CASE STUDY

Strategic IT Portfolio Management with 70% Faster Integration for a US Construction Industry Giant using Boomi

ArchKey SOLUTIONS

aspire SYSTEMS

attention. always.

Key Issues

- Lack of Standardization and Governance
- Limitations of Legacy Systems and Infrastructure
- Poor Scalability and High Operational Costs
- Complex and Rigid Programming Model
- High Dependency on Specialized Skills and Tools

Solutions

- Establishing Standardized Integration Principles to Address Governance Gaps

Benefits

- 70% Faster Project Completion
- 30%+ Lower TCO
- 5–6X Developer Productivity Boost

About the Customer

The customer is a leading provider of comprehensive electrical and technology solutions, they specialize in designing, building, and maintaining electrical, technology, and other specialty systems, serving both new and existing facilities nationwide. With a workforce of nearly 6,000 employees and a widespread national presence in the U.S., they deliver scalable technology solutions with a strong focus on reliability. Additionally, the customer has launched a national facilities services team, supported by strategically positioned local teams across the U.S., to provide asset care and lifecycle management.

Need

The customer aimed to consolidate two to three recent acquisitions into a unified, scalable enterprise system to support business growth and operational efficiency.

Their goal was to modernize existing processes, incrementally scale resources and operations, and leverage data-driven insights to align with strategic objectives.

A key part of this initiative involved migrating from legacy middleware to an integration platform as a service (iPaaS), enabling greater agility, enhanced security, improved connectivity, and a more flexible foundation for future growth.

The Challenge

Lack of Standardization and Governance:

The customer struggled with inconsistent integration practices, limited governance, and poor visibility across systems. This made auditing difficult and slowed down the creation of a controlled and efficient integration environment.

Legacy System Limitations:

Their existing integrations were built on legacy platforms with the following constraints:

- **On-premises deployment:** Required dedicated hardware and infrastructure.
- **Complex configuration:** Involved manual setup and intricate processes.
- **Limited connectivity:** Supported fewer protocols and data formats.
- **Non-user-friendly interfaces:** Needed specialized technical skills to manage.
- **Scalability issues:** Continuous changing data volumes lead to complexity and high cost
- **Poor support for modern architectures:** Struggled with SaaS, microservices, and event-driven systems.
- **High maintenance costs:** the aging infrastructure and traditional legacy system, required specialized resource needs

Programming Model Challenges:

The standard programming approach added further complexity:

- **Heavy reliance on custom coding:** Required significant increased time and specialized development skills.
- **Tightly coupled logic:** Created monolithic code that was hard and to understand, change, or reuse leading to complexity

- **Limited use of reusable assets:** Developers had to build integrations from scratch.
- **Tool-dependent development environment:** Tied integrations to specific legacy tools.
- **Restricted deployment flexibility:** Deployments were bound to the tool's infrastructure.
- **Steep learning curve:** Developers needed in-depth knowledge of the legacy tools and programming models which thereby increased the labor cost

These challenges collectively made integration efforts time-consuming, costly, and difficult to scale or adapt to modern business needs.

The Solution

Establishing unique standard integration principle –

Aspire's solution was establishing standard Integration Design Principles & Guidelines as a fantastic step towards addressing the earlier governance and standardization challenges and all this with Boomi as middleware.

This proactive approach significantly helped improve the efficiency, maintainability, and overall quality of the integrations

Redefining design rules and best practices

Fundamental rules and best practices were defined to guide the design and development of all integrations within the customer organization to ensure consistency, quality, and adherence to architectural standards.

Aspire's defined practices as solution covered the following

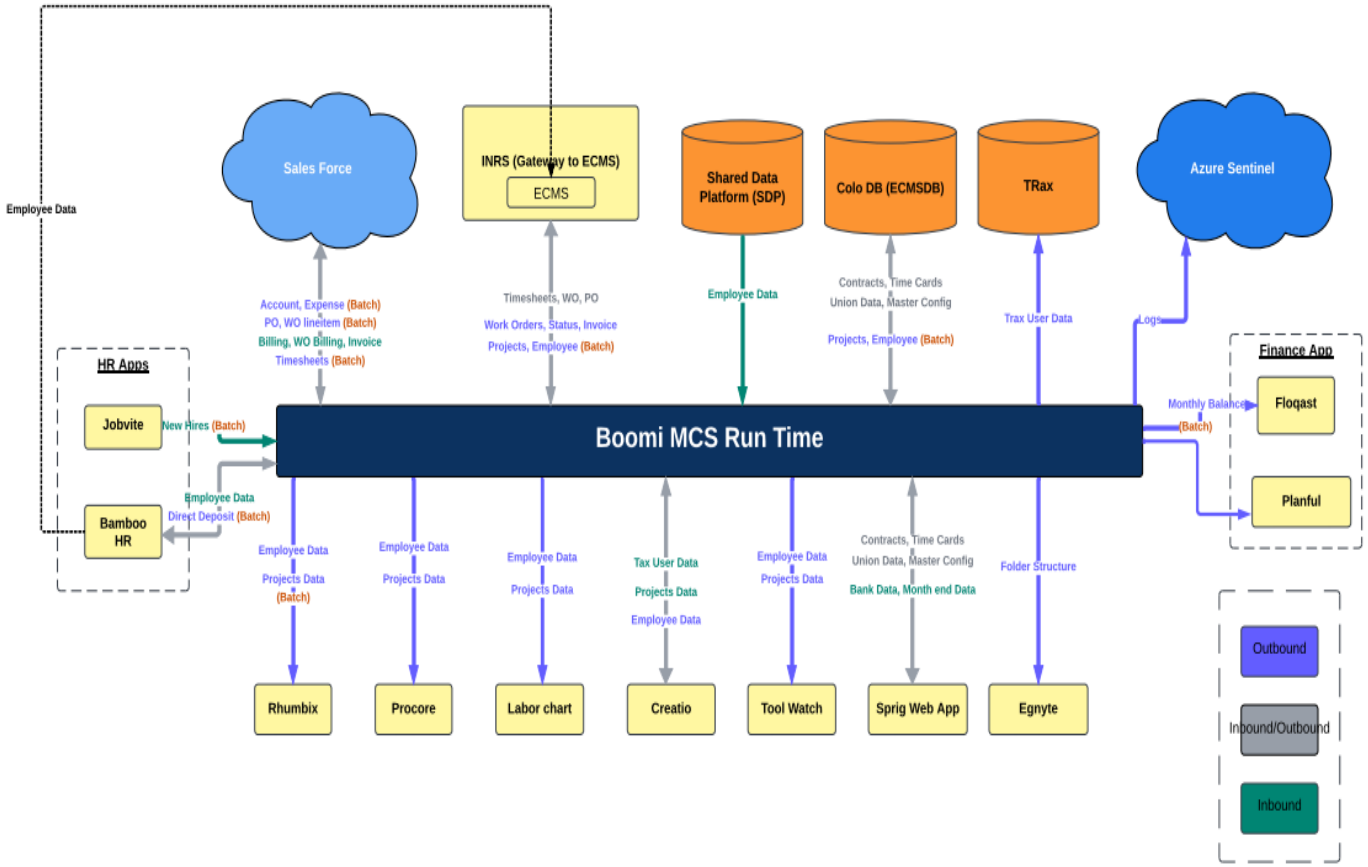
- **Data Integration Principles**
- **Data Integrity and Transformation:** Ensuring data accuracy, consistency, and validity during integration covering Standard approaches for data mapping, cleansing, and enrichment.

- **Data Security and Governance:** Guidelines for data encryption, masking, and access control during transit and at rest so that integrated data aligns with overall data governance policies.
- **Data Volume and Performance:** Considerations for handling large data volumes and ensuring optimal integration performance.

Application Integration Principles:

- **Loose Coupling:** Designing aspect for integrations to minimize dependencies between systems.
- **Reusability:** Identifying and promoting the reuse of integration components and services.
- **Scalability and Reliability:** Designing integrations that can handle increasing load and are resilient to failures.
- **Modularity and API First approach:** Breaking down complex integrations into smaller, manageable components. Prioritizing the use of APIs for integration where feasible.
- **Event-Driven Architecture:** Considering event-based integration patterns for real-time data flow.

Architecture Diagram



The Results

- **Faster Time to Value =** Lower Implementation Costs: Client was able to reduce integration project completion times by as much as 70% due to its ease of use and pre-built components.
- **Reduced Total Cost of Ownership (TCO):** A potential TCO savings of 30% or more by switching to iPaaS due to lower infrastructure costs, reduced maintenance, and decreased reliance on specialized skills
- **Increased Developer Productivity:** Aspire's help in moving to iPaaS with low-code/no-code capabilities have led to 5-6X faster development compared to code-intensive legacy tools, freeing up specialized developers for more complex

Technology Snapshot

- **Boomi Integrator**
- **Boomi APIM**
- **AURAS accelerator**

Aspire Systems is a global technology services firm serving as a trusted technology partner for our customers. We work with some of the world's most innovative enterprises and independent software vendors, helping them leverage technology and outsourcing in our specific areas of expertise. Our core philosophy of "Attention. Always." communicates our belief in lavishing care and attention on our customer and employees.

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