Benefits of Adopting Data Management Practices to strengthen Measurement Analysis

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Wipro Technologies
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About Wipro

- Wipro Ltd is a global information technology, consulting and outsourcing company with 145,000 employees serving over 900 clients in 57 countries. The company posted revenues of $6.9 billion for the financial year ended Mar 31, 2013.
- Wipro started the CMMI journey in 1997 when it was assessed at Level 3
- Wipro is world’s first software services company to be assessed at CMMI level 5 in 1998
- Organization has gone through multiple certifications since then. Currently it is certified at Level 5 for CMMI for Development Model (V 1.3).
- Since last year, organization has started the journey on CMMI for Services for which assessment is planned at start of next year.
- Wipro is currently member of EDM council & has just completed internal gap assessment w.r.t to DMM Model
Wipro IT Services Business

- Wipro provides services in the following areas:
  - Product Engineering Services
  - Managed Services
  - Business Process Outsourcing
  - Consulting Services
  - Analytics & Information Management
  - Infrastructure Management Services

- Of the above areas; Managed Services & Infrastructure Management Services are covered under CMMI for Services

- The case study focuses on our experience in deploying the DMM model (Data Quality & Governance) in the Managed Services projects.
DMM Journey at Wipro

- Wipro has become a member of EDM council (Q1, 2013)
- In order to get Executive buy-in and also to understand the DMM model better, a POC was conducted on Managed services process, limited to the Data Quality Process Areas
- A Self-Assessment was conducted on the DMM model
- A practical approach for implementing the DMM model was formulated and is part of the recommendation and roadmap presented to Executive Management
The Measurement and Analysis (MA) Process Area of CMMI lays out the requirements for process measures, metrics and measurement systems.

DMM model is a process management & Improvement maturity model for the development and management of data and data services.

- Data Governance prescribes establishing a formal mechanism to manage data management within an organization.
- Data Quality helps to understand and apply the processes, criteria, and approaches used to ensure consistent, accurate, complete and timely data delivery across the organization in order to meet the specific goals of the enterprise.

A POC was conducted for implementing Data Quality and Governance Process Areas of the DMM model for Managed Services Processes.
Performance Monitoring System

Program 1
Program 2
Program 3
Program 4
Program 5
Program 6
Program n

Upstream Systems

Master Data

PMS

Transactional Data
- SLA
- Internal Metrics
- Key Performance Indicators
ASSESSMENT

Alignment with Business Objectives
- Review & Gap Assessment of
  - Process Flow
  - Data Models
  - Data Requirements & Usability

Data Profiling
- Analysis of data w.r.t.
  - Data Quality Dimensions

Data Quality Assessment
- Target & Threshold Definitions
- Weightages for DQ Index
- Scoring DQ Metrics

Data Quality Metrics Definition
- Review & Collation of Critical Data Quality Metrics based on:
  - Business Objectives
  - Business Rules for Process Areas
  - Data Quality Dimensions

Data Governance Practices
- Assessment of current practices of Governance and Stakeholder Management

Consolidate Findings
- Alignment & AS-IS Review
- Data Profiling
- Data Quality Assessment
- Data Governance
Data Quality & Data Governance Case Study

Consolidate
- To-Be Process
- Data & Usability Gaps
- Application Controls
- Actions based on Recommendations based on DG and DQ Baselines

Data Governance
- Data Governance Structure
- Tasks
- Roles & Responsibilities
- RACI
- Base-lining of artifacts & metrics
- Action Items based on Recommendations

Compliance & Review
- Audit & Compliance
- Review Process
- Compliance & Dashboard results

Manage
- Strategic Direction & Roadmap
- Change Management
- Stakeholder Management & Communication
- Data Operations
- Threshold and Goals for Metrics

Improve
- RCA
- Corrective Action
- Initiatives for Achieving Target

Governance

Measure, Store & Communicate Metrics
- DQ Dashboard
DQ Dashboard

- Published to Management on Monthly Basis. Inputs from:
  - Scripts running on Database
  - Enhanced Data Quality audits as part of ISO 20 K audits
Conclusion

- While there are other areas where DMM and CMMi for Services are closely aligned, there was a realization during the POC that there is a cohesion between Data Quality & Governance and the M&A process area.

- Implementing Data Quality & Governance ensures:
  - Constant alignment of metrics with business objectives and information needs
  - Improved communication and stakeholder management
  - Operationalizing the process of measurement, review, control and management of data quality
  - Timely corrective action and continuous improvement based on results of objective assessment

- Key benefits of employing the DMM practices w.r.t to CMMI practices:
  - Continuous feedback on Data Quality through Data Quality Reports
  - Clear Role definitions
  - RACI matrix for data governance
  - Identification of improvement plans for data quality
  - Continuous Improvement in quality of data for the organization
  - Strengthening of M&A process
  - Better decision making capability
  - Management Buy-in
Thank You