

Integration
Mobilization
Unification

From Legacy to Leading Edge



Enterprise Data Integration: Making the Most of Your Mainframe Data Assets



White Paper



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EXECUTIVE SUMMARY

In today's business climate, companies need to exploit whatever data enters the enterprise, in whatever format and from whatever source. This is the only way to gain a comprehensive view of the business and its customers. "Every company is a data company," as the adage goes, and if you're not using all the available data, you're probably making incorrect decisions.

While migrating mainframe data is a reasonable choice in some scenarios, often a better, and more affordable solution is to unify data across disparate platforms, programming languages, and data formats. Integrating vital business information with other platforms and processes is what we call [Enterprise Data Integration](#).

The challenge is that many companies operating one or more mainframes may not realize how much valuable data they have –or how to access and use it effectively.

```
mirror_mod.use_y = True
mirror_mod.use_z = False
elif _operation == "MIRROR_Z":
    mirror_mod.use_x = False
    mirror_mod.use_y = False
    mirror_mod.use_z = True

#selection at the end -add bac
mirror_ob.select= 1
modification_ob.select=1
```

WHY IS DATA INTEGRATION IMPORTANT?

According to [Fortune Business Insights](#), the big data industry was valued at \$272 billion USD in 2022 and is projected to grow to \$745 billion USD by 2030. The size and ongoing 13.5% growth rate indicate the importance of data to the current and future state of business.

Value-added content providers and data brokers will proliferate as enterprises (and developers) look for interesting data sources, as well as applications that help them to understand their customers, products, and the markets in which they exist.

To deliver the systems and information to support this big data explosion, organizations must be able to access and integrate information from multiple data sources, including the traditionally hard-to-integrate mainframe data.

BUSINESS DRIVERS FOR DATA INTEGRATION

What factors are driving organizations to seek new and innovative ways to access and integrate information from multiple data sources?

The primary drivers include:

REAL TIME ANALYTICS

With access to more complete, up-to-date integrated data, companies can become more nimble and make faster, more informed business decisions to improve operational efficiency and customer service.

SIMPLIFIED DATA ACCESS

As companies grow – organically and through mergers and acquisitions – operations can become siloed because the data systems are disparately located and lack common structure and format. Effective data integration opens operational borders, enabling ubiquitous access to business-critical information through a common interface, and reducing the need for unique skill sets for each data source.

LEGACY MODERNIZATION

Technology continues to push the speed of business, especially as it relates to IT. For many firms, new mobile, Internet, and business intelligence requirements are overloading IT professionals, while at the same time, they are trying to manage and maintain mission-critical, legacy data and mainframe systems. Data integration solves that challenge. Done right, unified data can extend the life and ROI of existing legacy resources while allowing data to flow to and from disparate sources of data in real-time.

COST REDUCTION

Faced with growing consumer demand and competitive pressure, companies are pushing to get IT projects completed quickly and at the lowest possible cost. With a sound business strategy and an effective data integration solution, they can actually reduce data storage and warehouse costs, cope with decreasing mainframe programming skills, and gain a common tool for reusing multiple source data sets.

KEYS TO SUCCESSFUL DATA INTEGRATION

As with any IT implementation, there are several important steps involved in undertaking a data integration initiative.

The following is a step-by-step guide:

1 Assess your business objectives

Conduct a complete inventory of the programs and data elements. Ensure that all the data sources can accommodate the business requests for information.

2 Implement a unified interface and lightweight installation

Pick technologies that can be easily configured, implemented, and managed. To reduce cost and complexity, the solution should be able to be installed quickly and with minimal IT staff involvement.

3 Conduct comprehensive data mapping

Choose tools that are simple to use but powerful enough to get the job done. Mapping the data accurately is essential to keeping the project on track with the end goals in mind. Someone with extensive knowledge of the data, such as a DBA or an application developer typically performs the data-mapping function.

4 Complete data integration and seamless transfer

Adaptigent's data integration solution ensures that the business-critical, enterprise data residing on a mainframe can work in conjunction with any application or data residing on any other system — even in the cloud. It enables the staging and consolidation of data from multiple source systems, so you can standardize data formats, validate relationships between records and data elements, and create a single source for information access.

5 Ensure strong project management and troubleshooting

Provide options for system administrators and data administrators to manage and fix errors.

6 Future-proof and leverage technology

Reuse, repurpose, and grow the data integration needs across the enterprise as business needs and objectives change.

Data integration gives an enterprise the ability to take applications and extend them by including up-to-the-minute mainframe data, as well as data from other sources. But the benefits don't stop there. Having the mainframe be a provider as well as a consumer of data makes your investment in the mainframe more valuable.

In addition, creating and maintaining a stable, consistent development environment makes it possible to maximize IT talent and resources. This helps ensure that future projects will be completed on time and within budget.

Unlike data replication, which runs the risk of having out-of-sync data, an integrated data architecture means information is accessed in its native form. By not moving legacy data off the mainframe, there is no need to initiate a huge conversion effort and to write new code.

Finally, having multiple ways to access the data and deploy the finished application means much more flexibility in the way future applications are developed and deployed. Data integration is a powerful capability that involves your most important assets. With the right tools and technology partner, the process is quicker and easier than you might think.



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DATA INTEGRATION IN ACTION

GOVERNMENT - A California County gave its police and criminal justice staff remote web access to its mainframe-based criminal record system, joining together past criminal records with pending arrest warrants and charges. The result:

- Improved processing of individuals through the criminal justice system
- Immediate, real-time access to criminal records
- Eliminated needless detention of citizens
- Reduced personnel needs and space to accommodate backlog

MANUFACTURING - A High-end Hosiery Manufacturer needed to manage inventory and its processing more closely to ensure customers had products in stores to sell when needed. By connecting the systems and data that tracked production, packing, and shipping updates, they:

- Reduced errors in each of the process categories
- Gained better production visibility and avoided lost revenue
- Improved customer service for its distributors

RETAIL - A Regional Grocery Store Chain operating on small margins needed to consistently meet customer demand for fresh grocery items to stay competitive. Managing sales, ordering products, and shipping so many items involved complex management and shipping logistics. With data integration from its inventory system, supply resources and in-store ordering, they:

- Reduced errors in production, packing, shipping, and tracking of shipments
- Improved distribution accuracy of products to store locations
- Shrunk inventory waste and maintained fresher quality by avoiding surplus produce

BANKING - A Large National Bank lending, managing, and collecting student loans needed to provide improved access to loan information, including both past loans and loans currently under consideration, which resided in multiple data locations. With data integration, they:

- Opened options for access from a variety of devices
- Met new graduate expectations for accessing loan information on various devices
- Improved the borrower experience with prompt, complete loan information

FINANCIAL SERVICES - The Nation's Largest Employee Retirement System struggled to keep up with the volume of member inquiries regarding their individual retirement plans. Information such as amount invested, recent transactions, investment elections, payroll deductions, etc. were stored on different systems. By connecting the disparate data resources the retirement system provider:

- Decreased customer service response time
- Improved member experience
- Gained a competitive advantage over other providers



Adaptigent is a software technology company offering solutions to help businesses harness the power of APIs for innovation and growth. A global distributor of the Fujitsu NetCOBOL compiler, Adaptigent seamlessly integrates core systems. More than 2,500 organizations globally trust Adaptigent solutions. Visit www.adaptigent.com.

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