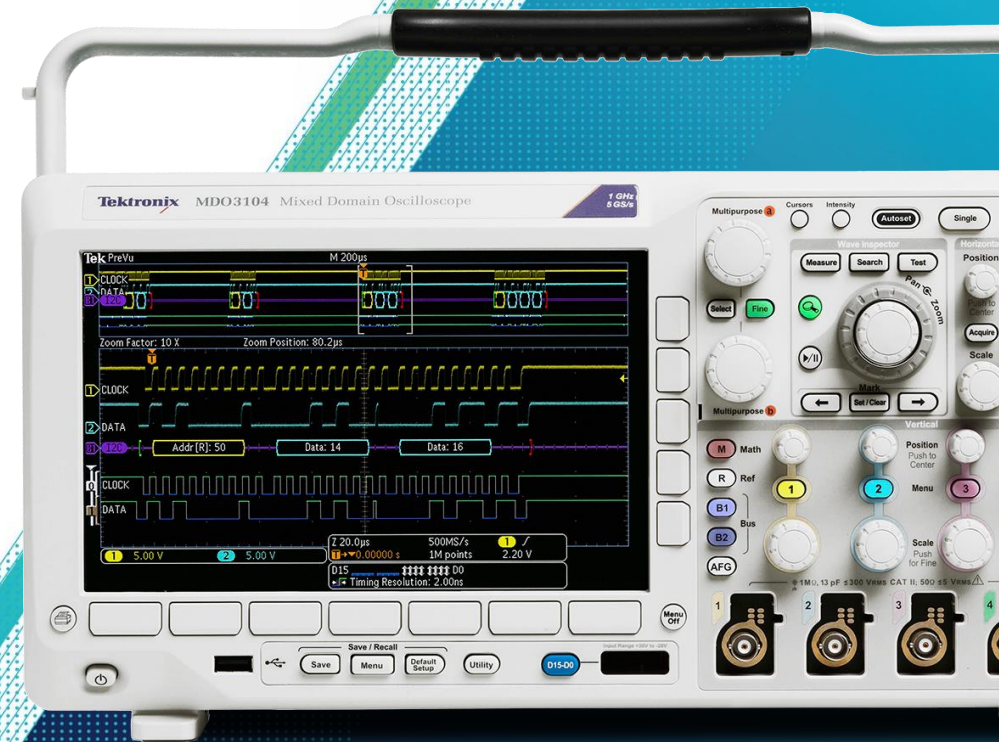


**Tektronix**



# 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?