# IBM Cognos Performance Better Intelligence. Better Business.

## Lessons Learned: Building a New Enterprise Foundation for Business Intelligence

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## The Timberland Company

- \$1.4B revenue; 5,600 employees
- Manufacture, source, distribute and sell in 76 countries through a network of wholesale, distributor, retail, franchise and eCommerce channels













## The Ironside Group

- Northeast based Consulting firm focused on helping it's customers leverage information as a strategic asset
- Competencies include:
  - Enterprise Business Intelligence
  - Performance Management
  - Data Warehousing
  - Training
- IBM/Cognos Partner (Since 1999) & Software ValueNet Member
- Headquarters in Lexington, MA
  - Branch Offices in (Cleveland, OH and Deer Park, NY)
- Certified and Experienced Consultants
- Trusted, Flexible, and Dependable Partner









## The Journey to Global Enterprise BI

- 1. Where we were The Old Road
- 2. Where we went The New Road
- 3. Lessons learned Pitfalls Along the Way
- 4. Where we are going Getting back on track





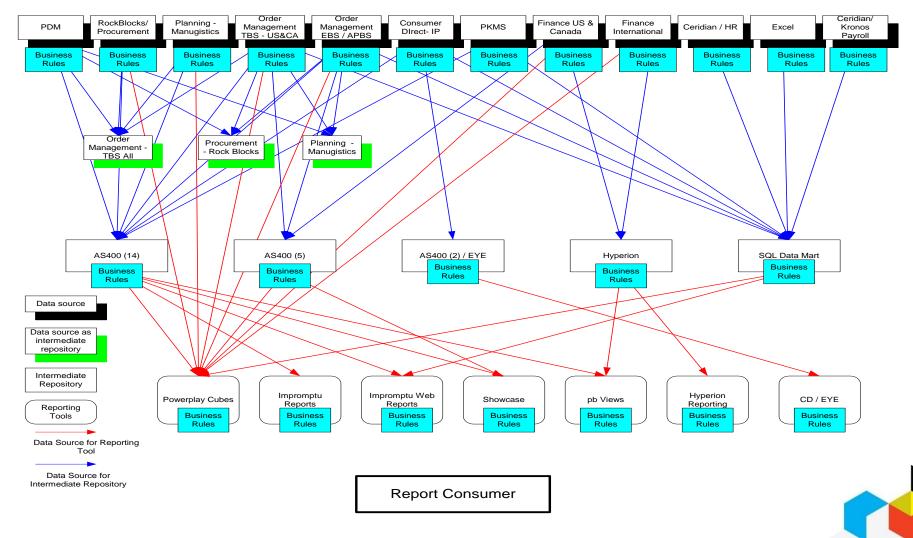
## The Old Road - Compartmentalized Bl

- Regions and Departments defined their own requirements
- Single named element could have many different definitions or vice versa
- Difficult to roll up global revenue or margin numbers across all channels
- Users lacked synergy with peers across geographic regions and distribution channels.
- Result was an "enterprise" solution that spanned 200 PowerPlay Cubes
- This architecture was expensive to manage and maintain.





## The Old Road - Complex Architecture





#### How do we embark on a new road?

- How could we remove the silos of information?
- Consolidate data into one data repository

- How could we eliminate reconciliations between the different reporting applications?
- Standardize metadata within IBM Cognos 8

- How could we align on common business definitions?
- Drive towards global requirements





#### How do we embark on a new road?

- How could we reduce the cost of maintaining multiple marts, cubes and reports?
- Maintain one global copy of the data and one global copy of the BI objects

- How could we respond to changes in the business effectively?
- Reduce the number of objects that needed to be touched for each change – maintain one copy, not multiple copies





#### **Our Solution**

Consolidate and standardize within a single Data Warehouse

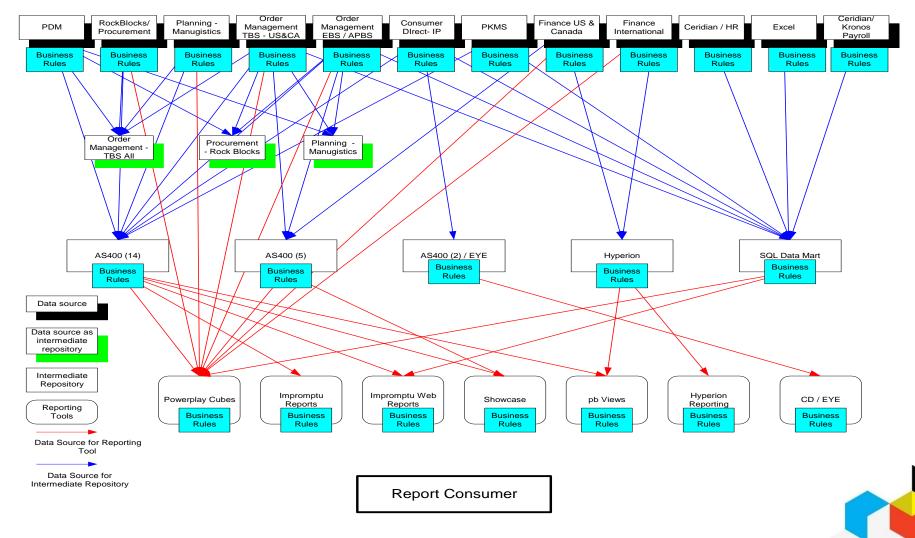
Implement a global reporting strategy using IBM Cognos 8

Drive towards global requirements



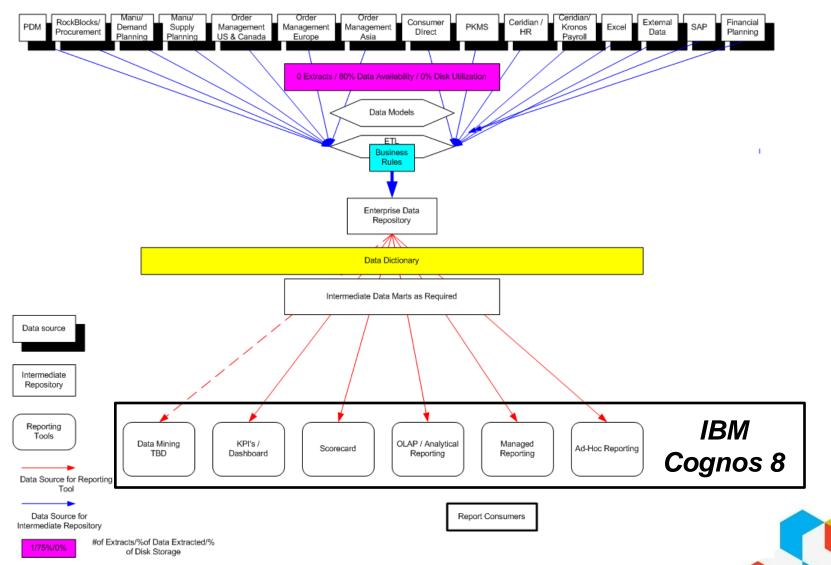


#### Out with the old...





#### And in with the new





#### Our New Road - Rollout of the Teradata Data Warehouse

- Build the data warehouse by subject area starting with global wholesale orders
- Very large initiative
  - 34 Unique sources
  - 85 Million Records
- Near real-time updates
  - 3 regional systems in 3 different time zones





## Our New Road - Rollout of IBM Cognos 8 BI

- Initial Focus
  - Re-create selected reports giving them a global view
  - Required alignment on standard dimensions and measures employed by the different geographic regions and channels of distribution.
  - Achieve operational efficiencies by reducing time to gather source data and assemble into management reports
- Survey analysts for usage of key reports
  - Compile listing of common measures
  - Prioritize the migration of reporting initiatives





## Major Pitfalls Along the Way

- 1. Unanticipated Complexity
- 2. Struggle to Deliver Initial Business Value
- 3. Lack of Clarity and Engagement
- 4. Lack of Documentation & Standards
- 5. Low Rate of User Adoption





## Major Pitfalls – Unanticipated Complexities

- Initial Data Warehouse Requirements:
  - Near real time data loads introduced unexpected challenges
  - Wholesale orders from three separate regional transactional systems.
- First Business Intelligence Initiative:
  - Large, complex report with over 50 measures
  - Measures were not well understood by the business
  - As we dove deeper into requirements we uncovered a data source not planned to be loaded into the data warehouse





## Major Pitfalls – Struggle to Deliver Initial Business Value

Many milestones were achieved behind the scenes but...

- No short term win could be achieved
  - Deliverable was "all or nothing"
  - No opportunity for incremental value
- Development time was months not weeks due to concurrency with:
  - Data Warehouse Implementation
  - Data Validation
  - Driving global definition of dimensions and measures
  - First true attempt at querying our data warehouse





## Major Pitfalls – Lack of Clarity and Engagement

- Established practice of documented business requirements was not enforced
- Global alignment was stifled by a lack of regional resources
- Published report did not meet the needs of the global audience
  - Had global requirements but US decision makers introduced a bias
- Lost the enthusiasm of the business users as a result of long development cycles and infrequent engagement along the way



## Major Pitfalls - Lack of Documentation & Standards

- Business definitions known by individuals but not accessible for all to review
- Standards were primarily sourced from the US region
  - Resulted in confusion among users, even those within the US as to what the true definition of many measures and attributes really were.
  - Uncovered more regional operational differences than anticipated which widened the gap between the requirements and the initial delivery
  - Moved forward without first establishing a sustainable strategy for documentation



## Major Pitfalls – Low Rate of User Adoption

- Users had a high level of comfort and satisfaction with the legacy platform
- No compelling reason to move to the new platform as there was nothing new
- Same report with new look and delivery method
- Struggled to maintain viability of the new EBI Platform





## Getting Back on Track – Critical Success Factors

- 1. Deliver Incremental Value
- 2. Gather and Document Requirements
- 3. Implement Global Standards and Documentation
- 4. Drive Adoption with Innovative Solutions





#### Deliver Incremental Value

- First initiative should have been simpler in nature
  - Would have ensured the invaluable quick win
  - Built confidence in all of the stakeholders
  - Opportunity to shakedown the process
- We established a release strategy
  - Defined the scope within manageable work units of 8 to 12 weeks.
  - Focused on alignment of all stakeholders
    - Sponsors
    - Consumers
    - Developers





#### Deliver Incremental Value

## **Project Methodology**

- Requirements can change and evolve BI is iterative.
- Adapted our project management approach to best suit the project at hand – <u>Be Flexible</u>
- Waterfall Model
  - Those based upon well established business processes and familiar information
- Iterative Model
  - Those based upon emergent information and result in evolving solutions
- All projects need to follow a process to maintain control
  - We settled on a maximum of three learning cycles





## Gather and Document Requirements

- Established representation of the business by region and functional area
  - It was difficult to gather requirements and engage from afar
  - We put resources on the ground
  - The Timberland Solutions Group
    - North America, Europe and Asia
- Kept business engaged throughout the process ensuring 'buy in'
  - Requirement and Design Reviews
  - Encourage creativity and innovation





## Implement Global Standards & Documentation

- Established strict naming conventions across the application
  - Example: What is net sales? (Net Discount) less all Returns
- Determined a single definition for each element
  - Made sure we had a decision maker driving those definitions
- Applied a naming standard to all IBM Cognos objects
  - Before: Quarterly Order Analysis Report
  - After: FIN-0001 Quarterly Order Analysis
  - Provided a common language for business and IT
- Needed to publish our new standards in a manner that was easily accessible to everyone



## Implement Global Standards & Documentation

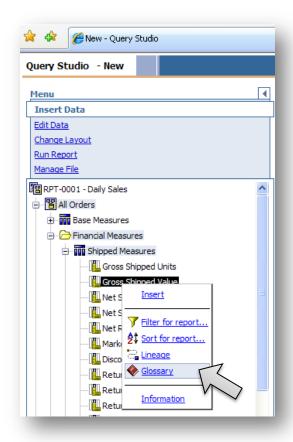
- Initially, documentation lived on network shares
  - Difficult for users to find and navigate.
- We needed a centralized web based solution that was easy to maintain
- An Enterprise Wiki was the ideal platform
  - Enables collaboration and comments
  - Cross referencing of information discourages duplication
  - Opportunity for Integration with IBM Cognos 8

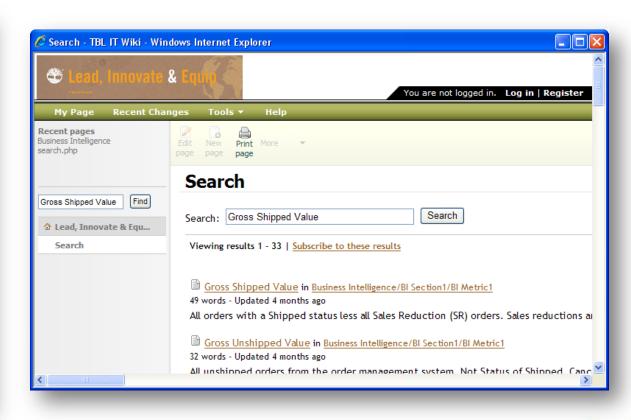




## Implement Global Standards & Documentation

Integration of IBM Cognos 8 and the Enterprise Wiki







## **Driving Adoption with Innovative Solutions**

- We gave them something they don't already have
  - Rolling out Global Sell-Through Reporting
  - Tapping into previously unviable data sources to enable regional insights
  - It has generated excitement and renewed enthusiasm.
- Fresh content encourages creativity and productivity
  - Keeps senior management focused on your project
  - Drives adoption
  - Increases the viability of the platform and helps to ensure continued funding.
  - Entices non-traditional users to utilize the service.



#### Technical Conclusions

- We discovered that there isn't a single "right way" to approach data modeling for BI.
- We leveraged all of our proficiencies and various technologies for their strengths.
  - Third Normal Form, or "Snowflake" data modeling was great for broad, but low level detailed analysis.
  - Multi-Dimensional or "Star Schema" data modeling was an excellent approach for high level, aggregate analysis in a narrower scope and creating DMR packages.
  - Cognos PowerCubes offered great performance, and a familiar interface with all the added benefits of the IBM Cognos 8 platform.





## Constant Learning and Evolution

- We're on the right track
  - 1st Consolidated global view of wholesale sales
  - 1st Combination of wholesale and retails sales
  - 1st Alignment of financials with sales data
  - 1st Insight into emerging markets via 3rd party retailers
  - 1st Consolidated view of corporate strategic initiatives
- But its not over...
  - Every day is a learning day
  - This is a journey





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