Real life experiences with Continuous Controls Monitoring (CCM) on Master Data

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What is Master Data?

- Master data is the core data that is essential for operating an industry.
- The kind of information treated as master data varies from industry to industry, company to company and even individual business units within the same company.
- Master data refers to real life entities pertinent to a business that are physically present in the world.
- For instance: assets, suppliers, customers, products, employees, bank accounts, corporate cards etc. are some examples of Master data.
• Reference data are the supporting tables that make master data more meaningful.

• In most industries, master data will include fields that have recurring numeric text. These fields don’t make any sense. Although when you link these fields to reference data, master data becomes more meaningful.

• Reference data consists of structural information for the industries.

• These might include texts for wage type, texts for organisational unit, texts for business unit, texts for job title, texts for position, details of employee’s group and subgroup etc.
If I'd known they wanted me to use all this info— I would never have asked for it!
Different Types of Master Data Files

• Vendor Master
• Payroll Master
• Corporate Card Register
• Asset Master
• Business Area Data
• Organisational Unit Data
• Equipment Master Data
• Inventory Master Data
• Cost Centre Master Data
• General Ledger Master Data
• Tax Master Data
• User Access Master Data
Why Master data and not Transactions?
Blood Passing through the body Master Data

Different Systems interacting within the business
Why Master Data and Not Transactions?

• An error in the master data may have **ripple effects** in the business processes.
• Incorrect master data will provide **false representation** of the business.
• **Bad decisions** will be made on reports generated through wrong or missing information.
• Incorrect master data might lead to **duplicate transactions**.
• Loss in terms of **lost opportunities**.
• Risk of **leaking information** to the wrong hands.
• **Lack of compliance** with regulations.
• Run over time or require lengthy **rework**.
• Negative impact on **creditability** of the organisation.
Research says that 75% of the transactional errors are caused due to errors in your master files.
What and How Often Should We Monitor Master Data?

The intensity of clean up depends on various factors. These may include, but are not limited to:

• Feasibility to perform the test.
• Risk involved in the test.
• Managements role in the test.
• Availability of data.
• The size of the master data handling team.
• The size of the business.
Steps in Performing Analysis

Planning  
Data Collection  
Analysing the Data  
Applying Analytics  
Generating Exceptions  
Reporting and Monitoring
Steps in Performing Analysis

**Planning**
- Engage with management to determine the list of tests you want to perform.
- Determine the scope and objectives of the tests.
- Identify the source of the data that is being affected by the business process.

**Data Collection**
- Get access to the raw data as a preference.
- If the data is coming from different sources then make arrangement to synchronise them in one application.
- Validate the data and look for completeness and accuracy.
Steps in Performing Analysis

Analyzing the Data

• Study the fields in the table and analyse how each and every field is being impacted by the business process.
• Create data definitions.
• Plan how are you going to achieve your set objective.
• Decide what kind of data analytics techniques are we going to use to achieve the set objectives.

Applying Analytics

• Apply the analytics.
• Perform the tests.
Steps in Performing Analysis

➢ Generate Exceptions
   • Arrive at the exceptions.
   • Validate the exceptions with management to confirm that there are no false positives.

➢ Reporting and Monitoring
   • Transfer the exception to the management for reviewing.
   • Get the feedback.
   • Formalise it as CCM if no changes are required.
   • Ensure follow up procedures are in place.
Steps in Performing Analysis

- Generating Exception Report
- Reporting to Audit
- Reporting to Management
Outcomes and Results, and What We Do With Exceptions

• The exceptions need to be diverted to the right “owner” in order to get them resolved.

• Results must be analysed and a root cause analysis of the exceptions must be conducted.

• In the long run more focus should be placed on evolving a business process rather than fixing errors.

• The results must be time stamped and must have a proper audit trail on details of the exception.
DoH’s Current Master Data Tests

- Accounts Payable tests
  - Duplicate Vendors
  - Vendor with missing address
  - Missing / Invalid Australian Business Numbers (ABN)
  - Vendor ABN deregistered with Australian Tax Office
  - Vendor charging GST and not registered for GST
  - Vendor blocked and then unblocked
  - Vendor with bank account changes
DoH’s Current Master Data Tests

- **Accounts Payable test (cont.)**
  - One time vendors used multiple time
  - Stale Vendors

- **Corporate Card tests**
  - Limit Issues
  - Terminated Card users access not cancelled
  - Card not used
  - Status Match

- **Hybrid tests**
  - Employee Vendor fuzzy logic match
DoH’s Current Master Data Tests

- **Payroll tests**
  - Employee terminated but still having position
  - Employee entering their own data
  - Invalid / Incorrect Tax File Number (TFN)
  - TFN not supplied

- **All System tests**
  - Users who can change master data
  - Segregation Of Duties
How to Get Management’s Attention on Master Data Exceptions

“This really is an innovative approach, but I’m afraid we can’t consider it. It’s never been done before”
How to Get Management’s Attention on Master Data Exceptions

Two important aspects of analysis are:

- Reporting
- Presentation

How effectively and efficiently you are able to report the analysis to different levels of management will determine how efficiently those exceptions would be fixed.
How to Get Management’s Attention on Master Data Exceptions

- Try to understand the psychology – identify their key issues. Get them the result they are looking for and win their confidence.
- Put some easy wins on the board that would attract their attention.
- Provide them with assurance that you are with them and there to help them rather than spying on them.
Exception Reporting
“After closer investigation, it’s become clear that we need to enter more than one value.”
## How to Get Management’s Attention on Master Data Exceptions

### Executive Summary Dashboard

<table>
<thead>
<tr>
<th>Test</th>
<th>Timing</th>
<th>Periodic Trend</th>
<th>Aging</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes to Vendor bank Account</td>
<td>Monthly</td>
<td></td>
<td></td>
<td>Drill Through</td>
</tr>
<tr>
<td>Changes to Vendor Status</td>
<td>Monthly</td>
<td></td>
<td></td>
<td>Drill Through</td>
</tr>
<tr>
<td>Closed items with GST where the vendor is not registered for GST</td>
<td>Monthly</td>
<td></td>
<td></td>
<td>Drill Through</td>
</tr>
<tr>
<td>Consolidated Duplicate Report</td>
<td>Monthly</td>
<td></td>
<td></td>
<td>Drill Through</td>
</tr>
<tr>
<td>Multiple One Time Vendors Details</td>
<td>Monthly</td>
<td></td>
<td></td>
<td>Drill Through</td>
</tr>
<tr>
<td>No Transactions for vendor in period</td>
<td>Monthly</td>
<td></td>
<td></td>
<td>Drill Through</td>
</tr>
<tr>
<td>One time Vendors used multiple times</td>
<td>Monthly</td>
<td></td>
<td></td>
<td>Drill Through</td>
</tr>
<tr>
<td>Open Items with GST where the vendor is not registered for GST</td>
<td>Monthly</td>
<td></td>
<td></td>
<td>Drill Through</td>
</tr>
<tr>
<td>Vendor Missing ABN</td>
<td>Monthly</td>
<td></td>
<td></td>
<td>Drill Through</td>
</tr>
<tr>
<td>Vendors with Missing bank Accounts</td>
<td>Monthly</td>
<td></td>
<td></td>
<td>Drill Through</td>
</tr>
</tbody>
</table>
ACL’s Audit Analytic Capability Maturity Model

- **Ad hoc**: Foresight
- **Repetitive**: Insight
- **Continuous**: Hindsight

Levels:
- **Level 1**: Basic
- **Level 2**: Applied
- **Level 3**: Managed
- **Level 4**: Automated
- **Level 5**: Monitoring

Sophistication
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Questions?