Getting an early and complete visibility into Manufacturing test yields (Contract Manufacturing or In-house) and potential root causes is a challenging task. The Manufacturing Operations Detect-to-Correct (MOPS D2C) program at Riverbed Technology, Inc. is leveraging Oracle Endeca Information Discovery to analyze failure trends, mechanisms, and potential root causes across a large dataset (billions of rows). In near real-time, this not only improves its production test yields but also time to visibility while reducing its costs.

As part of the MOPS D2C program, the semi-structured testing log files are processed in Amazon AWS and loaded into HIVE tables. The Oracle Endeca Information Discovery (OEID) installed on-premise is used for information discovery and analysis. The Clover ETL (part of OEID) connects to the HIVE tables on AWS and extracts the information. The data is then loaded into OEID and presented to the end users to enable them to monitor production test outcome and discover new patterns and root causes.

### Business Benefits

- Improve Product Quality
- Reduce Business Operations Cost
- Reduce Audit/ Compliance Risk
- Reduce IT Capital Cost
- Reduce IT Expenses
- Improve production test yield: from 60 to 85%
- Increase production throughput: from 80 to 85%
- Reduced test infra costs (value TBD)
- Reduced Test Manpower costs (value TBD)
- Time for Multi Structured Data Ingestion
- Time for Root Cause (RC) categorization, Issue Fix (IC) categorization and Fix Guide along with color tag
- Search feature for Root Cause and Issue fix Category
- Processes to manage continuous improvements on RC, IC data
- Predictability of issues based on Device Configuration -before Devices come for Testing (Pattern matching, Correlation, Association etc)
- Repeat the above steps in Production-like Environment, so real-time Incident Analysis, Resolution can be done
- Track Testers using the RC, IC and Reports (24 to 48 Hrs delay today)
- Re-Use fix process across devices, test processes
- Provide continuous improvement on RC, IC data
- Manual Fix to Automated Fix process (with review and approval)
- Test Infrastructure Usage vs. Costs

### Tentative list of KPIs impacting the Goals

<table>
<thead>
<tr>
<th>Objectives/ Goals</th>
<th>Information Management</th>
<th>Business Processes</th>
</tr>
</thead>
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**Infosys**

Building **Tomorrow’s Enterprise**

Leveraging Oracle Endeca Information Discovery to improve Production Test Yields
Infosys Offering

- Developed solution to load average daily log processing time of 12 minutes (~1000 Log files & 8-10 Million Records

- OEID integration with AWS for both structured and unstructured information discovery

- Cutting-edge next generation cloud-based technologies like, Amazon EC2, MAPR-Hadoop, Oracle Endeca for Information Discovery

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