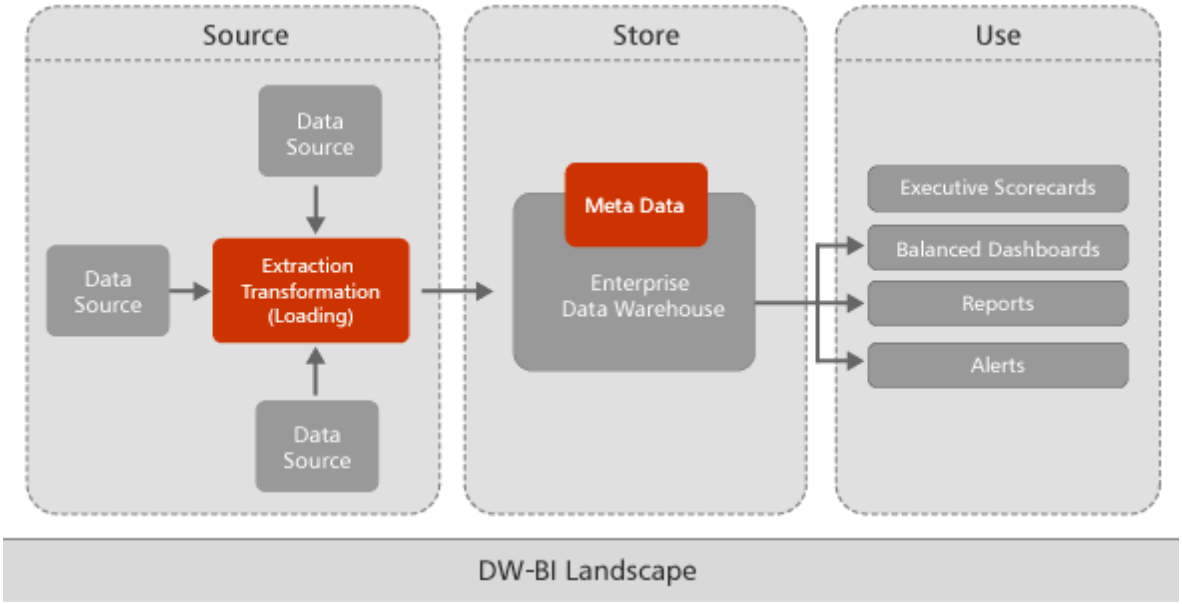
InfoSage
REDEFINING VALUE

Data warehouse and Business Intelligence Collateral

Brains for the corporate brawn:

In the current scenario of the business world, the competition is never too far. Enterprises are forced to make critical business decisions within extremely short timeframes encompassing volumes of data. Given these constraints, Business Intelligence is the answer to the enterprise needs of providing decision support. With tremendous ease of access to the business insight provided by these solutions, power users can now pinpoint their strategies to explore a whole new range of business possibilities. 'InfoSage Systems' solutions in Data Warehousing & Business Intelligence are based on a holistic approach for quick and precise implementation of such projects. 'InfoSage Systems' innovative and tested approach helps our customers to derive the maximum out of the information wealth of the organization, to help them stay ahead of the competition.



Our process model:

Data warehousing/Business Intelligence projects pose unique analysis, architect, design, and management challenges. Traditional application development methodologies are primarily geared towards developing transaction oriented systems and not analytical ones.

InfoSage Systems Process Model results from delivering working solutions to several of our satisfied customers, in analytical systems. It is both unique and adaptable, thus delivering benefits quickly to the users. We have also developed a global delivery model for these projects, which encompasses the on-site and off-shore teams working in tandem to deliver a cost effective solutions to our global clients.

Our offerings:

- BI Consulting
- Data warehousing design and development
- DW/BI Implementation Services
- DW/BI Support & Maintenance Services
- Specialized Services
- Data Mining
- CRM Data Warehouse
- Corporate Information Factory

The AAA approach:

Our unique AAA approach is used for execution of the project. The various activities that would be done in each of these phases are given in the table below.

Analyze	Architect	Accomplish
Business Analysis	ETL Design	Balance Dashboards
Data Analysis	Dimensional Modeling and Data Staging Design	Data staging development
Requirement definition	Metadata Repository Design	ETL
Application Prototyping	Technical Architecture	Application Development and Implementation
Executive Score Card	Data Warehouse Application Architecture	Metadata repository development

Data Architecture & Modeling

'InfoSage Systems' utilizes a dimensional modeling approach for analysis and design for developing data warehouse and associated business intelligence applications. Platforms and tools are optimized for the development of dimensional applications that explicitly support

dimensional architecture and techniques to improve application quality and developer productivity

Key Activities:

- Dimensional Modeling
- Logical and physical design
- Data-staging design
- Aggregation strategy design
- Data-source management

Issues Considered:

- Retain fundamental integrated base detail
- Provide common reference & translation tables for integration
- Use data-driven quality management
- Retain as-is and as-was for consistency
- Support a diversity of data structures
- Must scale to allow for growth
- Minimize impact of changes in a data source

ETL Services

Our consultants have expertise across Extract, Transform & Load (ETL) tools that we use to extract and unite data from disparate sources and deliver coordinated business intelligence across the organization. Advanced data merging, aggregation and transformation capabilities of the ETL tools let us consolidate data from different sources, and transform it into information using best-practices dimensional design. Metadata describes the transformation rules and allows faster integration with OLAP & Reporting suites

Key activities:

- Data extraction from source
- Data transformation
- Quality assurance of data
- Data loading, scheduling

Issues considered:

- Maximize productivity through re-use and standardization
- Simplify ETL logic by using a multi-stage approach
- Ensure a robust ETL process by minimizing the impact of failures
- Enforce a common approach to data validation and error handling
- Support for process monitoring
- Reduction in latency of data transfer for critical KPIs

Data staging Services

The extract process exposes data quality issues that have been buried within the operational source systems. Data staging specifications are designed to populate clean data into the Operational Data Store (ODS) and subsequently into the data warehouse.

Key activities:

- Set-up staging environment
- Develop Incremental Fact Table Process
- Design & Develop Aggregation tables
- Design and construct cubes
- Implement DB Administration (Archive, Backup & Recovery)

Issues considered:

- Metadata management
- Standards like OMGs Common Warehouse Meta model (CWM)
- Minimum impact to OLTP system
- Data stored in a way so that rendering through various channels and analysis of data is easier
- Data Lineage so that tracing a report element to source data becomes easier

Analysis & Presentation Services

Analysis involves statistical modeling using an assortment of tools to format the multidimensional values which allows to represent values using metaphors and 'Swap and Move', or 'Slice and Dice', which juxtaposes dimensions in more meaningful arrangements that illustrate patterns.

These views are then presented using a variety of front-end tools to navigate the view, seeking to understand the relationships between various dimensions and members. These views could be in the form of executive dashboards, portals and even pervasive devises like PDAs. Users can drill up, down and across to select the level of detail, or generality, with which they wish to work

Key activities:

- Statistical modeling & reporting
- Report web-enablement
- Rendering reports on pervasive devices - example Handhelds, PDAs etc
- Rendering through executive dashboards
- Information Architecture & report formatting

Issues Considered:

- Distribution methods
- Report automation
- Scalability & accessibility
- Security & privacy
- Methodologies like Balanced Scorecard, Six Sigma, EVA
- KPI lineage to identify parent and child KPIs

DW-BI Support and Maintenance

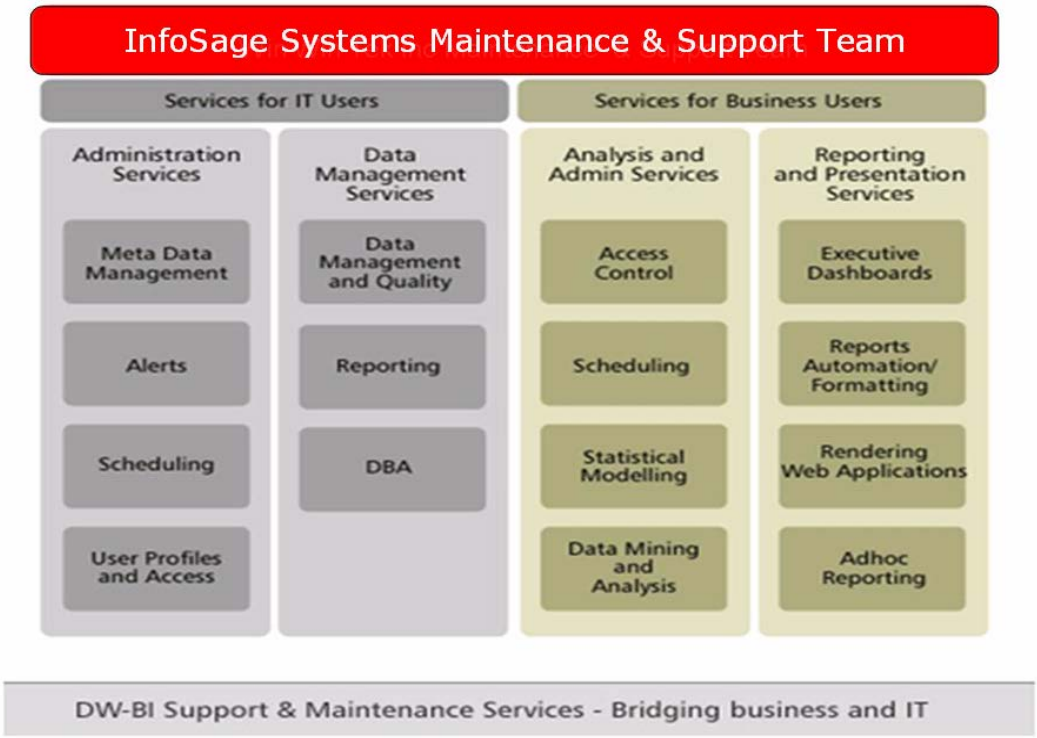
A long neglected aspect of successful business intelligence and data warehouse systems is maintenance. The objective of DMS (Data warehouse Maintenance & Support) is to provide comprehensive DW-BI value management using a structured methodology, maximizing customer satisfaction and minimizing maintenance effort

'InfoSage Systems' recognizes the difficulty organizations face in reaching and sustaining the potential value of their Business Intelligence investment. With our DMS model, experts skilled in multiple facets of decision support systems take the responsibility for ensuring that your users questions and issues are answered, that processes and systems are consistently performing, and that your resources are managed effectively

Key Activities:

- Business User Services
  - Adhoc reporting/query services
  - Digital executive dashboards
  - Reports development/tuning
  - Deploy report work requests

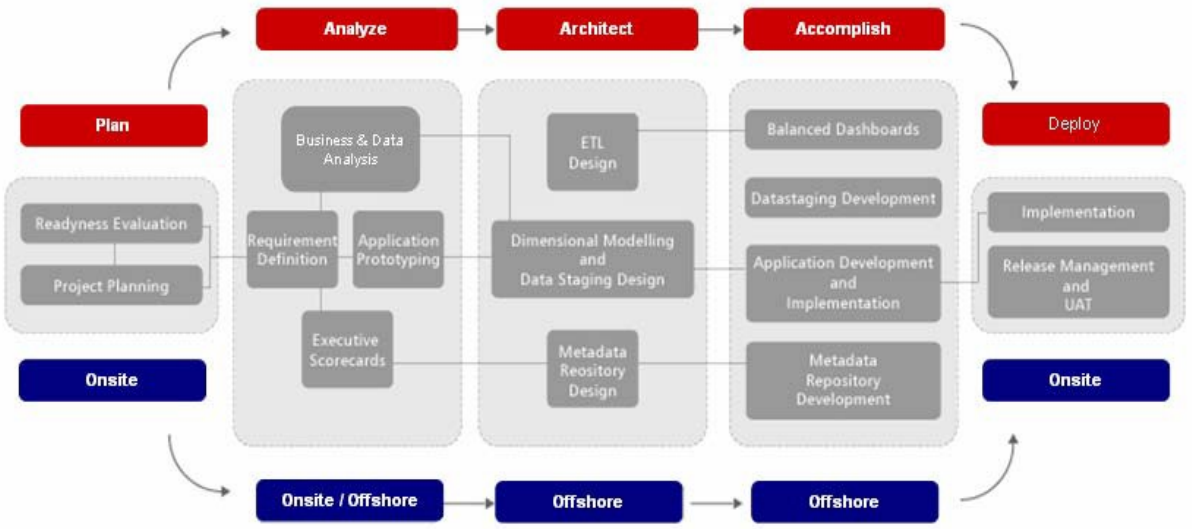
- IT User Services
  - Data management & quality monitoring
  - Data maintenance routines
  - DBA services
  - ETL tool administration



Issues considered:

- Single interface for IT and business users
- Approach to turnaround time
- Data security and confidentiality
- Need for building aggregate structures for processing efficiency

DW / BI Global Delivery Model:



DW - BI Global Delivery Model

The need for a unified plan with a tighter risk management and the purpose to execute within the time, cost and budget has been the four cornerstones for 'InfoSage Systems' global delivery methodology. The lifecycle defined has been distilled from various industry known best practices and 'InfoSage Systems' proven experience in implementing DW-BI solutions. While all projects follow a methodical approach from discovery to deployment, 'InfoSage Systems' methodology enunciates this in the context of DW-BI projects through the means of future-proof stages and steps that unifies an organization's business and IT needs.
'InfoSage Systems' Global Delivery – customer location and offshore model consists of five key stages and fifteen development steps, of which, some steps are performed in parallel and the well established dependency links in an iterative manner help in optimizing the time needed for such implementations.

Planning

The most critical stage of the lifecycle and the most challenging when it comes down to assessing the business needs, justifying the investments where in the technology readiness combined with strategic and tactical plans are evolved. As most planning stages, tasks here are not performed linearly and hence has the flexibility of performing this both at the customer's location and offshore.

Analyze

Requirements and any analysis if not have done properly will certainly have an impact on the project from time, cost and overall solution perspective. That's why 'InfoSage Systems' business analysis stage takes extra caution in analyzing the business needs, defining the problem statements at multi-levels and crystallizes the requirements/specifications thereby setting the path for a scalable solution. The extensive workshops and meetings with stakeholders and owners of each system involved ensure the completeness of the understanding.

Architect

The technology solution conceived through a framework/foundation to solve the business problem; this stage transforms the requirements onto a technical solution architecture & design encompassing all the layers in a typical DW-BI project. The design activities are carried offshore with prototyping and proof of concepts that validate the choice of technology and tools planned to be used in the development.

Accomplish

Comprising of a set of key layered activities such as ETL development, Data Mining, Metadata repository development and core application development, parallel efforts on most of these ensure that the project is delivered within the timeframe and the desired output. Executing this stage offshore maximizes the customers cost benefits.

Implementation

The acid test for any project is its implementation and rollout. 'InfoSage Systems' delivery model ensures the plan to this step is always kept at mind while the solution gets developed and thus preventing surprises that impact the time, quality and cost of the project. Structured operational procedures defined during the design stages and rigorous quality checks help in a smooth transition to the production environment.

Benefits

Address the complexity in an evolutionary rather than a big-bang fashion. Allows the design and development artifacts to be refined during development. Helps to identify and minimize risk early on in the development phase.

Technology Expertise

'InfoSage Systems' has expertise in integrating and implementing a whole range of Data Warehousing and Business Intelligence solutions from leading vendors.

ETL Tools	Data Base	OLAP / BI Tools
Informatica	Oracle	Cognos
ERWIN	SQL Server	Business Objects
Microsoft	DB2	Microsoft
Oracle Replication	Teradata	Micro Strategy

'InfoSage Systems' Advantage:

Services covering the entire spectrum of Business Intelligence solutions

- Total implementation capability
- Vertical Industries based approach
- Advanced capability building through a dedicated competency center
- Tested and proven process model
- Virtual team model for cost effective implementation
- Tool based services and solutions for your specific business needs
    - Diverse skill sets including:
    - Data mining
    - Enterprise Information Portals
    - CRM

Key Differentiator:

- Expertise in working in various industry domains. Hence able to understand customers business more rapidly.
- Technology and practice competence
- Senior management commitment
- The difference between being the nth customer and "THE CUSTOMER"
- Value Ascendancy Model

Outsourcing to InfoSage Systems - Advantage:

InfoSage Systems Out Sourcing Advantage