

Data Architecture, Data Governance, and Success

Intro

- Me
- Sources
 - Experience
 - **NASCIO**: National Association of State Chief Information Officers
 - **Enterprise Architecture Maturity Model**
December 2003
 - **Enterprise Architecture Development Tool-Kit v3.0**
October 2004
 - **Data Governance Parts I-III**
April 2008 – May 2009

Company Assets

- Building
- Computers
- Furniture
- **Data**

Data as an Asset

- “Data and information will outlast applications requiring the management of data and knowledge assets through time as applications, and even business processes change.”
 - Data Governance – Managing Information As An Enterprise Asset Part I – An Introduction

Tools to Maintain a Car

- Wrenches
- Manual
- Duct Tape

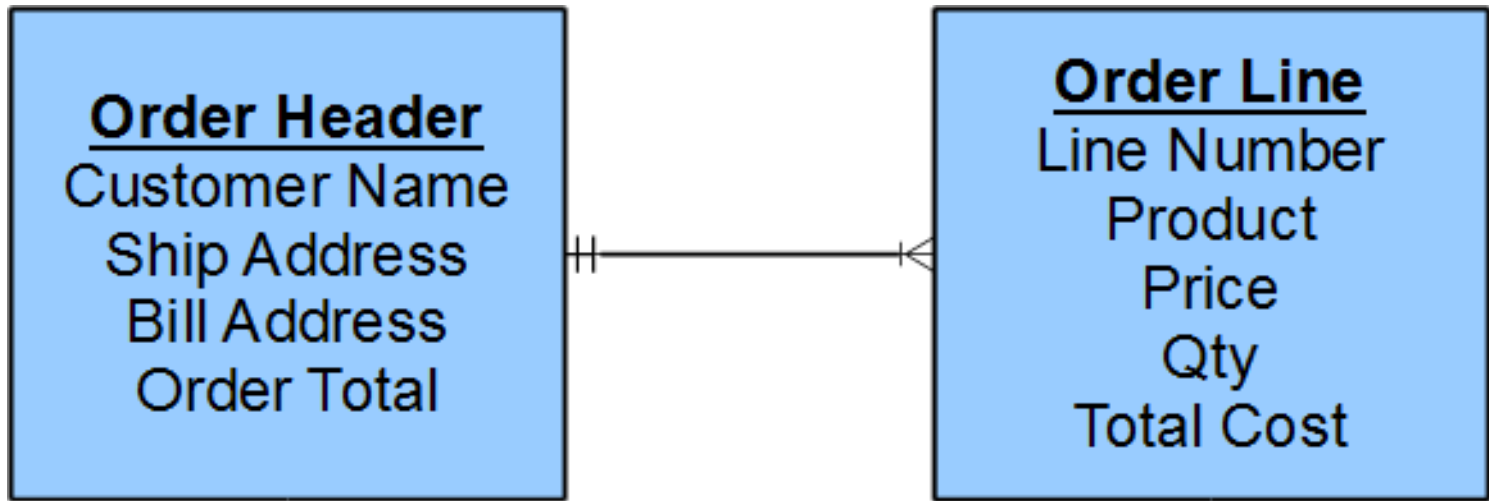
Tools to Maintain Data

- Information Architecture
- Data Models or Model Driven Architecture
- Data Governance

Tools -Enterprise/Information Architecture

- Technology Footprint – Hardware, OS, Version
 - Information Footprint – DBMS, Version
- Technology Roadmap – Servers, Network, Software
 - Information Roadmap – Applications, Master Data

Tools - Data Model



Does this work for Amazon?

Tools - Data Governance

- Standards
 - Review Process
- To be Continued

Data Architecture, Data Governance, and **Success**

Data Architecture, Data Governance,
and **Success**
(Growth!)

Success and Growth

- "Without continual growth and progress, such words as improvement, achievement, and success have no meaning."
- Benjamin Franklin
- "Growth is never by mere chance; it is the result of forces working together."
- James Cash Penney, Founder of JCPenney
- "If you don't know where you're going, you'll wind up somewhere else."
- Yogi Berra

Tale of Two RVs



Standards Help Growth



The Beginning

- “If you don't know where you're going, you'll wind up somewhere else.”

- Yogi Berra

Sharky's Corollary

- “If you don't know where you are, you don't know how to get where you're going!”

- Sharky Jacaway, famous Data Architect

Enterprise Architecture Maturity Model

- Level 0 – No Program

- There is not a documented architectural framework in place at this level of maturity. While solutions are developed and implemented, this is done with no recognized standards or base practices. The organization is completely reliant on the knowledge of independent contributors.

- ...

- Level 5 - Continuously Improving Vital Program

- The processes are mature; targets have been set for effectiveness and efficiency based on *business and technical goals*. *There are ongoing refinements and improvements based on the understanding of the impact changes have to these processes.*

Enterprise Architecture Maturity Model

- Level 0 – No Program
 - No recognized standards or base practices
- Level 1 – Informal Program
 - Defined standards, but informal processes
- Level 2 – Repeatable Program
 - Defined standards and processes, repeatable, metrics
- Level 3 – Well-Defined Program
 - Standards and processes are defined throughout the organization
- Level 4 – Managed Program
 - Metrics are analyzed and acted upon
- Level 5 – Continuously Improving Vital Program
 - Targets are set based on business and technical goals

Zero to Standards

- Hurdles
 - Cultural Change
 - Time
 - Upper Level Support
- Rewards
 - Consistency
 - Singularity (Reduction of Redundancy)
 - Fewer Growing Pains

Hurdles

- Cultural Change
 - This is a pain
 - ‘I know what I’m doing’
- Time
 - ‘Extra’ steps, ‘Extra’ time
 - ‘I have to wait?!’
- Upper Level Support
 - Conflict Resolution
 - ..but we’ve already spent weeks, (months) working on this

Rewards - Consistency

Occupation	January 2002	January 2004	January 2006	January 2008	January 2010	January 2012
Total, 16 years and over	3.7	4.0	4.0	4.1	4.4	4.6
Management, professional, and related occupations	4.6	5.0	5.2	5.1	5.2	5.5
Management, business, and financial operations occupations	5.2	5.5	5.5	5.4	5.4	5.9
Management occupations	5.6	6.0	6.0	6.0	6.1	6.3
Business and financial operations occupations	4.2	4.5	4.7	4.6	4.6	5.2
Professional and related occupations	4.2	4.7	5.0	4.9	5.0	5.4
Computer and mathematical occupations	3.2	4.8	4.8	4.5	4.8	4.8

Bureau of Labor Statistics
Employee Tenure Summary – Sept. 2012

Rewards - Singularity

- 'I just built a table for x'
- 'I didn't know anyone else was working on x'

Rewards – Fewer Growing Pains



Data Governance - Tools

- Standards
 - Specific
 - Enforceable
- Best Practices
 - Proven over time
 - Suggested, but not enforced
- Trends
 - New methodologies

Data Governance - Processes

- Reviews
 - Scheduled
 - Specific Responsibility
- Escalation Path
 - Conflict

Data Governance – Getting Started

- Management Support
- Standards
 - Start Simple!
- Reviews
 - Set Schedule
 - Frequency!

Data Governance - Goal

- Enterprise Architecture Maturity
- Level 2 – Repeatable Program
 - Defined standards and processes, repeatable, metrics

Personal Goal



Success and Growth

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Resources

- www.nascio.org
 - Publications -> Subject -> Enterprise Architecture
- www.dama.org
 - www.dama-ps.org Seattle chapter
 - www.damapdx.org Portland chapter