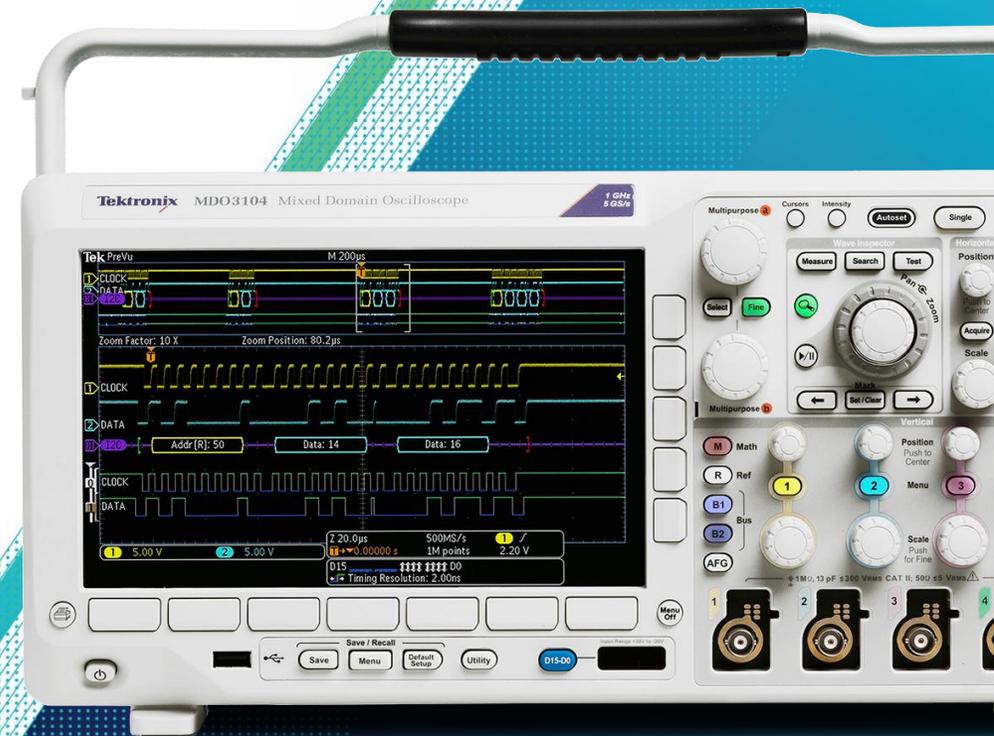


Tektronix



Exploring OAC in Modernizing BI and Analytics at Tektronix

21 MARCH 2018



Background on Tektronix

- Hi-Tech leading manufacturing company, part of Fortive Corporation
- 4500 employees located worldwide
- Global install of Oracle ERP and OBIEE
- Manufacture measurement instruments and video diagnostics
- Been in business for over 70 years
- HQ in Beaverton, Oregon

Tektronix Oracle Vlamis Teams

- Eshwari Mulpuru – Tektronix – IT professional and project leader
- Xinyu Zheng – Tektronix – Business analyst and power user
- Raquel Robinson – Oracle – Sales and customer advocate
- Tim Vlamis – Vlamis – OAC front end development and machine learning
- Arthur Dayton – Vlamis – OAC backend data modeler

Current Challenges Facing Tektronix

- Need for visual analytics with a wide set of stakeholders
 - Executives
 - Sales, Marketing, and Sales Operations
 - Manufacturing and Logistics
 - Finance and administration
- Highly technical staff interested in technology and leading practices
 - Many “cutting edge” departmental visual BI solutions
 - Lots of smart, hard charging teams with little interest in “waiting for IT”
- Legacy OBIEE system and multiple new tools being adopted in silos
- Large and complex data sets
- Integration and security are key challenges



Security Requirements at Tektronix

- Global constituents and stakeholders
- Need for single-sign on and integration
- Row-level security in data warehouse
- Efficiencies in query and report design through proper security
- Challenge of external data sources, mash up requirements, and self-service data modeling for functional business teams
- Reuse of definitions as part of integrated solution
- Single definition of dashboard for consistent user experience



Advantages of a Cloud Solution

- Shared infrastructure at Tektronix
 - Fortive and Danaher history
 - Fluke history
- Need for agility and reliable platforms
- Hybrid solution requirements
- Effective subscription cost model vs. perpetual licenses and support
- Leverage features on latest releases as they become available
- Ease of deploy and manage

Provisioning OAC

- Dedicated VPN
- Dbaas and Storage containers
- Analytics with Load Balancer
- Security and network
- Analytics Instances
 - New Data Modeler instance
 - Legacy repository instance
- By the hour versus always on option



Oracle's Velocity Program

- Oracle investment in Proof of Concept projects
- Funding available for expert consulting firms
- Participation requirements
- Pros and Cons



Three main strategies in BI development

- “Big Bang” Project
 - Extensive requirements gathering
 - Clean up and fix all existing problems before deploying new tools
 - Carefully plan a comprehensive project
- “Choose a Champion” Pilot
 - Identify constituency and data model for initial work
 - Pursue joint development with experts through working sessions and workshops
 - Showcase champions’ work through highly visible demo events and presentations
- Organic Growth “Survival of the Fittest”
 - “Brick the dirt path”. Let natural adoption by users determine tools and best practices
 - Allow several alternative tools to compete for corporate adoption
 - Determine milestones and parameters for “killing off” alternatives that waste resources



“Choosing a Champion” Pilot

- Sales and Marketing corporate data set
- KPI subject area
- Data Model development
- Starting dashboards and concepts
- Importance of putting together the Pilot team
- Working sessions and knowledge transfer
- Importance of milestone demo

Data Model

- Importance of sufficient dimensions
- Challenge of large number of measures
- Choosing a key measure for a large amount of work
- Integrate “RLS” row level security across all dimensions
- Complex KPI data model adhering to RLS
- Dimension of KPIs
 - Actual and Target measures
 - KPI filter
 - Complex calculated measures



Data Visualization Project Development

- Starting with existing dashboard examples
- Highlight features and capabilities of OAC, including Machine Learning capabilities
- Focus on DV interface and not dashboards and answers
- Working session breakdown
 - Sales and Marketing
 - Finance
 - Manufacturing
 - Machine Learning
- Explore and demo user experience
- Mobile capabilities



Major Demo Report

- Large group demo of project work on OAC
- Follow up working sessions with functional teams

Future Development Challenges & Objectives

- User adoption
- Cost and ROI
- Development Phases
- What's Best for Tektronix?
 - Architecture
 - Security and Governance
 - User adoption
 - Subscription cost
 - Scalability
 - Machine Learning



Key Take-aways

- Pilot projects are extremely useful versus watching demos.
- User experience is critical. Different people have different perspectives.
- Security integration is important, but involves work. SSO is hard.
- Oracle Analytics Cloud is powerful, with lots of features, but is also complex.
- Modeling choices, front end choices, etc. are aided by experience or experts.
- Everyone loves the idea of machine learning.
- Oracle cloud provisioning experience is not “press the easy button.”
- Data quality is hugely important for pilots (and deployments)!



Questions?