

BE FREE

BE FREE OF  
**SOFTWARE**

OPTIMIZE YOUR DATA  
SERVICE CORE



# MANAGE YOUR DATA

The concept of **Data Management** is relatively straight forward. Corporate entities require seamless access to high-quality, relevant data, provided in a timely and cost-effective manner to enable effective business decisions.

Data is the business blood of an organization: it is the content of transactions, of reports, of analysis. It is the details of your customers, products and services.

Organizing this data in a robust and effective way is what data architecture brings, along with the capacity to trust the data to be current, true and available. How you manage your data – its evolution and its life-cycle – is the core of your data strategy. Building, maintaining and supporting data platforms requires best practices in data architecture, metadata – data about data – taxonomy,

security and storage. Optimizing your data is much more than just a technology issue.

BestIT employs a holistic approach to optimizing your data, coordinating with people and business processes as well as technology innovation. Effective data performance enables to realize significant benefits including lower operating costs, greater integration and better informed decision making. A new wave of companies are deploying data warehouse and Big Data solutions, resulting in increased demand for data warehouse, and analytics consulting and support services, including internally.

BestIT is a leader in data warehouse and Big Data technologies and data architectures that support new data types, such as XML, text, audio and video content.

Wherever your data architecture is driving your organization, we will be there and able to help you throughout your journey.

BestIT data services experts can help you overcome the complexities of your corporate data, information, analysis and reporting needs, boost the performance of your data repositories and ensure integrity and security.

We complement our data storage solutions with innovative Data Services to meet your specific needs, including:

- Database and Data Server Hosting
- Database Management and Administration
- Database Monitoring and Alerts
- Database Tuning and Performance
- Data Architecture Strategy

## Database Monitoring and Hosting

BestIT proactively monitors the performance and availability of database platforms. Our database monitoring services include the following metrics: CPU utilization, I/O utilization, memory utilization, disk space utilization, fragmentation check, database locks, log space review, transaction volume analysis, number of database connections, hanging database connections, storage for data and application files, fragmented objects, network connection health, cluster and mirroring health, cache utilization, shared memory analysis, latch contention, index management issues, SQL Log destination space, SQL alert areas and DTS package monitoring.

Recommendations to fine tune production instances (databases and applications) — architectural, operational, and performance recommendations — need to be continuously provided to preserve the business performance.

**BestIT has selected a suite of tools for our managed and hosted services; they include:**

- Nimsoft Monitoring
- Nagios Monitoring
- Native Oracle Monitoring tools

**Most of our Data related projects include a composite team of part and full time members including:**

- **Data Architect**
- **Data Strategist and SME**
- **Database Designer**
- **Data Security expert**
- **Database administrator**
- **Data analyst**

# PROCESS YOUR DATA

BestIT Data Services experts can help you overcome the complexities of your corporate data, information, analysis and reporting needs, by boosting performance of your data repositories and ensuring integrity and security. We complement our data storage solutions with innovative data services to meet your specific needs.

Corporate entities require seamless access to high-quality, relevant data, provided in a timely and cost-effective manner to enable effective business decisions. BestIT's data processing services include:

- **Data Integration**
- **Data Operations**
- **Database Support and Performance**
- **Data Archiving**
- **Data Archival and Retention**

## Data Integration and Operations

The use of data in applications and various transactions implies that data elements are integrated in logical and physical layers of data architecture.

The integrated data is then used in inbound and outbound flows of processing. With the primary responsibilities of IT operations come the integration, management and processing of the data. Policies and procedures, repositories, backups and archival, validation and testing, restoring and cleansing the data are just a few of the various tasks and activities managed by operations.

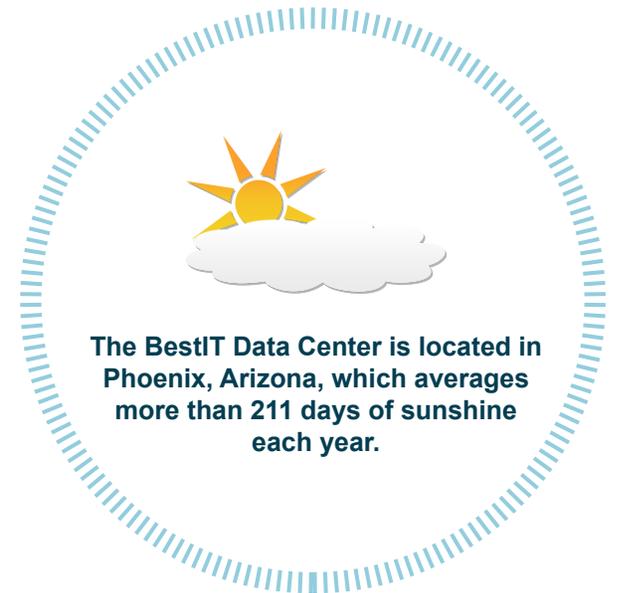
The quality and discipline displayed in performing those functions is a key factor in preserving the accuracy and availability of the data to the users and processes.

Security (both passive and pro-active) of the data is as critical as the data is to your business, its value (to recreate or cleanse) and its constraints (regulatory, disclosures).

BestIT approaches data management and operations from a holistic point of view, as operations management is an integrated discipline: processes and guidelines or tools are used across the entire operations scope; altering one process can cause a "butterfly" impact to the final value of a data field.

Our managed services, and in particular, data services, include security and integrity management with discovery and assessments, diagnostic and remediation as well as continuous monitoring and alerts.

The BestIT security team assesses how much compliance and security you need, and determines how much effort is required to achieve and maintain your desired security level.



# PROCESS YOUR DATA

## Database Support

A database requires constant TLC to be operating at the best level of performance and satisfaction. Standard resolution of production database includes access rights, backup and restore requests, data field change, performance issues, space availability (or lack thereof).

The basic support usually includes periodic and on-demand performance tuning of database and server memory, CPU, caching along with ongoing recommendations to maximize hardware usage.

Recommendations to fine tune production instances (databases and applications) – architectural, operational and performance recommendations – are usually provided as needed.

Standard DBA support for database instances for development efforts includes patching, software version upgrades, backups and migration of changes to production.

BestIT will provide:

- 24x7x365 managed Oracle DBA service support for the customer's Oracle and Grid Control environment.
- 24x7 production Oracle Database DBA support services. Production database down issues: backup and recovery; bug fix and patching; data integrity and constraint violations; data and transaction locking; SQL query performance and tuning; data encryption; CPU patches; database upgrade.
- Backup, patch and upgrade production and development databases on quarterly basis or as required by manufacturer software releases.

BestIT will plan and deploy updates, patches, and security updates for your database servers and platforms, including testing and roll back planning for all standard database platforms.

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## Archiving – Extended Data Retention

In today's complex regulatory environment, critical data must be retained for extended periods for audit or forensic purposes.

BestIT can also provide extended data retention services that ensure your data is protected and available for months or even years through secure, off-site archiving.

The effectiveness of the backup and retention efforts is only as good as the capacity to restore and reuse the data. Periodic and random restore tests and validation are necessary to maintain an acceptable level of effective data archival performance.

The delay to restore and make available data upon request is the largest impact of the cost of unavailability. In some cases data which have been archived for a long time (especially on magnetic support) cannot be restored at all, which makes the whole cost of archiving, retaining and restoring become a waste.

BestIT standard archival and retention services include regular database recovery test to ensure backed up data is valid and recoverable.

Our toolkit also includes:

- Veeam Backup Application
- Nimble Storage Software

Data integrity and data security enable the preservation of updates and key information, protecting the data against illegitimate accesses and modifications.

Data archival and retention are about how you store, manage and restore the data based on your needs and external constraints (disclosure regulations, etc.).

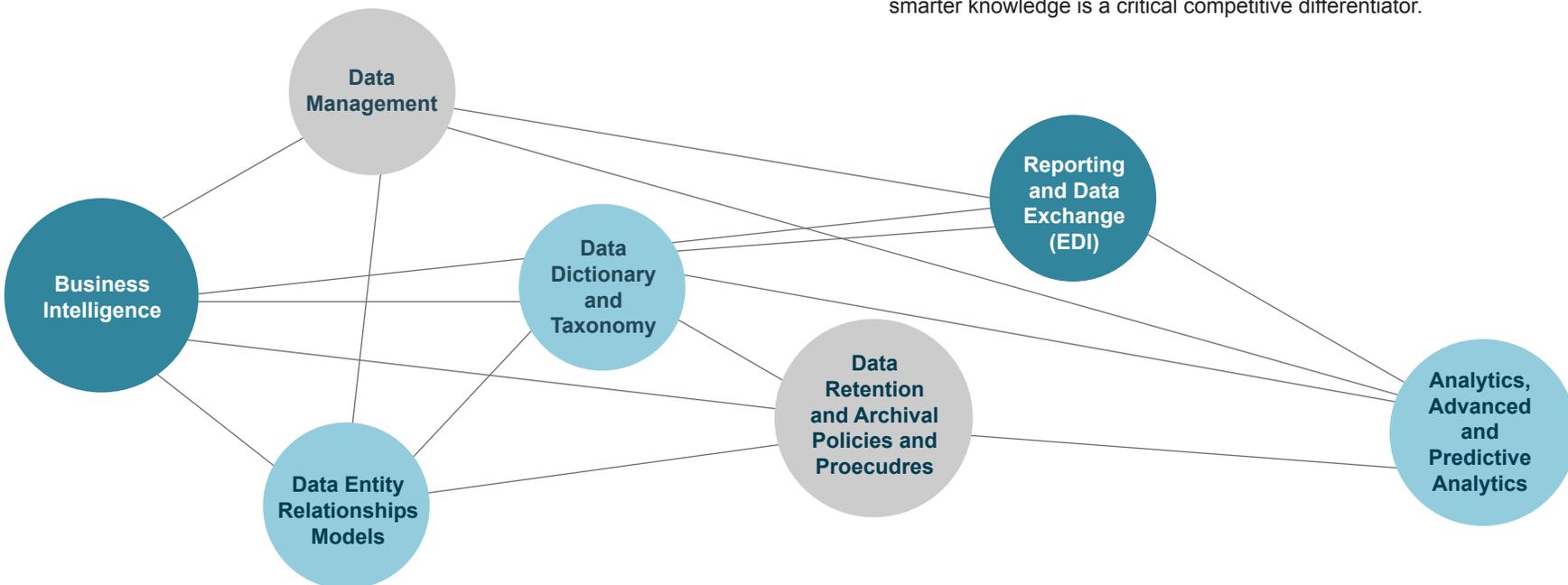
# MONETIZE YOUR DATA

BestIT data services experts can help you overcome the complexities of your corporate data, information, analysis and reporting needs, by boosting performance of your data repositories and ensuring integrity and security. Your data is your business life, and leveraging its power is the key to growth, profitability and effective, right-on-time reporting.

Today's end-users and your very customers are operating in a world where information is continuous, dynamic and accessible. Purchases, decisions, research are no longer done in insulation by a small group of scientists, but available at the tip of everybody's fingers with friendly user interface. How do you work and compete in this context?

BestIT's Subject Matter Experts can help you define or review your data architecture, your data strategy and your data security.

**Typical artifacts include:**



## Data Warehouse and Data Mart

A more traditional management of data in aggregation is the gathering of multiple sources of data in a consistently formatted repository, the data warehouse (or data mart). As opposed to Big Data, all the data is in this case created, modified and managed internally; the consistency of the formatting allows for accessing the data from standard application processing. It also enables a higher level of protection and integrity, as only approved processes and transactions can access the data. This comes at a cost, obviously, but also with a responsibility to manage the performance, integrity, security and archival / retention of the data itself.

## Big Data and Predictive / Advanced Analytics

Big Data is just another name for the aggregation of data from multiple sources, in various formats and currency levels, and its combined processing. The true value is the analytics and in particular the predictive analytics, which extract discrete correlations and patterns, sometimes even identify correlations that nobody saw before between various data elements. The capacity to extract information from Big Data and turn it into better decisions, more sales, better understanding of your customer and in general smarter knowledge is a critical competitive differentiator.

Speed kills. Or at least it kills your competition. If you can make your data work as **efficiently** as possible, your systems will speed up. If your systems speed up, your company will be more efficient. If your company is more efficient, it will make more money. So yeah, data is important. It's more than just binary numbers — it's the numbers that make your business run. We make sure your data is at your fingertips. Fast and ready to work for you.