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Peter Balisteri is the vice president and chief information officer at Merchants Insurance Group, headquartered in Buffalo, N.Y.

Along with his work in property/casualty insurance at Merchants, Peter has a variety of experience in information technology across an array of industries, including banking, manufacturing, higher education, and healthcare. His experience encompasses a diverse set of functional roles within IT, but is focused on transformative initiatives emphasizing close alignment between business capability requirements and technology delivery. He has led data warehouse and information management initiatives in various industries, including financial services.

Three Session Ideas
Tools or tips you learned from this session and can apply back at the office.

1. 

2. 

3. 
Topics

• Overview
  – Common Architecture
  – Lexicon
• Uses and Strategies
• Data governance
• Big Data
Data Warehouse – What

“A data warehouse is a subject-oriented, integrated, non-volatile, time-variant collection of data to support management needs” – William H Inmon

“Data warehousing incorporates data stores and conceptual, logical, and physical models to support business goals and end-user information needs. A data warehouse (DW) is the foundation for a successful BI program.” – The Data Warehouse Institute

The Data Value Chain

<table>
<thead>
<tr>
<th>Data Sources</th>
<th>Data Provisioning</th>
<th>Data Warehouse</th>
<th>Information Delivery</th>
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<tbody>
<tr>
<td>Operational Data + Policy Admin + CRM + Finance</td>
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<td>External Data Sources</td>
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<td>Extract, Transform, Load (ETL)</td>
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<td>Raw Data (DW)</td>
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2015 Connect Differently - Balisteri
Starting with a plan

• Avoid “build it and they will come” trap

• Alignment with business priorities
  – Insulation from disruption
  – Determine where the biggest bang is

• Assess what underlying technology you will need

Building Block Approach

Operational Data (Retrospective)

Data Marts by Departments/Domain
- Retention Reports
- Policy Tenure
- Claims Reports
- Product MIX

Progressive data governance

Data Marts For Enterprise
- State Compliance Reporting
- Statistical Reporting
- Reinsurance Reporting

Analytic Data For Department/Enterprise
- Pricing Analytics
- Risk Assessment
- Predictive Modeling
- Fraud Modelling

Analytic Data (Predictive)
Data Governance & Metadata

• Why do you need Data Governance:
  – To establish a “Single Source of the Truth”
  – To encourage business integration as opposed to business silos
  – To support the harmonization of business processes
  – Confidence in the data

• Why do you need Metadata Management:
  – To promote a common understanding
  – To document data about the data
  – To document agreements on business rules on an enterprise-wide basis
  – Confidence the data

Big data for insurance

• Examples of Big Data sources for Insurance:
  – Telemetry data from devices or aggregators to support UBI programs
  – Social feeds to understand customer behavior, preferences and sentiment analysis
  – Sensory data to support loss prevention programs

• Internet of Things (IoT) insurance markets will require Big Data management
  – Dash cams, body cams, wearables, drone data, building sensors, surface sensors, autonomous vehicles, smartphones/watch
Dealing with big data

• Take a step back and see how it fits in your organization
• Don’t “hoard” data if you don’t need to
• Introduce Big Data technology as required
  – Hadoop, aggregator feeds, NoSQL databases etc.

• Don’t try to fit the square peg of traditional insurance data in the round hole of Big Data:
  – Adopt a “mash as required” approach.

Questions?