

Enterprise Big Data & Analytics on IBM z Systems eGuide

*Bringing analytics and transactional data together
for optimal business insight & outcomes*



The convergence of Big Data, Mobile, Customer Interactions & Cloud with Analytics

Organizations are being asked to deliver more insight and smarter outcomes to support increasing revenue and profit while lowering business costs and risks.

Big Data, Mobile, Customer Interactions and Cloud are fundamentally changing the traditional business landscape and are having a significant impact on the direction of enterprise analytics strategies. Big Data presents many new sources of data, most notably, Social Media, which can enrich our knowledge about situations, issues, customers, and organizations that help create new opportunities. The ubiquity of mobile devices add location and time sensitivity to analytics. Winning in today's market not only requires competitive product offerings but it also demands superior customer interactions in order to attract, maintain and grow the client base and ultimately improve business performance – all of which requires analytics. Cloud has been identified as the optimal way to reduce costs and complexity. Its ability to virtualize data and services is changing the way analytics are delivered and managed.

Finding the optimal software solutions and platform to support a more business critical analytics strategy is vital.

Combines the power of transactional processing & analytics with IBM z Systems:

- Deliver analytics throughout the enterprise where ever and when ever users need it, giving the business a competitive edge to improve business outcomes.
- Ensure the very latest data is reflected in your analytics, leveraging the high qualities of service and accelerated performance to equip users with real-time, accurate and secure insight to support anti-fraud and customer growth initiatives.
- Offer a flexible, cost effective infrastructure that can expand and grow quickly as business needs change without re-architecting or adding IT complexity and cost.

This e-guide discusses the current climate impacting the analytics landscape and new approaches to provide quality, timely business insight for improved IT execution and enterprise business performance.

Resources

Thought Leadership Video: [Endless opportunities realized with a private analytics cloud](#)

Analyst Paper: [The Mainframe as a Key Business Analytics Platform - A white paper by Carl Olofson, IDC](#)

Analyst Papers: [Transforming Big Data into Insights - A white paper by Intelligent Business Strategies](#)

The Impact of Big Data on Analytics

Information is power....if you know how to extract value and insights out of it. The more that is known about a particular issue, situation, product, organization or individual the greater the likelihood of a better, smarter decision and business outcome. Volumes, varieties of data are growing exponentially. Learn how to exploit it.



The velocity at which organizations are expected to process data is accelerating. Today the majority of business analytics are based on information stored in enterprise data warehouses, operational data stores and data marts fed mainly from transaction and operational systems. This data is rich in value, is trusted and understood, as is its provenance.

The big data paradigm focuses on combining transactional data with many other sources of data such as social media, web logs, emails, documents, multi-media, text messages, sensor information providing a much richer, more complete view helping to augment our knowledge of the world around us. Big data and business analytics are symbiotic – without a big data approach analytics will be less effective. Without a comprehensive analytics strategy the benefit of Big Data may not be fully realized. And bringing all of that together with transactional data in real time is paramount in gaining the most competitive insight and optimal business outcomes.

Resources

[Demo: Your Big Data Advantage](#)

[White Paper: Deliver Deeper Business Insight with IBM InfoSphere BigInsights and the z Systems Connector for Hadoop](#)

[Video: Building a Scalable Big Data Solution in a Changing Regulatory Landscape](#)

[Whitepaper: The Mainframe as a big data analytics platform](#)

[New Red Books publication, blog and video!: The Value and Benefits of IBM InfoSphere BigInsights Running on IBM z Systems](#)

The right analytics platform for optimum insight

The business of analytics is undergoing a major change and the status quo is no longer going to suffice. To be successful organizations must address the critical shifts taking place across the analytics landscape, how these shifts impact their total strategy and the changes they need to make in order to drive innovation and more competitive insight.

With this evolution of analytics, there are more users to support, more transactions to process and the qualities of service surrounding analytics initiatives are now more critical than ever in order to consistently deliver the right insight, at the right time, to the right users. This shift introduces a new set of non-functional requirements that must be considered in every analytics strategy – bringing platform choice to the forefront of the conversation.

Resources

Video: [Ray Jones](#)

White Paper : [Gain vital insight from your data](#)

Blog: [When analytics are business critical](#)

The IBM z Systems platform offers distinct advantages to analytics strategies:

- **Integrated, end to end data lifecycle for transactional & analytics processing** capitalizing on the fact that 80% of the transactional data used for analytics originates on z Systems. The industry is recognizing the need for such integration; Gartner Group calls it hybrid transaction and analytics processing (HTAP).
- **Transactional-application QoS extended to Analytics and Big Data:** Single integrated environment for transactional applications, analytics and Big Data with proven 99.999% availability, performance at 100% capacity, EAL5+ security .
- **Real time scoring integrated directly into operational processing** delivering up to 12K transactions per second .
- **High velocity transactions and dramatically faster complex query execution times** up to 2000x.
- **Rapid IT execution of business critical analytics:** A flexible on-demand infrastructure prioritizes analytics processes and user requests with automated workload management, allocating resources based on defined priorities to reduce the impact of bottlenecks.
- **Cost effective solution that uses current investments in platform/people/ processor to:**
 - ✓ Eliminate the expense associate with query tuning;
 - ✓ Minimize the cost of managing and processing historical data, reduce host storage costs by up to 95%;
 - ✓ Dramatically reduce ETL costs by minimizing data movement; and
 - ✓ Reduce the cost of Analytics infrastructure and administration up to 50%

Taking Business Insight to New Heights

With Big Data, Mobile, Customer Interactions and Cloud changing the analytics landscape organizations are reevaluating analytics strategies and looking for cost competitive, flexible solutions that can quickly impact the quality and timeliness of business insight across the enterprise.

Technology such as IBM DB2 Analytics Accelerator is just such a solution, enabling near real-time analytic reporting with minimal latency, increasing query responses up to 2,000 times. IBM SPSS on z Systems brings real-time scoring to transactional systems, minimizing the need for service calls across platforms with the ability to score 12K DB2 for z/OS transactions in real time.

These and other solutions combined with the proven qualities of service of the z Systems platform enable highly competitive business insight and improved business performance impacting areas like customer interactions and anti-fraud.

Big Data & Analytics on z Systems delivers:

- Improved bottom line results
- Heightened competitive advantage
- Access to new levels and types of insight, on demand
- More productive utilization of business users' time
- Reduced risk of exposing confidential data
- Increased user adoption
- Reduced time to value
- Reduced total cost of acquisition & ownership of analytics

Resources

Demo: DB2 Analytics Accelerator (Coming end of Q4)

[Demo: Integrating transactions & Analytics for Fraud Detection](#)

[Whitepaper: Use analytics to innovate and lead in today's banking environment](#)

[Whitepaper: The new era of capacity management: The art of the possible](#)

[Webcast: When analytics and mobile collide. Are you prepared?](#)

Big Data, Analytics & z Systems

Drive smarter business outcomes

Organizations across the globe and across all industries including finance, insurance, retail, telecommunications, utilities and government, are elevating their business performance through a cost effective, flexible Big Data and Analytics on IBM z Systems.



Increased retail sales revenue through point-of-sale suggest-sell insight



Gained 24/7 access to analytics for key public services. 3 million citizens gain insight into the county's finances, helping them keep track of public spending



Achieved its objective of providing access to the most timely, accurate data to improve customer satisfaction



1000+ users simultaneously get high-speed analytics on real-time data. Time cut from months to weeks to deliver the insight needed to develop and release new marketing campaigns

Resources

Use Cases:

- [Miami Dade County](#)
- [Petrol](#)
- [SwissRe](#)
- [Halkbank](#)
- [Sicoob](#)
- [Bankia](#)
- [Government agency](#)
- [IBM](#)

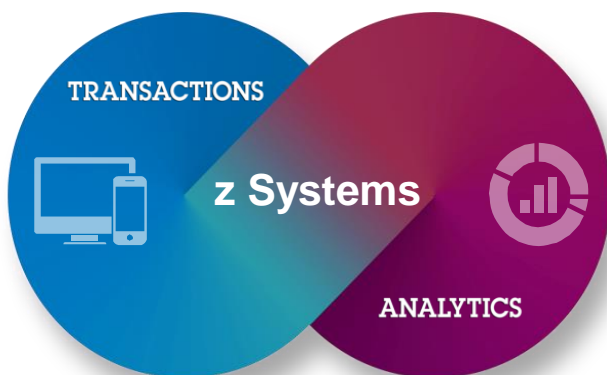
Videos:

- [Banca Carige](#)
- [Miami Dade Part 1](#)
- [Miami Dade Part 2](#)
- [IBM Blue Insight Part 1](#)
- [IBM Blue Insight Part 2](#)
- [Sicoob](#)
- [Swiss Mobiliar](#)
- [Swiss Re](#)
 - [Japanese version](#)
 - [Portuguese version](#)
- [White Cube](#)



Explore, Learn, and Implement

IBM's comprehensive Big Data Analytics solution can empower your organization with the business critical insight you need to outperform the competition and gain smarter outcomes...



[Visit the IBM Enterprise Big Data & Analytics Community to learn more](#)

Offerings/Capabilities

- [DB2 Analytics Accelerator](#) can accelerate queries more than 2000x faster, ensuring that mobile users get the answers they need fast.
- [InfoSphere BigInsights](#) brings additional big data sources into your analytics environment for broader insight.
- [Cognos BI](#) offers reporting, analysis, and dashboards accessible via mobile devices.
- [DB2 Query Management Facility](#) provides interactive dashboards, graphical reports and analytics for IBM DB2 for z/OS
- [SPSS Modeler](#) provides predictive analytics and real-time scoring in transaction for analytics at point of impact.
- [Cognos TM1](#) provides reporting, analysis, operational, and financial planning and consolidation
- [InfoSphere Information Server](#): profiles, cleanses and integrates information from heterogeneous sources to drive greater business insight faster, at lower cost
- [zEnterprise Analytics System 9700/9710](#) offers a cost-competitive, integrated combination of hardware, software, and services to deliver analytics across the enterprise.
- [DB2 with BLU Acceleration for Linux on z Systems](#) is the next generation database technology that changes the game for in-memory computing.
- [ILOG CPLEX Optimizer](#) is a mathematical programming technology that enables decision optimization for improving efficiency, reducing costs, and increasing profitability.
- [IBM z13](#) provides the infrastructure that will help differentiate a refined digital business.

