

Pitney Bowes[®] Spectrum[™] Technology Platform

Transform Business Data
into Actionable Information
Across the Entire Enterprise

Pitney Bowes[®] Spectrum[™] Technology Platform

Improve end-to-end business performance with the single platform that integrates quality data, location intelligence and decisive customer insight.

Benefits

- Deliver a comprehensive approach to managing data—on your terms
- Extend data quality to every customer touchpoint
- Provide for consistency and standards across your organization
- Enhance your core CRM and ERP applications
- Eliminate wasteful, redundant processes
- Make decisions that cut costs and boost profits
- Consistently meet stringent compliance requirements



The challenges associated with corporate data can overwhelm even the most sophisticated organization as each new acquisition, IT system and customer initiative adds new levels of complexity. While many executives rate their corporate data as “poor,” few are actively working on a plan for improvement.

To be successful, organizations need to find effective ways to deal with long-term issues such as ownership, disparate systems and overall data quality—while being opportunistic when it comes to favorable circumstances and critical business issues.

Pitney Bowes Business Insight provides the best of both worlds, with an enterprise-wide platform that makes it possible to centralize control and improve performance on your terms. The Pitney Bowes Spectrum Technology Platform does not replace your existing business platforms – it improves the quality, integration, accessibility and value of your information.

Take Control of Your Most Important Business Assets

In a recent Gartner study, organizations estimate that they are losing more than \$8 million annually because of data quality issues—with even higher totals in larger companies. In difficult economic times, organizations of all types must focus on controlling and improving data quality to minimize disruptions and losses.¹

Just as important, the right approach to enterprise data can help you locate new opportunities, connect with customers and communicate more efficiently. In addition to its service-oriented architecture and component-driven modules, the Pitney Bowes Spectrum Technology Platform is unique in how it leverages both data quality and location intelligence across your organization. From customer care and marketing to operations and compliance, business units can make better decisions with information that’s more accurate, timely and relevant.

¹ *Organizations Perceive Significant Cost Impact From Data Quality Issues, August 14, 2009, gartner.com*



A Foundation for Data Quality, Data Management and More

The Pitney Bowes Spectrum Technology Platform includes a set of components and applications that readily integrate with each other as well as your core CRM, ERP and legacy systems. These solutions work together to provide a consistent, single-view of your customers across the enterprise, and they are designed to support the needs of data stewards, IT managers and business users.

With considerable flexibility, you can start with applications that provide the most immediate impact to your bottom-line results and expand your reach over time based on specific business needs.

- **Know Your Customers Better**
Enterprise Data Quality Solutions standardize, validate and consolidate data so you can create accurate, comprehensive customer records.
- **Unleash Your Location Potential**
Enterprise Location Intelligence Solutions geocode records with pinpoint accuracy. Analyze and visualize data, automate calculations and make better business decisions.
- **Increase Returns on Your IT Investments**
Enterprise Data Integration Solutions unlock the power of your CRM and ERM systems, providing access to the

critical application data needed to improve enterprise performance.

- **Monitor, Validate and Manage Information**
Enterprise Data Governance Solutions provide the appropriate tools to profile and manage the quality of your company's data, so you can increase overall confidence.
- **Tackle Complex Business Problems**
Business Services include a suite of specialty applications so you can confront key challenges, including global terrorism, tax liabilities, runaway costs and wavering customer loyalty.

Simplifying a World of Data

Based on a modular, service-oriented architecture, these premier data quality solutions update, link and consolidate valuable information into an enterprise-wide business intelligence system.

To ensure consistency in all of your operations, the Spectrum Technology Platform includes both batch and transactional systems for any implementation. The scalable architecture leverages distributed systems and multiple processors to support millions of transactions per hour – satisfying the demands of enterprise-class data processing. Powerful rules-based engines and user-defined functions provide for unrivaled flexibility and ease of use.

The Pitney Bowes Spectrum™ Enterprise Data Quality Solution	The Pitney Bowes Spectrum™ Data Governance Solution	The Pitney Bowes Spectrum™ Enterprise Location Intelligence Solution	The Pitney Bowes Spectrum™ Data Integration Solution	The Pitney Bowes Spectrum™ Business Services
Universal Addressing Module Address Now Module Data Normalization Module Universal Name Module Advanced Matching Module	Profiler Plus Monitor Plus	Enterprise Geocoding Module Location Intelligence Module Enterprise Routing Module	Data Services for Oracle Data Services for Siebel Data Services for SFDC Data Services for SAP	Enterprise Tax Solution Enterprise Routing Module Data Quality Connector for mySAP Data Quality Connector for Siebel Global Sentry
The Pitney Bowes Spectrum™ Technology Platform ENTERPRISE DESIGNER • INTERACTIVE DRIVER • MANAGEMENT CONSOLE • CLIENT APIs • WEB SERVICES				

A Robust Set of Integrated Solutions

The true value data brings to your organization is reflected in the many ways it can advance your overall goals and objectives: increased profits; more efficient operations; and stronger customer relationships. That's why Pitney Bowes Business Insight provides you with a broad spectrum of mission-critical solutions—all on a single platform.

Data Quality Solution

Business users, administrators and data stewards can all access a single, enterprise-wide data quality solution to standardize, cleanse, update and enhance customer data, while streamlining the overall data quality process. We provide the tools you need to create and maintain up-to-date information – consistent, accurate data that can drive business results across every corner of your company.

Data Governance Solution

Organizational leader defined business processes are translated into “rules” through two powerful modules to enable you to quickly gain an accurate and detailed understanding of your data. You are able to profile and monitor the data used in your business systems and applications, with integrated analysis and management frameworks.

Location Intelligence Solution

In addition to enhancing your existing data, location intelligence creates new information about your underlying data records by assessing, evaluating, analyzing and modeling distinct geographic relationships. Reduce risk, increase customer satisfaction and streamline operations with our sophisticated, but easy to use, tools to verify locations and transform information into valuable business intelligence.

Data Integration Solution

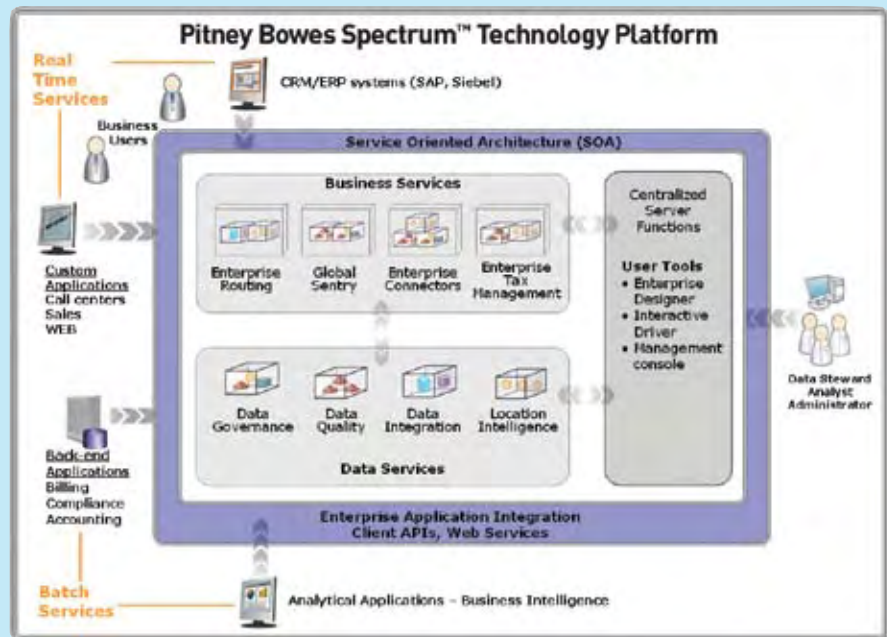
Accurate, complete and consistent customer information is essential to business success. Yet, even after investing millions in sophisticated CRM and ERP systems, over two-thirds of all organizations have issues with non-standard data and incomplete information. We provide you with a single source for data integration, so you can access, combine and deliver information from your disparate data sources.

Business Services

There are times in business when specialty applications are required to solve complex business problems. We provide you the means to confront and overcome some of the most pressing challenges in business today, including reducing the risk of conducting business with individuals and businesses on global watch-lists, tax liabilities, runaway logistic costs and quality connectors to your key customer information.

Enterprise-wide Data Quality, Data Management and More

The foundation of the Pitney Bowes Spectrum Technology Platform is built on services oriented architecture that enables easy deployment, integration and re-use of its data and business services into existing IT infrastructures with a strong commitment to continuous innovation and standards.



Capitalize on a More Accurate View of Your Business Data

Based on the service-oriented architecture (SOA), the Pitney Bowes Spectrum Technology Platform provides a foundation for enterprise-wide data quality, data management and much more:

- Extends data quality to every interaction and touch-point where customer data is part of a business process
- Helps establish "fit for use" standards
- Enables data stewards to understand, create and publish data quality and data enrichment business rules – specific to a domain, application, department or the enterprise
- Provides end to end capabilities – access, federation, profiling monitoring, parsing, standardization, validation, matching, consolidation and enrichment
- Data enrichment includes geo-coding, routing, and boundary-tagging using spatial analysis

This environment is not locked behind IT doors, it is brought forward to the opportunity owners – the data stewards and business analysts. Now business users, administrators and data stewards alike are able to use a single, enterprise-wide solution to effectively manage customer data quality processes, and much more.

Service-Oriented Architecture

The Pitney Bowes Spectrum Technology Platform uses a service-oriented modular architecture that supports multi-processor and distributed component installations, while satisfying the demands of enterprise-class data processing. Several options are provided for integrating in-house and third party applications. Integrating both batch and real-time solutions is simple and ensures consistency across the enterprise.

The Pitney Bowes Spectrum Technology Platform provides 3 Axis Scalability in support of performance, cost and flexibility with Remote Server and SaaS. Remote Server also supports batch (job) and real-time (service) dataflows.

Customize Business Processes

With the Pitney Bowes Spectrum Technology Platform's graphic rules editor, the Enterprise Designer, you can define a business process catered to the unique characteristic of your data and your business. Rules-based matching and user-defined dictionaries enable you to customize processes to your specific needs.

Batch and Real-time Processing

The Pitney Bowes Spectrum Technology Platform offers a single solution for both batch and transactional systems that provides consistent results across any implementation. The scalable architecture leverages distributed systems and multiple processors to support millions of transactions per hour.

Product Integration

API integration. Our flexible architecture provides rich support for integration using C, C++, COM, .NET, Java, Web Services and XML. This rich set of Client SDKs allows companies to integrate and provide the very best in data quality processes within their existing investments of ETL, EAI and Enterprise applications.

Real-time integration – On-premise. All functions of the Pitney Bowes Spectrum Technology Platform can be integrated into your IT and Web environments using the standard set of APIs. The results of transactional processing are always identical to the results obtained in batch, guaranteeing consistency in all your data quality operations and modes.

Real-Time Integration – Software-as-a-Service (SaaS). For faster implementation cycles and low Total Cost of Ownership (TCO), you have the flexibility to access and integrate all functions of the Pitney Bowes Spectrum Technology Platform over the Internet using the same APIs provided for on-premise integration.

Workflow and Centralized Management

The powerful and visual consoles serve both business analysts and data technicians equally well. The consoles allow for the population of the metadata repository, and creation and management of data quality processes. Using these features organizations can set standard rules across the enterprise for consistent data quality results

Monitoring and Management

Service utilization can be tracked and monitored by providing key information at a summary level, including who uses the service, when the service was accessed and what results were captured. Batch job flows can be monitored and managed to ensure proper execution from start to finish.

Additional benefits include:

- Design-time verification tool identifies errors in data-mapping and business rules prior to job execution
- Monitoring the run-time progress of workflows ensures that interruptions in mission-critical operations are detected immediately
- Workflow performance statistics allow the detection and monitoring of operational issues before they interrupt critical processes

User Interface

Data processing occurs at the server side, facilitating industry-leading processing performance. A powerful engine synchronizes repository data and manages communication between the client and the transformation modules via the HTTP or Sockets.

Framework Server

- Windows® 2000, XP, 2003
- Solaris – 9, 10
- HP-UX – 11.11, 11.23 (PA-RISC), 11.23i (Itanium)
- AIX – 5.3, 6.1
- Red Hat Linux – 4, 5.2
- Suse – 9, 10

Framework Client Tools

- Enterprise Designer
 - > Batch Flow Inspector
- Management Console
- Interactive Driver

Framework Client APIs

- C, C++, COM, .NET, Java, XML – 32 bit (Windows & Unix)
- C, C++, COM, .NET, Java, XML – 64 bit (Windows & Unix)
- Web Services

Get to know your customers better. Learn more about the Pitney Bowes Spectrum™ Technology Platform and gain the insight you need to make better decisions – enterprise-wide. Call us today at 866.874.6277 or visit www.tsimapping.com.

PITNEY BOWES
BUSINESS INSIGHT

With the industry's most comprehensive set of solutions for maximizing the value of customer data, Pitney Bowes Business Insight helps organizations more effectively locate, connect with and communicate to their customers in today's global markets.

TSI

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