Business Intelligence Rationalization – Building a Roadmap

BI Rationalization is the process of consolidating and standardizing point business intelligence solutions, both formal and informal systems, into a small number of managed platforms thereby…

- lowering costs,
- decreasing time-to-information access,
- increasing accuracy and repeatability,
- ensuring one version of the truth in all metrics, and ultimately…
- improving the decision-making ability of the enterprise.

How can I tell if my organization might benefit from BI Rationalization? Take this simple test:

- Do you have more than 5 Data Warehouse or Reporting Systems in your enterprise?
- Do you have more than 3 Business Intelligence toolsets deployed in your enterprise?
- Does answering a question that crosses multiple business functions require that you run reports or queries in multiple reporting systems and consolidate them by hand?
- Do you have multiple transaction systems that provide the same or similar information feeds to multiple reporting systems?
- Can you run a report in your environment that generates two different answers to the same question?
- Do you spend more time gathering the data to answer a business question than you spend analyzing the data to get the answer?
- When you ask a question about “customers” are you told that the answer “depends on what you call a customer”? (substitute any other business concept for “customers” above)

If you answered “yes” to at least 2 these questions, your enterprise might be a candidate for a BI Rationalization project. If you answered “yes” to 4 or more, your enterprise is definitely a candidate for a BI Rationalization project.
How do I get started?

In general, BI Rationalization projects have four phases:

1. Assess – In this phase you identify the extent of the rationalization need by identifying the BI systems in your enterprise and characterizing your current state in terms of:
   a. Cost, both for maintenance and new development
   b. Business subjects represented in the system
   c. Data feeds that populate the system (applies to data warehouse systems and “spreadmarts”)
   d. Toolsets in use, including BI technologies and database platforms
   e. Capabilities, such as ad hoc reporting and OLAP functionality
   f. Size, including number and complexity of standard reports and the number of users served by the system

   This is also the phase where unmet needs are identified and documented, the definition of Business Intelligence is agreed upon, the maturity of BI use within the organization (people, process, technology) is assessed, and the goals for the project are discussed and (ideally) agreed upon with the project sponsors. The goals will very often influence the assessment, especially in terms of the type and depth of data collected in each category above.

2. Create a Roadmap – In this phase you leverage the results of the assessment to formulate a high-level (typically) multi-step plan for the rationalization of your BI assets into one or more managed platforms. You also develop estimates for expected investment and Return-on-Investment (ROI) for the project. If necessary, the goals for the Rationalization are finalized in this phase, perhaps influenced by the results of the assessment.

3. Implement – This is an iterative phase whereby the roadmap is executed, the results measured, the roadmap is improved with the lessons learned from the most recent execution, and so on. This is also the phase wherein the governance

4. Maintain and Grow – In this phase the resulting BI platform(s) are managed to ensure that they grow appropriately to continue to meet the needs of the enterprise.

The remainder of this whitepaper focuses on creating the Transition Plan in the “Create a Roadmap” high-level plan and assumes that you have successfully executed the Assessment phase of the Rationalization project.
What does a Roadmap High-Level Plan include?

A High-Level plan for your BI Rationalization Roadmap includes the following:

- A Current State Summary, which succinctly articulates the BI environment as it exists today including capabilities, technologies and source systems in use (“you can’t draw a map unless you know where you’re coming from”)

- The Goals for the BI Rationalization project. The goals influence the end-state vision and the process that will be executed to achieve it. (“Why are we travelling in the first place? What will we see when we get there?”)

- A Vision Statement, which articulates the end-state once the plan has been executed including capabilities, technologies, and source systems. The vision will also address the methodology for satisfying the unmet needs identified in the assessment (“you can’t draw a map unless you know where you’re going”)

- The Governance Methodology which will ensure that the end-state Platform remains consistent, extensible, accurate and relevant to the enterprise

- The Principles that are to be (or were) applied in the conception of the phases of the plan. These principles are used in making decisions regarding the ordering of tasks and phases. (“Minimize tolls, Avoid seasonal roads…”)

- The Transitions (sometimes called “phases” or “initiatives”) that will move you from the Current State to the Vision State. The transitions must reflect the application of the principles referenced above. The transition description should minimally include:
  - Objective(s) of the transition step
  - List of Systems and/or Reports Retired
  - Data Sources
  - Data marts
  - User Communities Served
  - Capabilities Provided & Benefits to be accrued
  - Investment

(“We’ll stop at this hotel, see this attraction, and refuel here as we travel”)

What Are Some Common Principles That Influence the Transitions?

While the principles to apply in developing your BI Rationalization will vary from company to company since the goals that are driving the rationalization project will differ, there are some fairly common principles that are often applied:

- **Easiest System First** – Determine the level of effort associated with the migration of each system to its final destination and order them from easiest to hardest.
  - Applying this principle will ensure that your earliest transitions will be of shorter duration. This is particularly important in organizations that need to see very rapid ROI on the Rationalization project in order to justify funding.

- **Improved Operational Reporting First** – Focus on operational reporting that impacts the greatest number of people with data at the lowest level of detail.
  - Applying this principle will ensure that your earliest transitions will provide a foundation of detailed or transactional data on which to build higher-level analysis in later phases.

- **Highest Cost First** – Determine the maintenance cost associated with each system and order them from highest to lowest.
  - Applying this principle will enable achievement of cost savings sooner and can often (but not always) accelerate hard-cost Return-on-Investment.

- **Highest Pain/Lowest Productivity First** – Target those systems/reports/metrics in the existing environment that have the greatest negative impact on operations first.
  - Applying this principle will enable earlier achievement of operational efficiency and can often (but not always) accelerate soft-cost Return-on-Investment.

- **Missing Capability First** – Target those systems which, when combined or migrated, will enable the creation of high-demand reports/metrics/capabilities that do not yet exist or cannot be created in the existing environment.
  - Applying this principle will enable earlier achievement of new capabilities.

- **Largest User Community First** – Determine the number of users that leverage a systems capabilities and order them from highest number of users to lowest.
  - Applying this principle will expose the benefits of the new platform to the largest user population thus ensuring that the capabilities that are important to the largest constituency in your organization are available soonest.
Most Popular Data First – Identify the source systems for all of your various BI solutions and characterize each feed to those BI systems by business subject. Target those BI systems which contain duplicate or redundant business subject data.

- Applying this principle will enable achievement of system-of-record and single-version-of-the-truth goals.
- It could also have the added benefit of enabling source system upgrades and enhancements at lower cost due to minimization of the number of feeds to be updated and tested when performing such enhancements.

Other Principals to consider include…

- User Demand - The frequency with which a particular report of metric is requested may indicate the importance of a particular report or metric.

- Required for Specific System Retirement - Certain tasks, reports, or feeds can be directly related to the retirement of existing systems.

- Momentum – The roadmap should be designed to build momentum around the new platform by providing measurable, incremental improvements (such as enhanced functionality, improved reliability, improved user experience, etc.) in each transition.

- Database /Server/Storage/BI Platforms and Versions – Often there is an opportunity for cost savings by consolidating on to a single standard set of technology such as the same version and brand of database, server, storage and/or BI technology.

- Geography – The roadmap must comprehend the national and/or global nature of Business Intelligence use within the enterprise

- Target Platform Conformance - A common misconception in BI Rationalization projects is that the future state platform is necessarily brand new to the organization. Often this isn’t the case – a suitable platform on which to consolidate your other BI systems may very well be up-and-running within your enterprise right now. Once you’ve articulated your end-state platform vision you should evaluate your existing platforms against that model. You may find that you already have a suitable platform, or one that can be easily improved to become that platform, which will decrease both your overall scope-of-work and your time-to-benefit.
How Do I Apply the Principles?

After selecting the subset of principles that you will apply to your analysis, whether from the list above or from others that are more specific to your organization, you need to determine how you will balance competing priorities.

It is an unusual BI Rationalization project that does not have goals and priorities in conflict.

A simple method for addressing the conflicting priorities is to apply a weighting factor to each of the principles that you are going to apply in your analysis. This will allow you to craft transition content biasing toward the most important priorities while still taking into account (at least some of) the less important ones.

A better method is to apply weights as above, but evaluate multiple times weighing principles differently in each evaluation. This method often produces insights into opportunities in your transitions that are not obvious by weighing and analyzing once.

Certainly your goal is to define and as optimal a collection of transitions as possible up front – but expect that they’ll change throughout the project. The changes will come from at least two influencing activities:

- The first influence will be the insights and experience you gain while executing each phase, especially the first phase. Your hypotheses and assumptions will be proven or disproven, and those lessons learned will influence both the current and future phases of the project.

- The second influence will be the inevitable changes in your business that will be taking place while you execute your plan. It is important to retain flexibility in your project approach so that the new needs of the business are always factored into the execution plan.
What’s Next?

In most organizations the completion of the roadmap is followed by obtaining buy-in to the vision and the process of achieving it. This is then followed by obtaining permission and funding to proceed.

One important tool to have at your disposal is an executive summary of your transition plan in addition to the detailed analysis that went into developing it. The summary will support your sales pitch as you align your project sponsors and participants around the Rationalization project. A straightforward table like the one below can often be an effective tool and leave-behind artifact.

Often you can gauge the success of your sales pitch and the extent of organization buy-in by how often you see your transition plan table referenced and discussed by your project sponsors.

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Summary

BI Rationalization is the process of consolidating and standardizing point business intelligence solutions to achieve an Enterprise Business Intelligence platform that is lower cost, highly accurate, supports the current information needs, and is extensible for the future.

The Rationalization Road Map, both the final result and the analysis that goes into creating it, is the project component that will clearly articulate the strategy, duration, cost and benefits of execution.

Your Roadmap must describe a pragmatic approach with measurable incremental benefits in each phase and should allow you to align all current and future BI initiatives within a single inclusive framework.

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