SLAYING THE LEGACY DRAGON – MODERNIZING THE MONOLITHIC LEGACY SYSTEM

Phasing out the Mainframes

Many organizations are facing the end of life for their core legacy systems. These systems, often mainframes or the like, have been enabling critical business functions for the last 25-30 years. When faced with the reality that the legacy systems are becoming a hindrance to business agility and growth (not to mention the daily risk of instability), you are the IT executive being looked at for the answer. Replacing legacy systems usually has lots of upsides for the business - greater efficiency, new functionality, and business agility - but it also comes with incredible delivery risk and expense.

Due to their longevity, building these systems does not happen many times in a career. This creates another challenge - experience and skills in modernizing the core legacy system are typically non-existent internally. That leaves you with two choices: (1) building an internal capability, which will take time or; (2) hiring a large system integrator which is very, very expensive which should address some of the delivery risk but does not necessarily leave your organization capable of supporting it going forward (e.g. "no one ever gets fired for hiring company ABC").

Approach

When embarking on a large-scale legacy system modernization program, there are a few things you want to consider:

Q: What did the current state look like before the decision to modernize the legacy system?
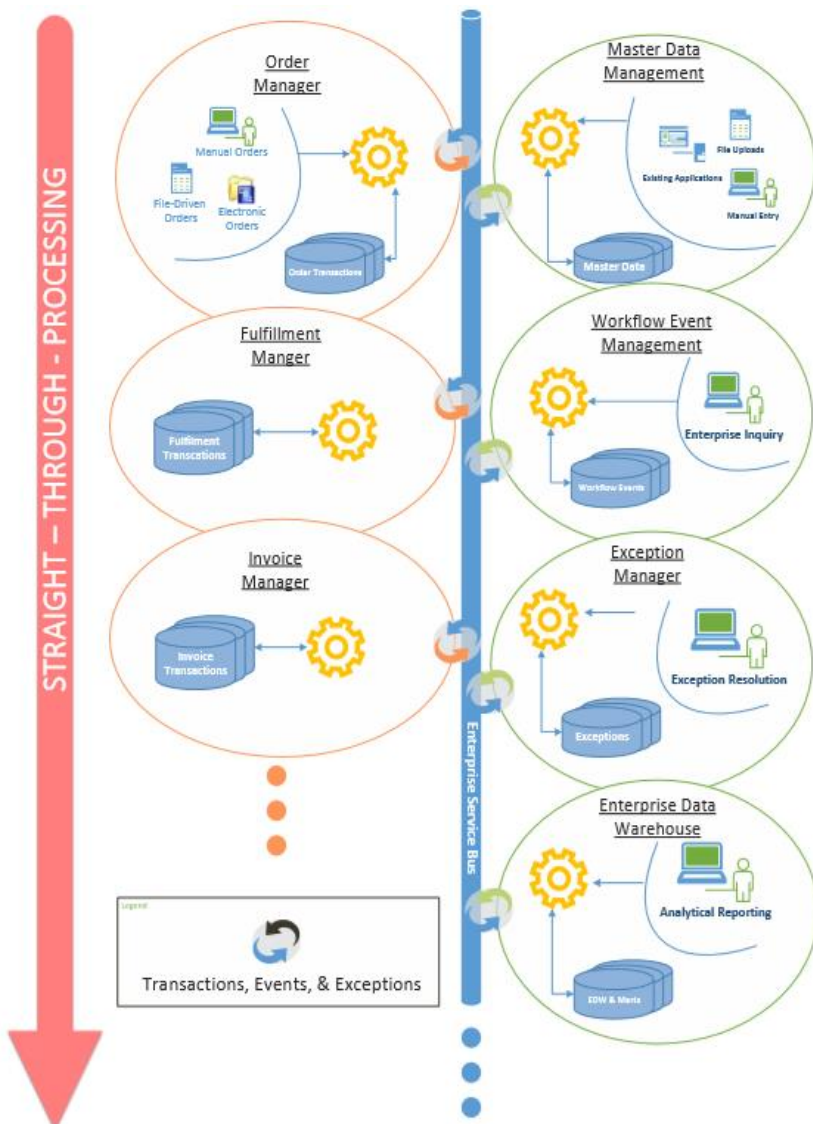
1. **From an IT perspective**

   - Tightly coupled architecture in a monolithic legacy system (e.g. mainframe systems) with bolt-on applications and batch- based interfaces
   - Required tribal knowledge to maintain
   - Limited resources with required skill sets
   - Not being used as intended – design no longer supports new business models
   - Reactionary and 'fire-fighting' IT operating model

2. **From a business perspective**

   - System was monitored (e.g. reports are run) to determine what work is required
   - Business performance improvements were constrained by legacy system capabilities
   - New business opportunities were difficult to implement
   - Operational risk increased due to unpredictable system behavior and performance
   - Business performance measures were not transparent

Modernization concepts that enable business opportunities

- Straight-through Transactional (STP) Processing
- Exception (Tasked)-Based Workflows
- Transactional Workflow Event Management (or Business Activity Monitoring)
- Get data correct the first time (Validation, Enrichment, and Standardize – i.e. VEST'ing)
- Data-centric approach: run data designs in front of application designs
- Component or service-based decoupled architecture

Transactions, Events, & Exceptions

Possible business opportunities from modernizing legacy mainframe system:
1. Increased Productivity: Reduced Costs/Improved Margins + Enable Scalability)
 • More orders/loads (i.e. transactions) managed/ processed per person
• Minimize non-value added manual support of transactional processing
• Process efficiencies enabled from operational performance measured in near real-time

2. Improved Customer Experience (Revenue/Retention Increase)
• Reduce operational issues experienced by the customer by managing issues proactively and more quickly
• Provide customers with self-service order tracking and alert monitoring
• Ad hoc customer service inquiries more efficiently and effectively handled

3. Greater Business Agility (Increased Revenue and/or Reduced Costs)
• Greater transparency into existing processes may identify new opportunities (or priorities)
• Quicker time to market to develop business enablers – e.g. new system functionality

These projects need emphasis in these initiatives:
• Business Strategy Alignment – i.e. A vision
• Organizational Change Management
• Enterprise Architecture
• Business Participation at Multiple Levels
• Business Process and organizational engineering
• Strong Program Management

About Data Blueprint

Data Blueprint is a data management consulting firm that puts organizations on the right path to leverage data for competitive advantage and operational efficiency. We unlock business value. It is our belief that strong data management capabilities are the key to sustained long-term value creation. We help clients leverage data as a strategic investment and become data-driven.