Sigma
Business Solutions Inc.

Information Life Cycle Management Specialists

SAP Information Life Cycle Management

- ERP Archiving
- BI / BW Archiving
- System Retirement
- Landscape Optimization

SAP Products

- HANA
- Business All In One
- Business Objects

SAP Consulting Services

- ERP Functional & Technical
- BI / BW Installation & Configuration
- SAP Migration (Platform, O/S, etc)
- Workflow Implementation

SAP Partner

PBS Partner

About Our Company
who we are | what we do | & why we do it

For over a decade Sigma Business Solutions Inc. has focused on SAP archiving and data management. We provide solutions and services for Information Life Cycle Management:

- ERP Archiving
- BI/BW Archiving
- HANA
- System Retirement
- Landscape Optimization
- SAP Consulting Services
- SAP Migrations

GSA

Our customers include organizations of all sizes and industries. Sigma is also GSA Certified:a preferred vendor/provider to the US Government.

As the premier North American partner of PBS Software GmbH for over 13 years, we supply and implement the software as well as provide first level support to all our our customers throughout North America.

Sigma is noted for providing best in class implementation and support services. Our customers can attest to this. Our organization employs business functional and technical experts that have worked in industry and as such we have the experience that is necessary to ensure success of our customers projects.

"Sigma Business Solutions Inc. has played a vital role in helping us with our Archiving needs. They have been available to use at all times, especially in emergency situations and are diligent, skillful and professional. They have consistently met and exceeded our expectations. We are very happy with our current engagement with them and hope to continue and expand in other areas."

Montefiore Medical Center

Customer Extract

American Standard

US. Dept. of Justice

University of Nebraska

Disney

Canadian National Railway

Bombardier

Pratt & Whitney

Northrop Grumman

Bristol-Myers Squibb

Holcim

Cardinal Health

Montefiore Medical
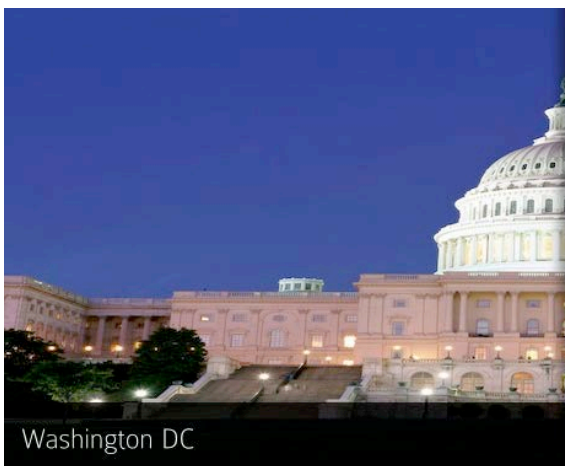
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SAP ERP Archiving

Sigma provides solutions and services to ensure that our customers are successful in their archiving projects. We provide all of the analysis to ensure that the right strategy and solutions are utilized to provide appropriate benefits to organizations. In addition we provide complete implementation and on going support.

PBS Software Products

Sigma is the premier partner of PBS Software GmbH and we provide and support all of the PBS Software Products. PBS Archive Software SAP ERP including archiving for Industry Solutions IS Utilities, IS Oil, IS Retail etc.

PBS Software provides seamless access to both archived and database data with complete drill down, document flow and integration. All standard display transaction codes are delivered ready to access archived data. No development is required.
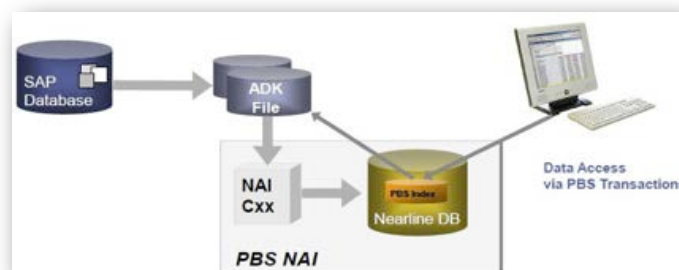
This solutions promotes user buy-in (a significant barrier to archiving) due to its user friendliness and ease of use and thereby making archiving projects very successful.

Users just have to enter **/PBS** in front of the standard SAP display transaction codes and they are able to access both archived and database data.

SAP Standard	PBS Standard
FBL3N	/PBS/FBL3N
	VA05
ME23N	/PBS/ME23N

PBS Modules	
CAB: Agency Business	**CPP: Production Orders**
CCMD: Cust. Master Data	**CPR: Process Orders**
CCO: CO Line Items	**CPS: Project Systems**
CCOPA: Costing-Based Profitability Analysis	**CQM: Quality Management**
	CRW: Routing/Work Center
CCU: Master Data Changes	**CSD: Sales / Distribution**
CDART: Data Retention Tools	**CSL: Special Ledger**
	CUSTOM: Cust. Specific Obj.
CDOC: Spool Requests	
CDVS: Document Info Records	**CVMD: Vendor Master Data**
	CWM: Warehouse Mgmt.
CFI: Financial Accounting	
CHR: HR Archiving Objects	**Database Analyzer**
CML: Material Ledger	
CMM: Purchasing	**Database Export Interface**
CMT: Material Master Data	• Data extracts from the SAP Database
COO: CO Orders	
CPCA: Profit Center Acct.	**PBS Content Link**
CPCP: Product Cost Plan.	• Connects to external storage
CPM: Plant Maintenance	

User Selection of Live or Archived Data

PBS NAI
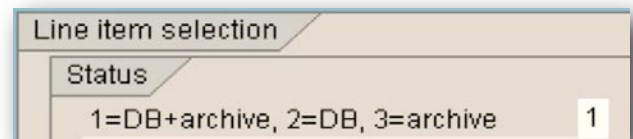### Nearline Analytic Infrastructure

PBS NAI incorporates a Sybase IQ Server and stores data using columnar technology. This results in very fast access to archived data. It also provides very fast indexing of archived data when using our PBS Software. In addition, our solutions also works with SAP-AS by storing index data in the Sybase server. This solves the problem where index type information is added back to the SAP database when SAP Info structures are used to access archived data.

Other Solutions

- SAP AS & DRB
- Content Management Solutions

SAP BI Nearline Archiving

Our solutions make archiving of BW Data successful by providing the ability to execute queries against both archived and database data on demand without the need to reload the archived information. This enables organizations to improve system performance and lower the TCO of the SAP System by reducing storage and system infrastructure costs. Effective archiving also facilitates planning and execution of Disaster Recovery Programs by having a much smaller and leaner database.

Option 1
PBS CBW NLS ADK

This options stores the archived data in the traditional ADK format. Additional indices and aggregates can be incorporated to enhance performance. High compression of archived data is also achieved.

Option 2
PBS CBW NLS IQ

This solutions stores the archive data in columnar format and utilizes a Sybase IQ server. Access is very fast and therefor does not requires the use of aggregates or additional indices. Archived data is highly compressed. This option is great for large data volumes.

"Sigma Business Solutions Inc. has been performing our SAP ERP data archiving since October 2006. They have been one of our most trusteed and reliable business partners. Equally important to their technical expertise is their professionalism and customer-focused methodology. They are the rare instance of a service provider that is given the "set it and forget its" status."

**Pacific Cost Companies Inc.**

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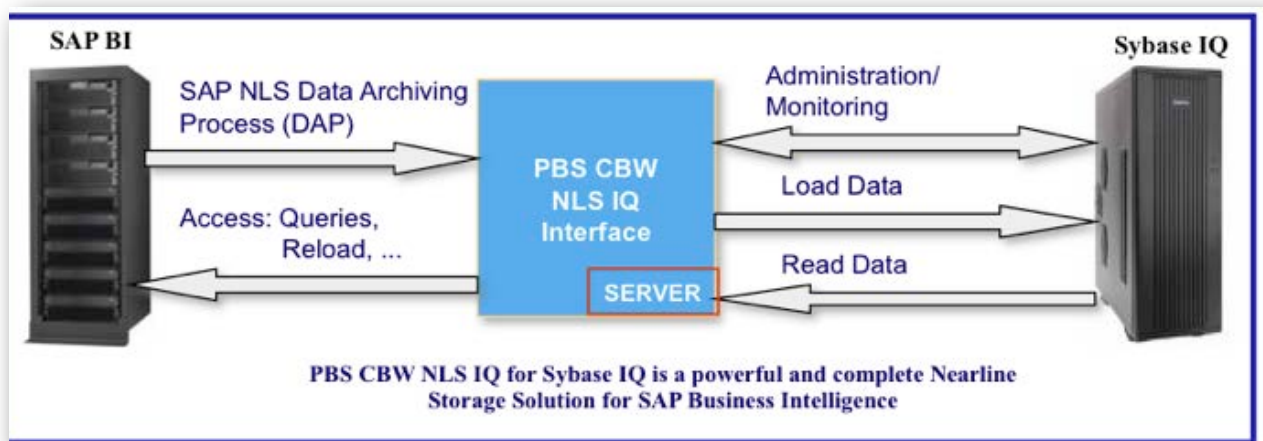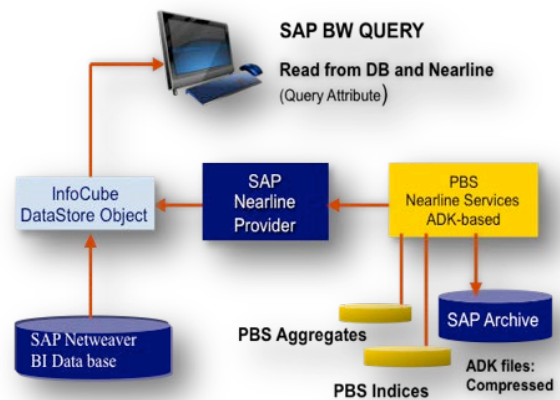
SAP System Decommissioning
Complete Access

Sigma provides software and services to enable organizations to decommission legacy SAP systems and still meet their reporting requirements. In addition, we provide the required Technical & Business analysis, strategy, definition of Data Access requirements and implementation services. We use packaged software such as SAP ILM (System Decommissioning Solutions), PBS Enterprise Content Store or develop customer specific solutions where appropriate.

PBS Enterprise Content Store

PBS enterprise store provides access to structured and unstructured data without an active SAP system. It is a very cost effective tool for decommissioning of SAP systems and still provides access to the data for internal and external organizational requirements. This is a PC based client / server solution that enables analysis of SAP DART Extracts, PBS Data Export Extracts, SAP Print Lists & Original Documents.
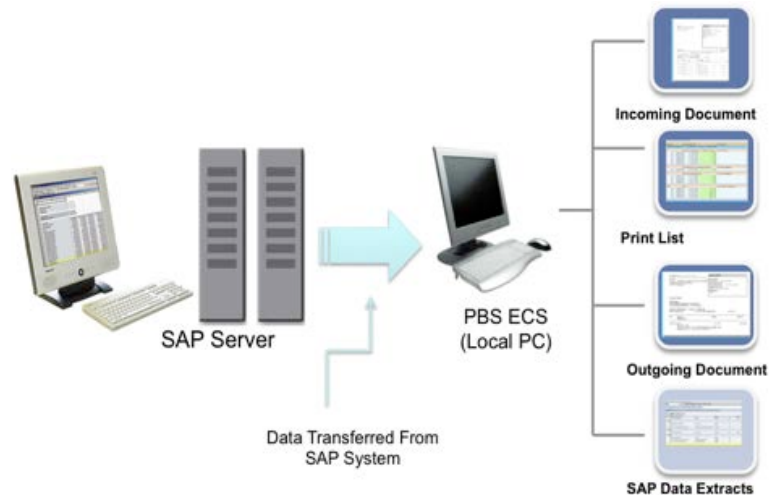
SAP ILM System Decommissioning

SAP ILM (System Decommissioning Solution) reduces TCO of legacy systems. The process allows for the consolidation of multiple legacy systems into a small single instance. It also provides on demand access to data from the legacy systems and reporting to comply with Tax Audits and Financial Reporting requirements.

Sigma provides services for the implementation of SAP –ILM-System Decommissioning.

Our services include:
- Data Analysis in the Legacy systems
- Preparing and enabling the legacy systems for ILM functions by importing snapshot or Context data extraction service utilities
- Configuration of the Retention Warehouse System
- Application of retention rules to ensure legal compliance
- Extraction of legacy system data
- Defining rules for transferring data into the New Retention Warehouse System
- Providing for reporting through SAP-BW to comply with tax an
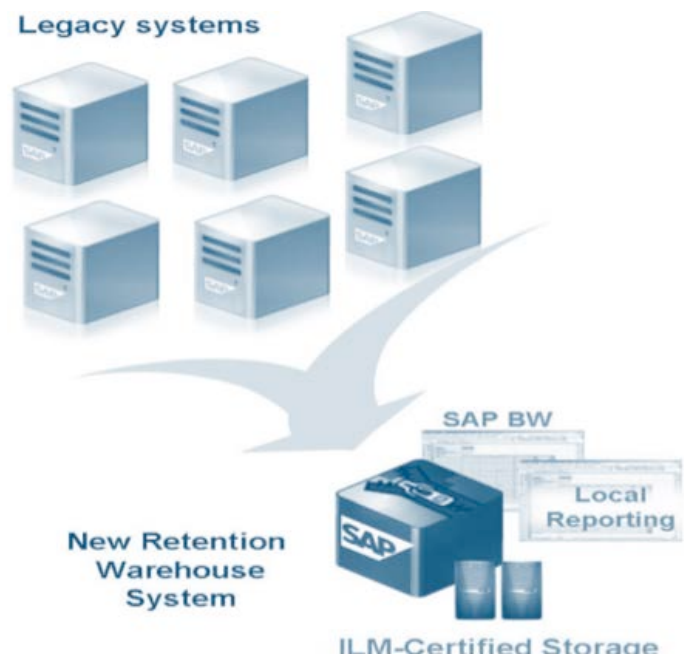
Other SAP Consulting Services
ERP | BI | Workflow | Landscape | Migration

Sigma provides SAP consulting to enables organizations to implement and support their SAP systems efficiently while taking the full advantage of the functionality provided by SAP. Our consultants have the business and technical expertise to ensure that your organization is successful and to also obtain reliable, best in class service at competitive prices.

SAP ERP

- Project management
- Functional consulting
- SAP system performance tuning
- Security & Authorization
- Data migration
- Interface to legacy system

- SAP installation
- ABAP programming
- Database management
- Unicode implementation

SAP BI/BW

- Installation & Configuration of BW System
- Business analysis
- Project management
- BW System sizing
- BW System upgrades

- Extraction of data & population of BW database

Workflow Implementation

Sigma provides solutions to automate business processes in the areas of:

- Invoice processing
- Order to cash
- Procurement cards

SAP Landscape Optimization

Landscape optimization is achieved by creating full functional SAP non-production clients with selected data only (time slices, business function, etc), which in turn is a more effective process rather than the traditional method of creating full copies of a production system. Optimization reduces the TCO and facilitates, fast client refreshes, more efficient testing and training.

SAP Migration Services

Provides technical services to migrate SAP applications from one type of Hardware/Operating system / Database to another.
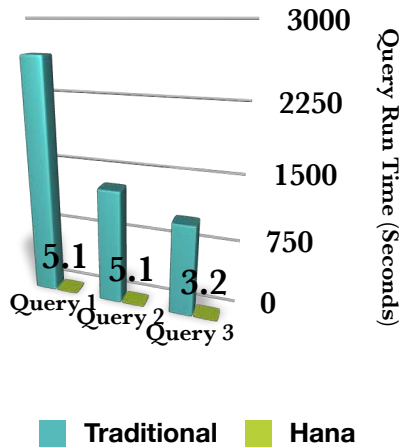
Services:
- Preparation of the hardware/OS/other required resources for selected SAP Server
- Migration to new HW/OS platform

- Set up (Mock SAP Dev, Q/A, and production) environments
- Technical/functional testing
- Production Environment Cutover
- Stabilization & Performance Tuning
- Implementation of Backup / Restore

HANA: The Power of Big Data
In Memory | Real Time | Analytics

HANA is an in-memory data appliance, which allows customers to analyze and manipulate large data volumes of data in real time. HANA, a combination of software and hardware (SAP In-Memory Database, Sybase Replication, and SAP LT "Landscape Transformation Replicator"). SAP HANA is currently available for BI and is expected to be available for Business Suites (eg. ERP) in the near future. In memory technology allows organizations to have the opportunity to manage increased growth, volume and complexity, while still able to provide insightful analytical results very quickly. In memory technology combines row and column based storage. The results are tremendous speed in processing and analyzing large amounts of data. This provides organizations with efficiency, the ability to adapt, and the flexibility to help improve their organizations functions.

3000

2250

1500

750

0

5.1   5.1   3.2

Query 1   Query 2   Query 3

Query Run Time (Seconds)

■ **Traditional**   ■ **Hana**

Future Landscapes

Enterprises are increasingly demanding real-time analytic and transaction processing capabilities from business applications. HANA puts SAP in good position to deliver such functionality for its customer-base of traditional enterprises.

If you use SAP, you will probably adopt HANA, maybe not today, maybe not tomorrow, but soon. More than 13,000 SAP customers use BW today, and more than 35,000 customers use SAP Business Suites. HANA will become so integration with the Business Suites, SAP users will likely move to HANA.

SAP Product Services

Planning & Preparation
- Identify best "use case" scenarios of SAP HANA
- Guidance of (hardware/software) purchases
- Sizing & Data replication advice
- Project plan preparation & project management

Implementation
- Install & Configure your SAP HANA landscape
- Extract source data & data loading services
- Advice on & implement replication options
- Data modeling services (HANA Studio)
- SAP Landscape with source system landscape
- Implement HANA reporting capabilities
- Establish security services/framework
- OS/DB migration implementation services

Support
- Upgrade SAP HANA components
- SAP HANA (admin/monitoring) services
- HANA Tuning
- Configuration of SAP Portal & BW Systems
- Maintenance of SAP Portal & BW Systems

Training/Knowledge Transfer
- Provide on-site HANA education sessions
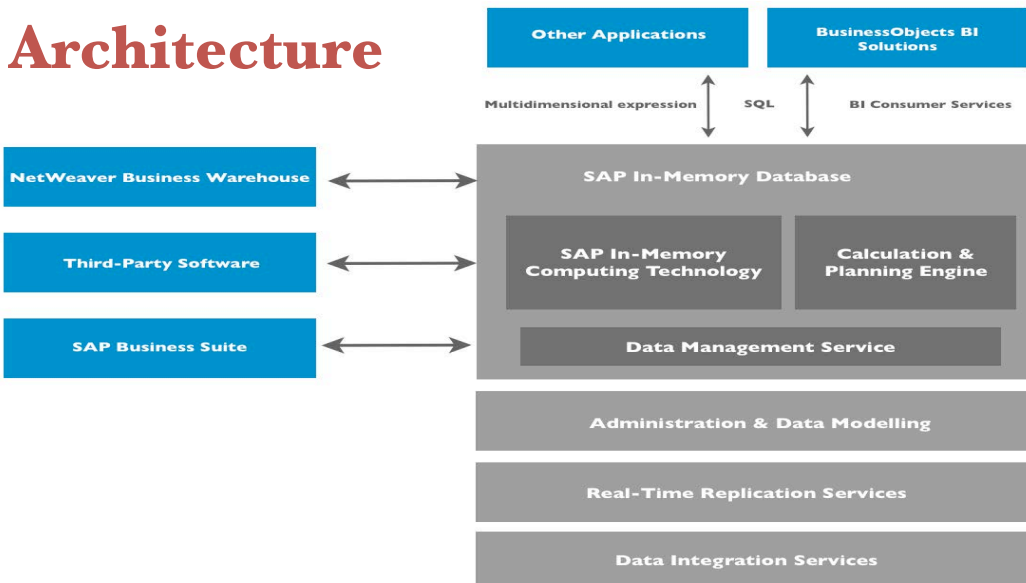
Project Staffing Resources
- Project Managers
- HANA Developers
- Administrator & Security Experts
- BW Architects
- BW developers

Architecture

Other Applications	BusinessObjects BI Solutions

Multidimensional expression   SQL   BI Consumer Services

SAP In-Memory Database

NetWeaver Business Warehouse	
Third-Party Software	
SAP Business Suite	

| SAP In-Memory Computing Technology | Calculation & Planning Engine |

Data Management Service

Administration & Data Modelling

Real-Time Replication Services

Data Integration Services

Sigma Business Solutions Inc.

Business All-In-One
SME centric | industry specific | designed for your needs

Without complete visibility into financial and operational performance, a company doesn't stand much of a chance in today's hyper competitive marketplace. Without accurate data, it's impossible to reliably create a sales and operations plan, or determine product line and customer profitability – hindering sound tactical and strategic decision making.

SAP® Business All-in-One solutions can be integrated with SAP BusinessObjects Edge Business Intelligence (BI) software to provide the visibility, insight, and accountability you need across all areas of your business – from sales and service to purchasing and manufacturing. Drawing data directly from the operational ERP software, pre-integrated BI functionality eliminates the complexity and time lags that can result when using a data warehouse. Preconfigured, interactive dashboards and graphical reports help you get a clear view of your customers, suppliers, finances, and business operations.

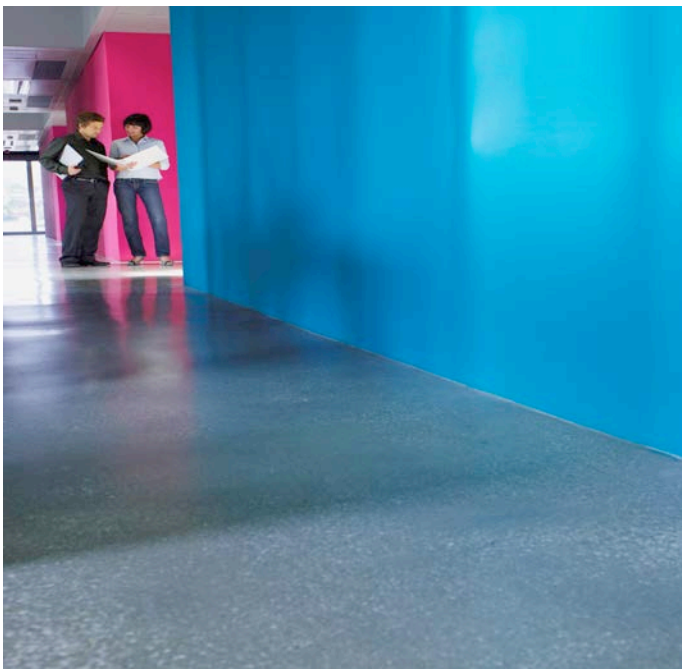### Benefits | Value | Opportunity

Alignment of business activities & corporate strategy

Resource allocation & best practices

Reduction in overall organization strain of regulatory compliance

Understand your current financial position for better decision making:
Has the visibility, insight, alignment and accountability to better manage revenue, margins, liquidity. The solution comes with preconfigured dashboards for AP Open Items, Controlling Dashboard, Cost Analysis Cost Center Actual Plan Variance, Cost Analysis Order by Actual Plan Variance, Financial Statements, GL Statement, and Profit/ Loss Analysis

Have accurate data across your operations:
Delivers graphical reports and interactive dashboards that complement the existing best practice operational reports in SAP Business All-in-One. You get extensive preconfigured reports and dashboards for sales, service, purchasing and manufacturing including: Purchasing Group Analysis, Stock Overview, Vendor Comparison, Vendor Fact Sheet, Vendor Analysis, Purchasing Volume Dashboard, Vendor Evaluation Dashboard, Trade Dashboard, Inventory Dashboard and more.

Have accurate data to profitability:
Delivers graphical reports and interactive dashboards that complement the existing best practice operational reports in SAP Business All-in-One. Some of the preconfigured product line and customer reports and dashboards include: Credit Memo Analysis, Customer Fact Sheet, Customer Standard Analysis, List of Billing Documents, List of Sales Orders, Material Analysis, New Quotations and Orders, Sales Volume Analysis and more.

SAP Business Objects
SME & Business Intelligence

How Business Intelligence Is Helping Midsize Organizations

Business intelligence allows organizations to better understand, monitor, analyze, and even predict what's occurring in the over-all environment and in their company. BI helps your organization turn data into useful and meaningful information and then distribute this information to those who need it, when they need it, wherever they need it, on the device of their choice – so that they can make timely and   better-informed decisions. It allows organizations to combine data from a wide variety of sources and see an integrated, up-to-date, 360-degree view.

Business intelligence (BI) allows business users to analyze and better understand their organization's plans and results. It provides insight into what's working correctly while identifying potential problem areas in time for corrective actions to be taken. FInd out how BI can help keep you midsize company ahead of the competition.

This is especially important for midsize companies, which – while not having vast resources – are typically able to implement business decisions more quickly than industry giants. BI provides a win-win solution for IT and business users; it allows the IT department to be more productive in working with its business users to service special requests, while also per-mitting those business users to become more self-sufficient.

Business intelligence helps your organization turn data into useful and meaningful information and then distribute this information to those who need it, when they need it, to the device of their choice - so that they can make timely and better informed decisions.

# Information Life Cycle Management
I.L.M.

Information Life Cycle Management (ILM) is the process of managing information from its creation to its destruction in accordance with organizational and regulatory policies and practices. Effective Information lLife Cycle Management requires appropriate archiving of information (data & documents), providing access to the archived information and providing compliant storage that allows for the application of Retention Management policies that govern the retention and destruction of information.

Successful implementation of an ILM program requires cooperation between I.T. and the business functional departments. This is essential in order to choose the right solution(s), that will result in cost effective data management and reduce the Total Cost of Ownership (TCO) of the ERP system. At the same time, ensuring that the organization is not at risk in compliance with regulatory re-
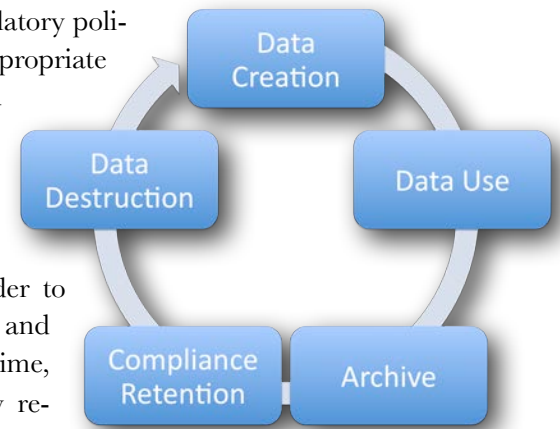
ILM Archiving Architecture
PBS Archive Solution

SAPinsider
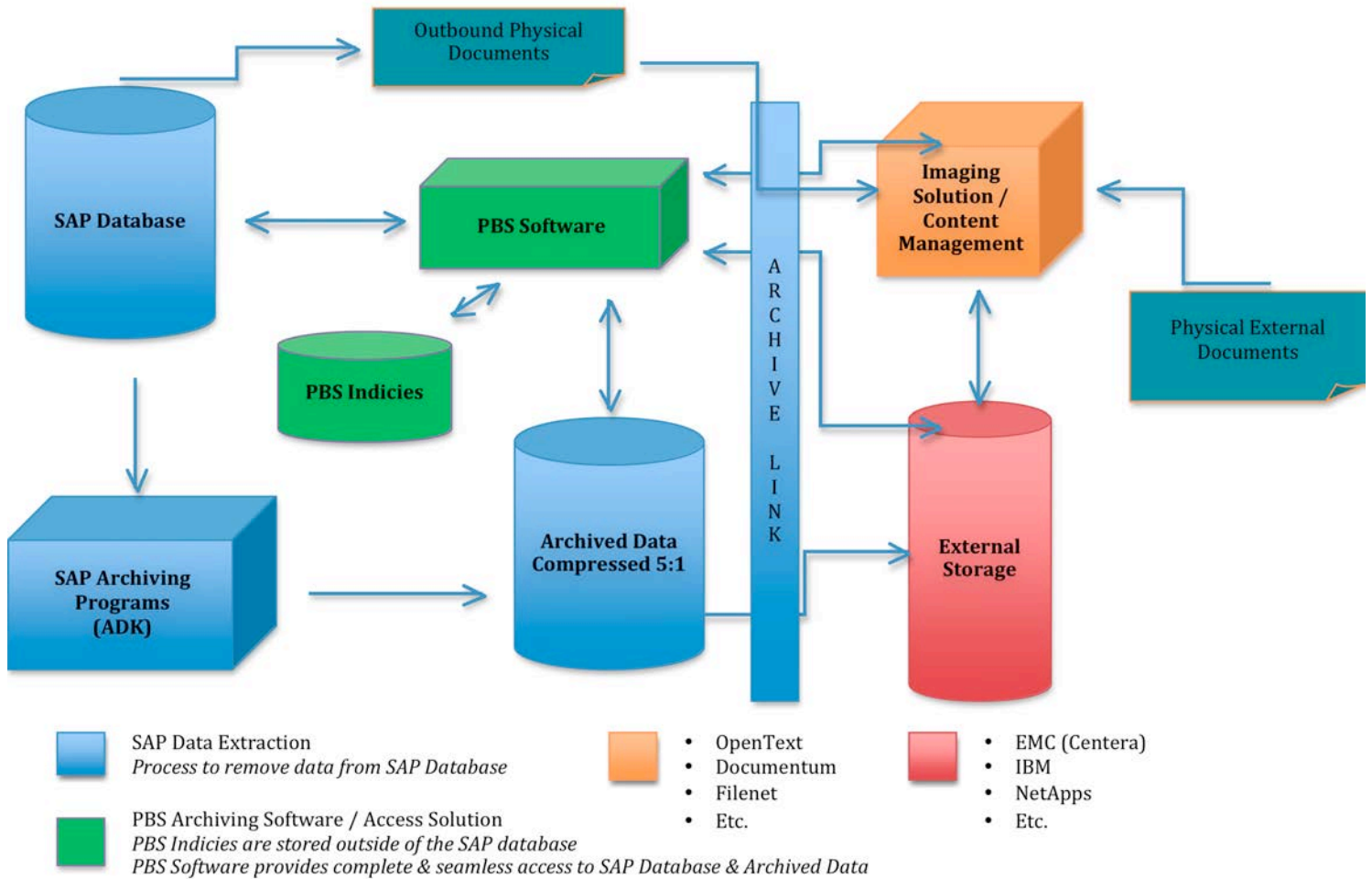
Delaying Your Company's Archiving Project? Perhaps It's Time to Reconsider

Use Archiving to Reduce the TCO of Your SAP System and Avoid Exposure to Legal Liability

Roland Bahadoor
Managing Partner
Sigma Business
Solutions Inc.

For most companies, data archiving is not considered a high-profile, high-priority project. It should be. Archiving — a key part of any information lifecycle management strategy — can reduce costs and help avoid legal liabilities (two high priorities for any CFO) that can result in fines or even jail time.

To remain compliant with regulations such as the Sarbanes-Oxley Act, it is critical for businesses to carefully manage their information, from creation to destruction. Additionally, only after archiving has been completed can retention management policies be applied to control and eventually destroy data in accordance with company policies. Failure to do so could result in a significant liability to the organization if the data is requested by regulatory agencies.

Archiving also reduces the size of the database and helps keep system performance at an optimum level. Additionally, archiving brings significant savings since it requires much less storage space.

Set Up Your Archiving Endeavor for Success

Successful archiving requires companies to select appropriate tools that will provide access to the archived data. This allows businesses to comply with internal and external reporting requirements.

Sigma Business Solutions Inc. has significant expertise in SAP data and document archiving, and can provide invaluable consultancy and advice to help your company select and implement the strategy and solutions best suited for your organization. Sigma offers consulting in the following areas:

- Archiving assessment and strategy development
- Project management
- Configuration and implementation of SAP's Archive Development Kit
- Implementation of PBS archive add-on software for SAP ERP and business intelligence systems
- Implementation of document management solutions

- Training and documentation
- Data retention tool (DART) requirements

Learn More

For more information on how Sigma Business Solutions Inc. can help your company reduce costs and stay ahead of legal liabilities with its archiving methodology, visit **www.sigma-sbs.com** or email us at **info@sigma-sbs.com**. ◼
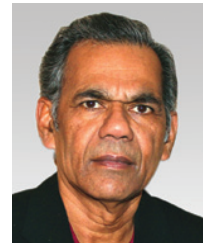
The Benefits of Partnering with Sigma

After partnering with Sigma, one customer experienced the following results from its data archiving strategy:

- Reduced execution times for weekly and monthly jobs (see **Figure 1**)
- Noticeable improvement in online queries and transaction processing
- Space savings of 1.7 TB
- Estimated savings of US$340,000 per year
- Reduction in database refreshes by 12 days per year (based on three refreshes)

Performance Improvement
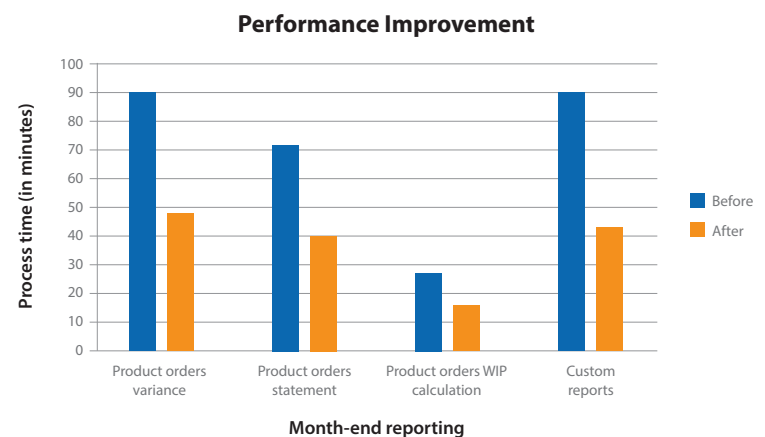
FIGURE 1 ▲ An at-a-glance look at one customer's performance improvements after partnering with Sigma to implement an archiving project

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