OPERATING AND ENHANCING THE CALIFORNIA VEHICLE INSPECTION SYSTEM

DEPARTMENT OF CONSUMER AFFAIRS

BAR

Bureau of Automotive Repair

CLAY LEEK

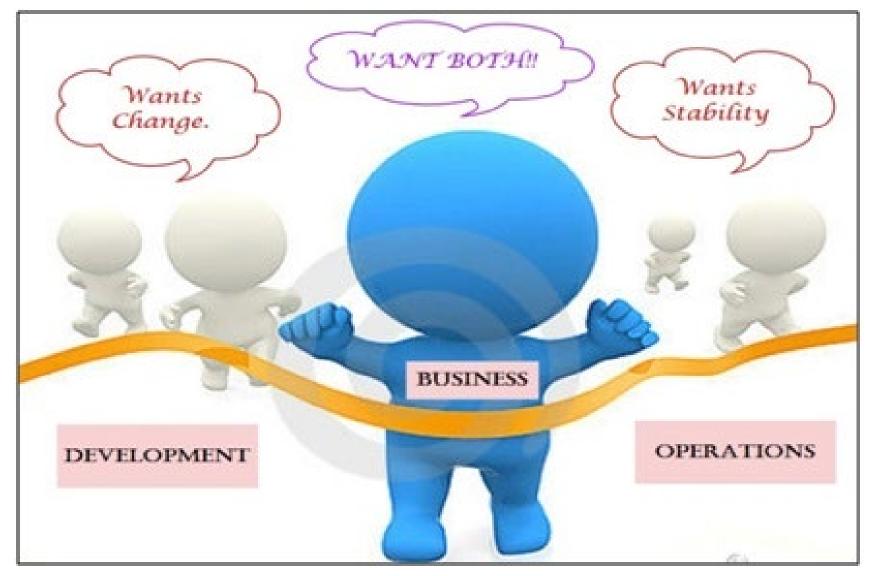EXECUTIVE OFFICE

BAR ADVISORY GROUP MEETING

OCTOBER 17, 2019

CAL-VIS OVERVIEW

- California Vehicle Inspection System (Cal-VIS)
  - Complex 3 tier architecture (100s of virtual machines)
    - Web / Application / Database (DB)
  - Network Connectivity
  - Internal BAR Applications
  - Interfaces with multiple business partners

CAL-VIS OVERVIEW (CONTINUED)

- Primary and secondary sites
  - Real time data replication and Extract, Transform, Load (ETL) Processes
  - Archive / Backup
- BAR-OIS and BAR-97 inspection equipment
- Oracle Exadata
- Multiple environments
  - Development, Integration, System Test, User Acceptance Test, 3 Sandboxes, Production
- Interfaces
  - SGS, OnCore, Parsons, DAD vendors, schools, stations, BAR, DCA licensing, DMV, State Bank, Referee, ARB

ENHANCEMENTS VS OPERATIONS

CAL-VIS OPERATIONS

- Ensuring stability and availability requires significant resources
  - Incident / Problem / Capacity / Continuity / Availability
  - Patching / Security
  - Hardware and software refresh
  - 24/7 Monitoring, process alerts
  - Defect correction, verification
  - User Acceptance Testing (UAT)
  - Procedures, technical documentation, training
- Incident Management
  - 81 open incidents

CAL-VIS CHANGE MANAGEMENT

- Change Management Request (CMR) is needed to implement new business requirements
- Change Lifecycle
  - Request, **analysis**, design, development, testing, implementation, acceptance and documentation
- Change Impact
  - Requirements, design specification, code development, integration test, user test, training, help desk, billing, BAR applications, connectivity partners, maintenance operations, BAR-OIS,BAR-97, database, network, etc.
- 162 open changes

IS THE JUICE WORTH THE SQUEEZE

- California law / regulation requirements
- BAR's mission and vision
- Consumer protection / Air quality
- Station / Inspector / Technician impacts
- Resource availability and expertise
- Contract alignment
- Opportunity Cost
  - BAR-OIS implementation
  - Cal-VISTA project
  - Transition from SGS Testcom to OnCore Consulting
- Quantitative vs qualitative value

RECENTLY COMPLETED CHANGES

- Certificate blocking and Referee direction
- Automated equipment data anomaly lockouts
- Self service limitations
- Clean gassing vehicle direction
- DAD driver update
- BAR-97 Wrong Platform Prompt
- Transition related changes

FUTURE CHANGES

- Integration of updated DAD
- Enhanced DAD security, improvements and bug fixes
- Add Safety Recall Data to VIR (BAR-OIS only)
- Display inspection information messages
  - "Advise owner to reflash ECM per TSB 1234 prior to inspection."
- Display vehicle specific emissions warranty messages using "Test Group" entry from VECI label (BAR-OIS only)
  - "This vehicle has a PZEV emissions warranty for 15 years / 150,000 miles."

FUTURE CHANGES (CONTINUED)

- Biometric scan in lieu of BAR-OIS password
- Update BAR-OIS supporting New Data Acquisition Device (DAD)
  - Expanded data collection, future vehicle connectivity
  - GPS location
  - Data encryption
- Brake and Lamp Inspection Software
- Smog Check Test Fee pre-purchase
- Transition from "On premise" to Cloud hosting
- BAR-97 Certificate Blocking

SUMMARY

- The Cal-VIS is large and complex
- Several large projects have reduced the velocity of change
    - BAR OBD Inspection System (BAR-OIS)
    - California Vehicle Inspection System Transition (Cal-VISTA)
- Balancing change velocity and system stability is the goal
- Stakeholder input is critical

QUESTIONS AND COMMENTS

Submit questions and/or comments to:

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