

# How Will You Develop and Implement a Data Strategy?

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# What's a Data Strategy – and Why Do I Need One?

- 60% of companies say they need one
- 40% of the 60% assume they HAVE one
  - But they don't know who developed it, who was supposed to develop it, and they don't know who is using it
- Why DM can't succeed without one
  - What 859 says about data strategies
- How 859 principles and practices both drive and profit from a data strategy

# The Data Strategy

- One of the most commonly misunderstood and missing components in the data arena
  - Stovepipe and bottom-up applications
  - Evolved states, rather than planned and structured outcomes
  - Complicates the improvement process – how to improve that which is not well-understood?
- CEOs and corporate officials routinely cite the data strategy as the missing component for success
  - Data redundancy, complex and erroneous IT portfolios
  - The \$64,000 Question: When can a proposed system architecture replicate existing applications?
- Data strategies are hard to develop – but they require commitment to the future and understanding of the present

Metadata management identifies how data should be constructed, what data exists, and what the meaning of that data is

# Challenges to Overcome

- The **value of data** is not well understood, by organizations
  - Once it is recognized, **data is power** – and control becomes essential
- Data strategies are usually addressed by sub-tiers of the organization
  - **Piecemeal approaches**, solutions result
- Suboptimized solutions yield **inconsistencies** that create problems for interfacing or developing systems that can be easily integrated
- Target systems (ERPs, PDMs) bring with them a variety of **diverse standards**, naming conventions, codes, and DBMS platforms
- A **bottom-up modification strategy** is too expensive to create, and the downward spiral begins
- **Non-scalable applications** or platforms, **bad SLAs**, sacrificial lambs  
...
- If you bring up “data strategies”, you’re “**not a team player**”
- Legacy systems that are working through it all are ultimately the best enemy of the total solution approach
  - Rogue databases, stealth applications are deliberately not disclosed to IT

## Challenges to Overcome (2)

- IT whines that it can't fix the problems created by the organization
  - IT is the first culprit – by **not having a data strategy in place**
  - Who can blame the organization for not wanting to deal with IT?
- No organizational standards exist, no blueprint for integrating with other applications

The data strategy is the organization's map – without it, there's no pathway and the destination or the plan to get there is unknown

# Why a Data Strategy is Needed

- Chaos reigns – even if it's not obvious
  - Dirty data, inconsistent data, redundant data, poor system performance, no availability, little accountability, dissatisfied users, inability to integrate applications or data
  - No one is working to a scheme – grand or otherwise
- Less risk, higher success rate, higher quality systems
- A data strategy provides the CIO/CTO with a rationale to counter arguments for immature technology and data management approaches that are inconsistent with existing strategy
  - So it had better be RIGHT! And you had better develop it!

# ANSI-859: The Role of Data Strategies in DM

## ● New components of the evolved DM process model

- Risk Assessment
- Concept of Operations
- Data Strategy

## ● Data Strategy

- What is it that you plan to do with the data?
- Who are the users for the data?
- Do you need to “acquire” the data, or can you simply “access” it?
- Other elements

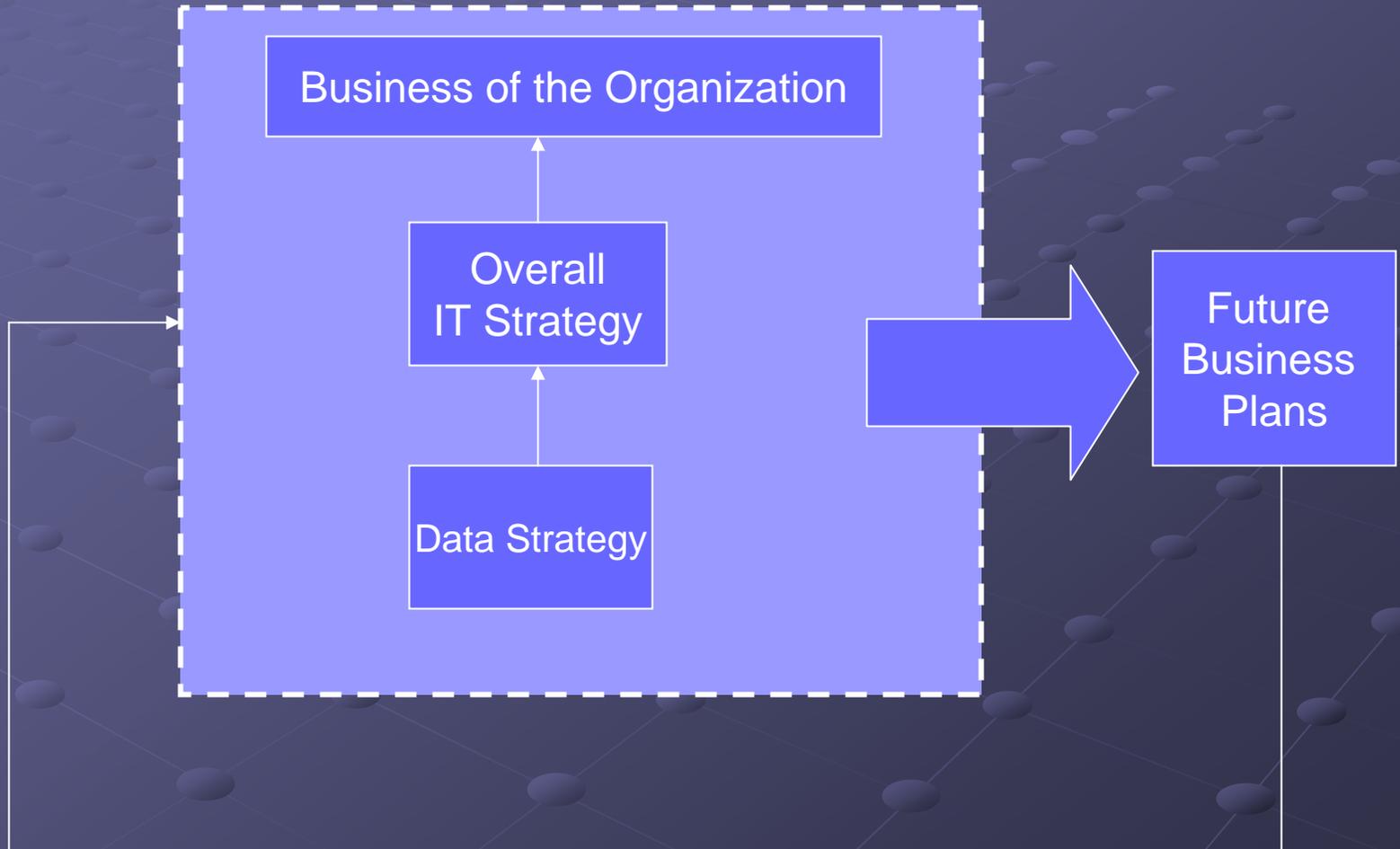
# So What are IT's goals?

## And How Can You Support Them?

- Deliver systems faster
- Improve relations with the business community
- Improve the quality of delivered systems
- Reduce risk and reduce failures in applications development
- Reduce costs
- Attract and retain good people
- Increase the productivity of applications development
- Provide controls for the IT environment
- Improve the productivity of the people who use the data

“Data” is the foundation of IT – not hardware and software

# The Data Environment



# Components of the Data Strategy

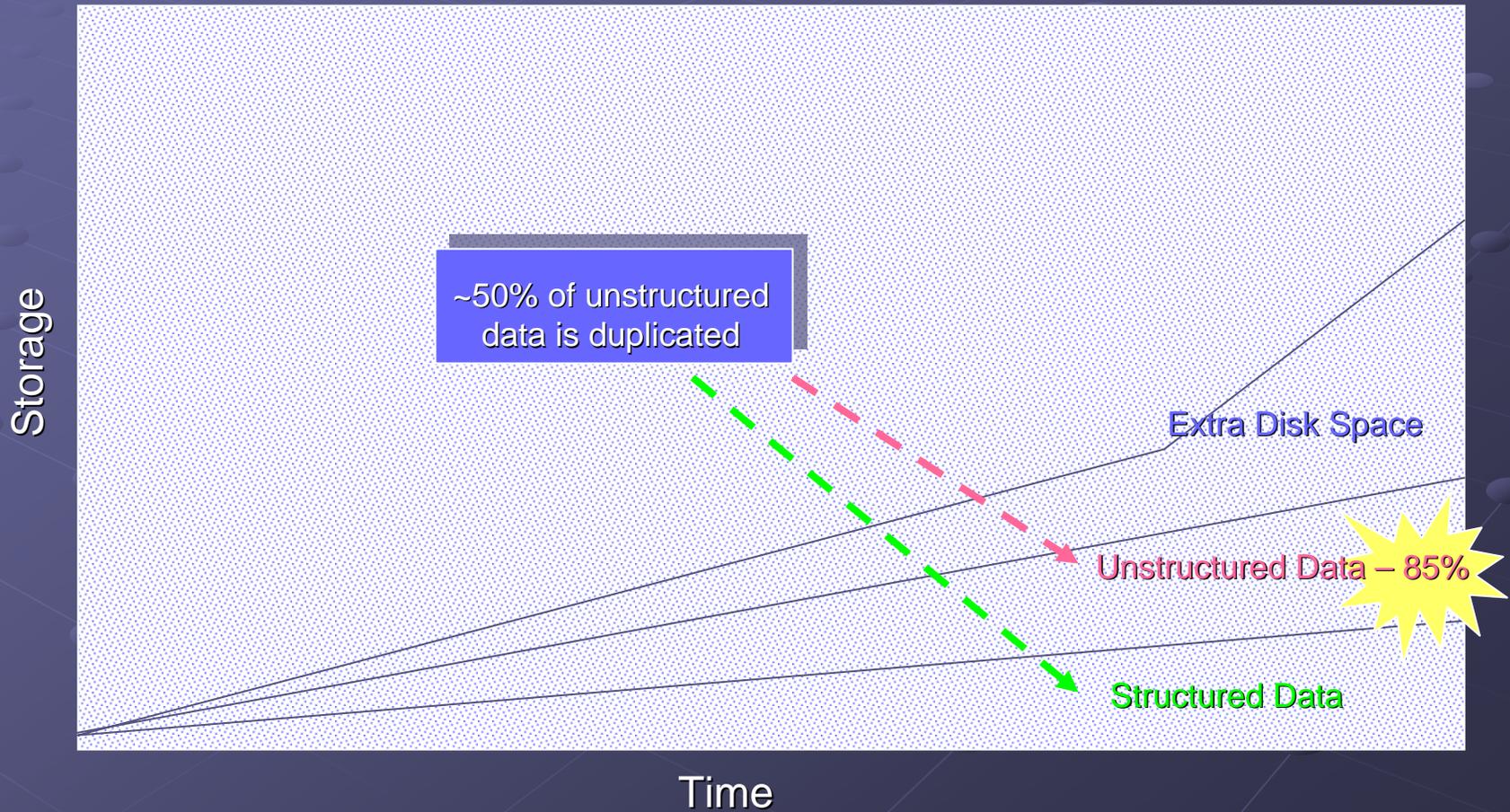
And how **ANSI-859** supports it

- Data integration
- Data quality
- Metadata
- Data modeling
- Organizational roles and responsibilities
- Performance and measurement
- Security and privacy
- DBMS selection
- Business intelligence
- Unstructured data
- Business value of data
- Return on investment
- Stewardship for Data

# Bad Silver Bullets

- ERP systems
- Data warehousing
- Customer relationship management
- Enterprise application integration

# Storage versus Time



# Unstructured Data

- Data types that cannot be normalized and stored in a hierarchical database
  - Relational, network, etc
- But these data types should nonetheless have
  - Organization
  - Categorization
  - Storage
  - Retention
  - Archival
  - Housekeeping (deletion, etc)
  - Search
  - Delivery
- Emails, documents, spreadsheets, reports, pictures, audio files, video files, and general content

“Content” – not in a web context, but in an organizational context

# Getting Started

- Measure – costs, gains
- Educate – ROI, profit and loss statement perspective
- Get sponsorship – Executive, business person, respected and visionary advocate (pick out the person that you know would be your most powerful challenge to getting this done)
- Prioritize – most critical and common data to most areas; regulatory and statutory data
- Research – knowledge of your business data, semantics, derivation/lineage, security and privacy considerations, ownership, business rules, entry and exit points for data in the organization
- Recruit – business-driven activities, subject matter experts, technicians, data architects ...
- Plan – assess and discuss candidate approaches, tools, and architectures to determine how to best integrate data into your environment. Ongoing projects, identify opportunities to arrest further proliferation of redundant data
- Execute – develop a tactical plan for data integration, data consolidation, and measure it! Benefits are identified? Realized? Adjustments needed? Use your metrics to inform management's judgement
- Adapt – your plan, your approach, your perspective, your method ...