The First Step in Data

Quantifying the Value of Data

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Presentation Objective

- Discuss how data creates value to a company
- Quantify that value creation
- Review practical methods for communicating value of data
- Agenda:
  - Approaches to data
  - Quantifying value
  - Communicating value
Categories of Value

- Data as an asset
- Contribution to brand effectiveness
- Improved productivity
- Decreased cost
- Reduced risk
- Increased revenue
APPROACHES TO MANAGING DATA
Enterprise Information Management

GOVERNANCE

Information Strategy

- Business Intelligence and Performance Management
- Data Management
- Information Asset Management
- Content Delivery
- Content Management

Architecture and Technology Enablement

ORGANIZATIONAL ALIGNMENT

Provides a holistic view of data in order to manage data as a corporate asset.
Enterprise Data Management

Ensure data is available, accurate, complete and secure

- Traditional & Big Data Governance
- Master Data Management
- Reference Data Management
- Metadata Management
- Big Data Management
- Data Quality Management
- Data Architecture
- Data Retention/Archiving
- Privacy/Security

Develop and execute architectures, policies and procedures to manage the full data lifecycle
Data Governance Assessment

- Vision & Mission
- Objectives & Goals
- Alignment with Corporate Objectives
- Alignment with Business Strategy
- Guiding Principles

- Operating Model
- Arbiters & Escalation points
- Data Governance Organization Members
- Roles and Responsibilities
- Data Ownership & Accountability

- Policies & Rules
- Processes
- Controls
- Data Standards & Definitions
- Metadata, Taxonomy, Cataloging, and Classification

- Statistics and Analysis
- Tracking of progress
- Monitoring of issues
- Continuous Improvement
- Score-carding

- Collaboration & Information Life Cycle Tools
- Data Mastering & Sharing
- Data Architecture & Security
- Data Quality & Stewardship Workflow
- Metadata Repository

- Strategy
- Business Impact & Readiness
- IT Operations & Readiness
- Training & Awareness
- Stakeholder Management & Communication
- Defining Ownership & Accountability

- Technology
- Change Management

- Organization

- Communication
- Mass Communication
- Individual Updates
- Mechanisms
- Training Strategy

- Data Governance
DATA AS AN ASSET
Data is an Enterprise Asset

- What is my data worth to the enterprise?
  - How do you value an intangible asset?
- How much are we losing by not managing our data?
  - In terms of both increased costs and reduced opportunities.
The Value of Data Assets

- Determine the “theoretical value” of information
  - Somewhere between 20% - 60% of the value of the company
- Consider “depreciation” based on data changes, i.e. approximately 10% of the population changes addresses, emails, etc. per year
- Analyze the maturity level of Data Governance to show the utilization value of information assets
- Calculate the value to be derived by increasing the level of Data Governance

- Full data governance maintains the integrity of the entire asset, while no data governance allows the depreciation to mark down the value of the asset to zero over time
## Calculating the Value of Data

<table>
<thead>
<tr>
<th>Element</th>
<th>Range</th>
<th>Calculation</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of Company</td>
<td></td>
<td></td>
<td>$10,000,000,000</td>
</tr>
<tr>
<td>Value of Information</td>
<td>20% - 60%</td>
<td>20%</td>
<td>$2,000,000,000</td>
</tr>
<tr>
<td>Depreciation of Information</td>
<td>10% - 20%</td>
<td>10%</td>
<td>$1,800,000,000</td>
</tr>
<tr>
<td>Maturity Level</td>
<td>1 - 4</td>
<td>1</td>
<td>$450,000,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>$900,000,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>$1,350,000,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>$1,800,000,000</td>
</tr>
</tbody>
</table>

**Opportunity for Value**
CONTRIBUTION TO BRAND
• Interbrand: 80% of the value of brand is related to 10 distinct factors: 4 internal and 6 external. The four internal factors are: Clarity, Protection, Commitment and Responsiveness. For brand valuation, the factors are equally weighted.

• Customer data has a direct correlation to the values assigned to Commitment and Responsiveness.
## Calculating the Value to Brand

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<tbody>
<tr>
<td>Value of Brand</td>
<td></td>
<td></td>
<td>$1,000,000,000</td>
</tr>
<tr>
<td>Impact of Factors on Brand</td>
<td>80%</td>
<td>.80</td>
<td>$800,000,000</td>
</tr>
<tr>
<td>Impact of Customer Data</td>
<td>2 out of 10 equally weighted</td>
<td>.2</td>
<td>$160,000,000</td>
</tr>
</tbody>
</table>
PRODUCTIVITY
Calculating Productivity Impact

• Manual Data Reconciliation
  ▪ Inputs:
    - Employee time
    - Opportunity cost of Employee time

• Data Access and Retrieval
  ▪ Inputs:
    - Above
    - Incremental cost of hardware, software, and process

• Project Delays
  ▪ Inputs:
    - Above plus
    - Increased consulting fees
    - Opportunity cost of delay
## Calculating Productivity Impact

<table>
<thead>
<tr>
<th>Productivity Loss</th>
<th>Quantification of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual Data Reconciliation</td>
<td>$\text{Impact} = E_1(\text{Hours} \times \text{FTE cost}) + E_2(\text{Hours} \times \text{FTE cost}) + \ldots + E_n(\text{Hours} \times \text{FTE}) + \text{[opportunity cost of } E_1, 2, 3, \ldots \text{ n]}$</td>
</tr>
<tr>
<td>Data Access and Retrieval</td>
<td>$\text{Impact} = [E_1(\text{Hours} \times \text{FTE cost}) + E_2(\text{Hours} \times \text{FTE cost}) + \ldots + E_n(\text{Hours} \times \text{FTE})] + \text{[opportunity cost of } E_1, 2, 3, \ldots \text{ n]} + \text{(incremental cost of data software, hardware, and support)}$</td>
</tr>
<tr>
<td>Project Delays</td>
<td>$\text{Impact} = [E_1(\text{Hours} \times \text{FTE cost}) + E_2(\text{Hours} \times \text{FTE cost}) + E_n(\text{Hours} \times \text{FTE})] + \Delta\text{consulting cost} + \Delta\text{support cost} + \text{opportunity cost of delay}$</td>
</tr>
</tbody>
</table>
• Estimate 10 FTEs allocated to reconciling data
• Estimated 5-7 additional FTEs dedicated to manual data collection/update processes
• The accelerating adoption of regulation will continue to increase the demands for more transparent data and flexible reporting
• Targeting a 10% improvement in Year 1 with the ultimate goal of reducing those costs by 40% over 3 years
• EPM Project delays due to bad data resulted in 2 year delay, $3.1 million spent with only 50%-60% of the functionality delivered (cost and time increased ~1.5x initial estimate)
OTHER COSTS
Impacted Costs

• Technology costs
  ▪ Data movement
  ▪ Increased configuration/customization

• IT Resource Costs
  ▪ Work-arounds
  ▪ Add-ons
  ▪ Re-dos

• Marketing Costs

• Personnel Costs
Actual Value Identified

• Reduce call center agent time searching for client information from 5 min to 2
  ▪ Improved productivity could enable 1-2 people to be reassigned to other high value activities
  ▪ Improved Customer Satisfaction with improved call handling time

• Improved marketing effectiveness
  ▪ Productivity improvement of 5-10% would enable marketing team to increase number of executed campaigns
  ▪ Reduced number of emails sent to inaccurate or duplicate email addresses (Quantified at 5¢ per email)

• Reduce sales rep commission reconciliation from 3 days/month to 3 hours/month
REDUCED RISK
Risk Categories

• Strategic
  ▪ Competition
  ▪ M&A

• Financial
  ▪ Cash flow and collections

• Regulatory
  ▪ Regulatory Penalties
  ▪ Cost to adhere to Regulations
  ▪ Opportunity cost to respond to regulators

• Operational
  ▪ Supplier exposure
  ▪ Employee turnover
  ▪ Loss of information
• Restatement cost 4-5 million in professional services, not including soft dollars (FTE)
• Consulting fees are $9m for audit; 40% of audit cost spent on gathering data
• Employee burn out was consistently cited as major risk of maintaining the status quo
• Credit Risk Rating remediation project resulted in over 2,500 hours of effort
• Global expansion (additional markets and 24x7 processing) will continue to exert pressure on manual processes, further increasing the likelihood of an oversight leading to reporting mistakes or noncompliance.
[ INCREASED REVENUE ]
Categories of Value to Revenue

- Increased “walletshare”
- Improved "household" penetration
- Increased upsell/cross-sell
- Improved marketing - response rate, purchase value per response, campaign effectiveness and optimized segmentation
- Increased sales effectiveness and face time
- Reduced churn
- Improved lifetime value of Customers
COMMUNICATING VALUE
Translating Data Value into Business Value

• Communication is key to maintaining commitment

• The right metrics help maintain alignment
  ▪ Metrics have no value if they aren’t aligned to the interests of a stakeholder
  ▪ Ensure there is some way of measuring how the improvement in data is helping stakeholders progress toward their goals
  ▪ What information do you need to track and measure to those goals?

• Translate the value statement into the language of the recipient
Sample: Creating Business Value

**Concerns**
- Poor Data Quality & Lack of Governance
- Fragmented System Landscape
- Difficulty accessing Data & Reports / accuracy
- Difficulty targeting / profiling
- Lack of Data

**Opportunities**
- Enable Sales Force Automation and other tools
- Improved Access to accurate centralized Customer Data
- 360° View of Customer - “single source of truth”
- Support ERP roll out and other system changes
- Improved Customer Data Maintenance Processes
- Common 3rd Party Customer Data Acquisition & Integration processes
- Improved reporting and analytics
- More accurate payment reconciliation
- Common Customer Definition

**Benefits**
- Increased business effectiveness and agility
- Facilitate Customer-centricity
- Increased up-selling and cross-selling
- Automated customer engagement
- Faster time to market
- Improved customer experience
- Improved productivity
- Improved ability to measure success
- Reduce data maintenance costs
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Questions?

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