised or we are done.”*
 - Matt Lamb, Rosendin CIO

Introduced to Vlami Software Solutions



Projects Working with Vlami

- Rosendin had done other things with OAC
 - Focused on financial dashboards (from requests)
 - Majority of users of system are project managers
- Started with support contract to help Rosendin with OAC
 - Punch list items – 7 quick-hit items to get going
- Rebuilt Billings in OAC classic using OBIEE dashboards as a prototype
- Install Rate dashboard built in DV according to users' needs
 - Identified issue with monthly vs weekly data
- Evaluated structure of DW (ongoing)



Benefits - 1

- Retire outdated technology and move to cloud-based
 - physical servers reaching end of life
- Improved overall performance of the system
 - dimension tables
 - remodeling of subject areas
- Redesigned dashboards to make more useful and interactive
- Used ad hoc DV capabilities of OAC
 - explore business data
 - develop new analytic insights



Benefits - 2

- Provided supervisors and managers access to on-demand weekly-level data
 - Enables them to properly staff their projects
- Business Improvements
 - Helped internal group be more confident about the data
 - Super users now able to use in ad-hoc manner
 - End users noticing improvement vs OBIEE – speed and usability
 - Have more confidence that IT can deliver results



Findings from OAC Assessment

- VlamiS assessed current OAC environment
- Evaluated on 6 C's: Content, Comparisons, Choice, Categorization, Connection, Context
- Redesign Executive KPI and other dashboards
 - Several UI suggestions
 - New comparison measurements
 - Additional graphs for specific analyses
- Move calculations into RPD, not in report logic
- Organize column names to make more useable
- Performance needs to be improved – lots of suggestions



Performance Issues

- Migrated but found performance not good
- Results of investigation – need to redesign data model
 - Business conditions have changed
 - Not using summary tables
 - Most analyses use attribute of customer dimension
 - RPD coded with left outer join to large customer dimension just to get country
- Users don't care about causes of bad performance. Just fix it.
- Adhoc user was pulling data from wrong subject area and was making business decision based on data that was off \$40MM



Technologies Used

- Autonomous Data Warehouse (ADW)
 - for storing data – faster database
- Oracle Data Integrator (ODI)
 - to move data from EBS and legacy Oracle DB to ADW
- Oracle Analytics Cloud (OAC)
 - to present data (migrated OBIEE dashboards and new dashboards)



How Used ADW

- Benefits of using ADW
 - Faster
 - Less maintenance
- Migrated from Oracle DB to ADW (able to retire old hardware)
- Modified data model at same time (Rosendin led, VlamiS assist)
- Now on cloud
- Issues with ADW:
 - Not 100% autonomous – needs some looking after
 - Dedicated resource that knows ADW is still helpful



How Used ODI

- Rosendin had been using ODI to move data into data warehouse
 - started using instead of Informatica at extra license cost
- VlamiS extended model using ODI to migrate data
 - created ODI process to load weekly Install Rate Dashboard data
- Issues with ODI
 - finding good reasonable resources with ODI experience
 - Rosendin finding desktop ODI faster than Marketplace ODI



Using OAC

- Advantages of using OAC?
- Using DV front end for new business cases
- Now have access to DV for better ad-hoc use
- Average user has trouble creating ad-hoc reports
 - Rosendin has complicated data model that's grown over the years
 - Use junior-level, computer-savvy people to produce ad-hoc reports
- Rosendin still getting used to OAC, not entirely sold
- Data issues are holding back the project
 - Rebuilt instead of just migrating
 - Some ETL processes still not right
 - Had too many cooks in the kitchen



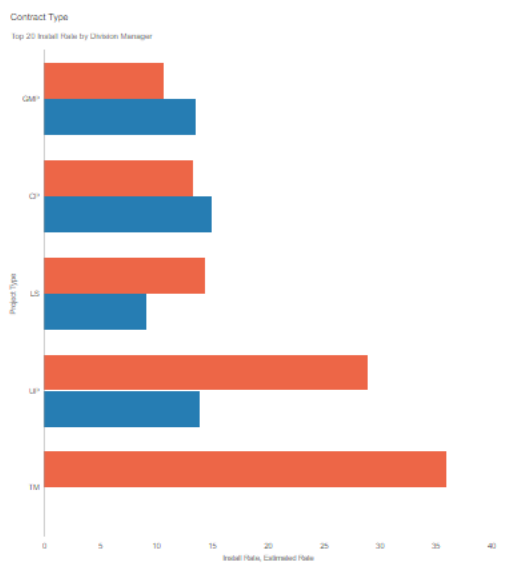
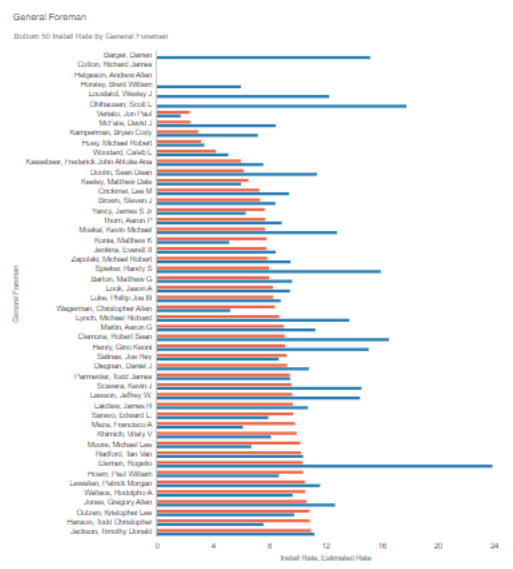
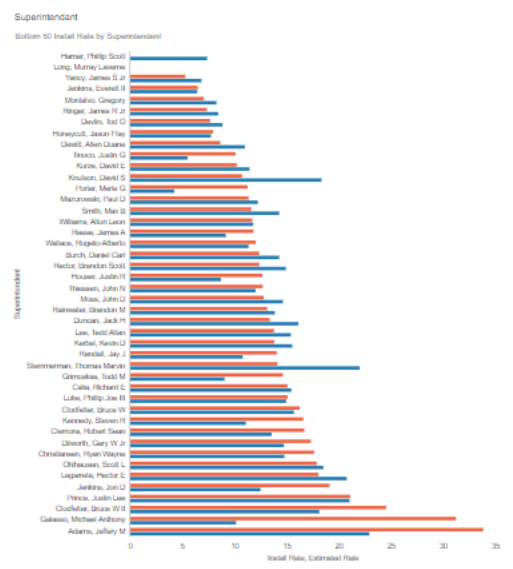
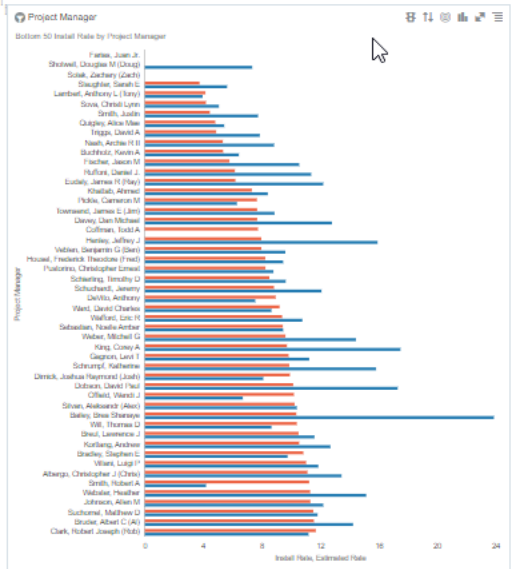
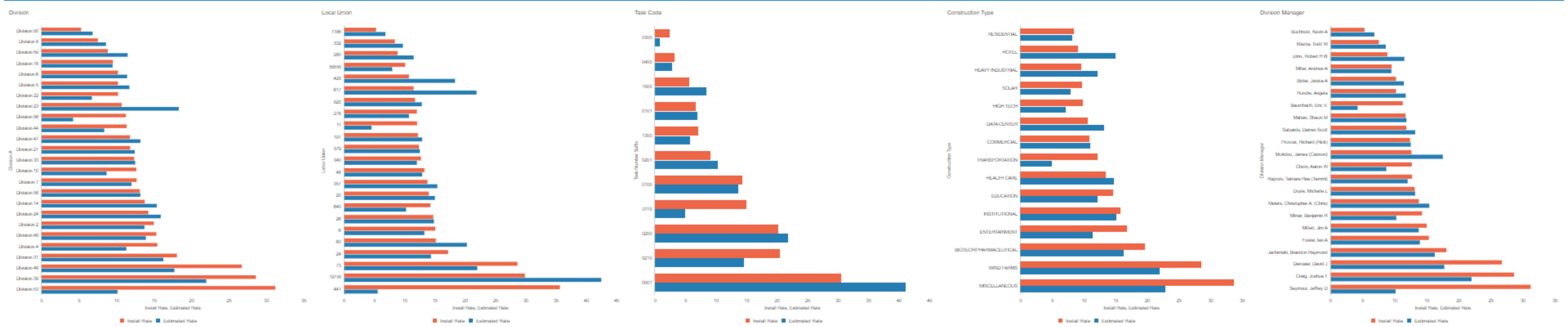
Install Rate Dashboard

- Major overhaul of former dashboard
- Seemed simple
- Complications in grain of data
 - Table had data at month level
 - Users wanted to see at week level
- How to handle cumulative totals vs discrete weekly data
- [Cathye to look for screenshots to show before and after]



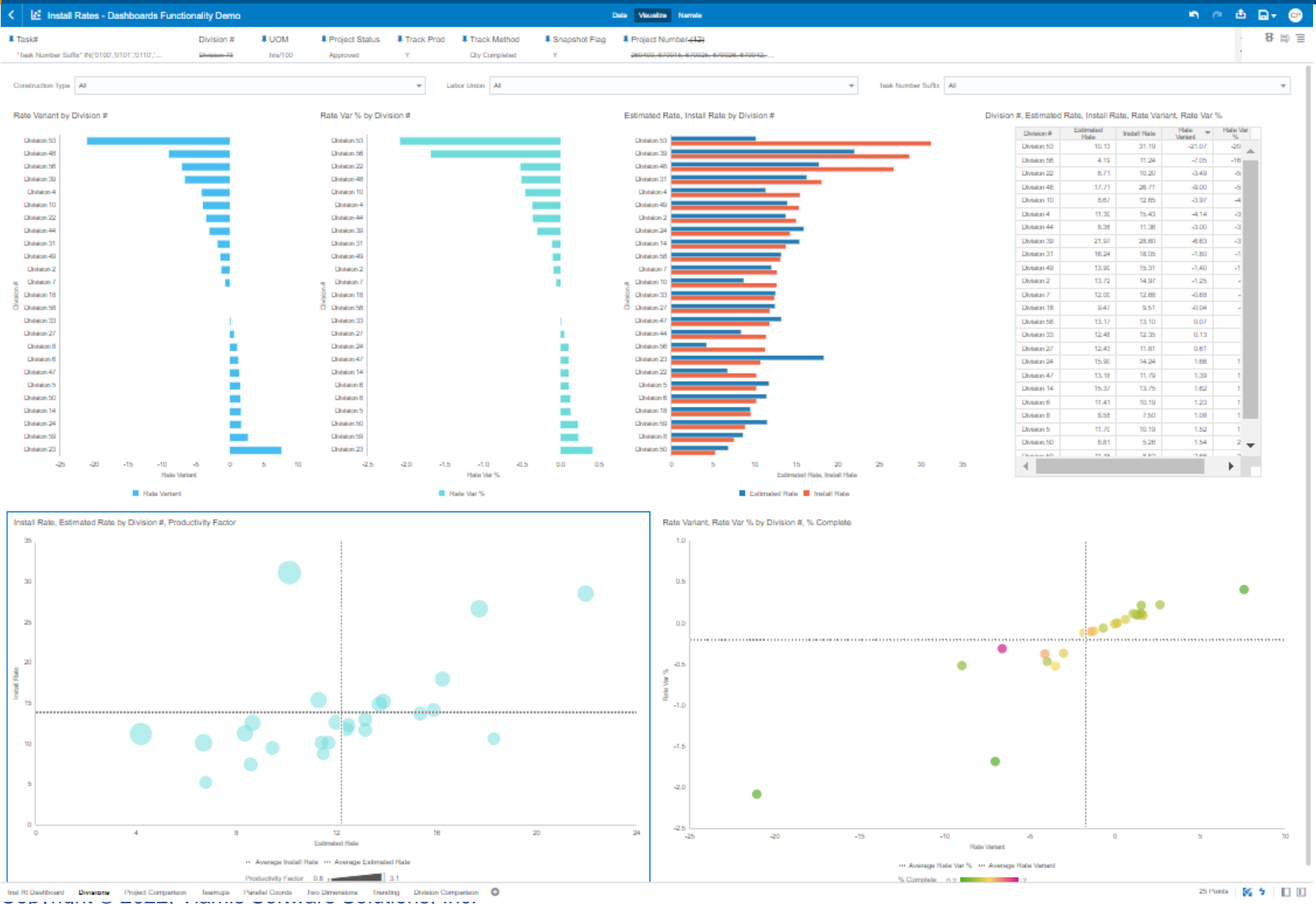
Example Dashboard

Task#	UOM	Project Status	Track Prod	Track Method	Snapshot Flag	Project Number	Division #	Division Manager	Industry	Labor Union	Task Number Suffix	General Foreman
"Task Number Suffix" (N) (01002, 01001, 01100, ...)	Inv/100	Approved	Y	Qty Completed	Y	200000-000000-000000-000000-000000-...	AI	AI	AI	AI	AI	AI





Example Dashboard





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The Future

- Increase adoption of Oracle Analytics
- Execute some of Vlami suggestions on data model, etc.
- Use AI and Machine Learning down the road



Conclusion

- Concluding remarks leading to Q&A



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Questions?

