The Four Levels of Data Readiness

Why the common practice of data migration is not good enough!

Most companies preparing for an ERP implementation focus on business process reengineering and configuration in their strategy planning and goal setting. Rarely are these companies given a meaningful explanation of their data readiness and what that means for the new ERP, CRM or HCM system, nor do they understand why application vendors recommend allocating 20-40% of the implementation budget to data migration. Like many others, your organization has decided to retire currently running legacy systems and migrate to a new instance of an ERP system or consolidate multiple instances of ERP into a single instance. The question you (and many others) have most likely avoided is:

Is Your Data Ready for your new system?

TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>PAGE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
</tr>
<tr>
<td>2</td>
<td>The Four Levels of Data Readiness</td>
</tr>
<tr>
<td>3</td>
<td>Tactical but not Practical Methodology</td>
</tr>
<tr>
<td>5</td>
<td>The BackOffice Answer: Be Strategic About Your Data</td>
</tr>
<tr>
<td>7</td>
<td>Boring Go Live®: Next Steps for Success</td>
</tr>
</tbody>
</table>
Implementing an ERP solution can seem like an insurmountable task and can leave even the most disciplined CEO, CFO or CIO with feelings of fear, uncertainty and doubt. A modern ERP implementation quickly absorbs large amounts of company resources and becomes the focal point of corporate strategy in the short term. The consequences of failing are enough to make any executive dread the decisions involved.

Data migration challenges are typically excluded as a company learns the common requirements of a new ERP, CRM or HCM system. In addition, the toolset offered by implementation partners generally focuses on configuration and business process challenges rather than the challenges of migrating the thousands of critical business objects in a complete, clean, consistent and properly formatted way using a repeatable process. However complicated the existing systems may seem, it’s not the complexity that overwhelms implementation teams but the lack of an effective migration methodology to eliminate the inevitable project delays associated with poorly executed migration plans.

While there are several ways to tackle the problem, the quality of a data migration often suffers from compromises made to meet rapidly emerging deadlines and the lack of a sufficient strategy for handling the data in the first place.

BackOffice Associates® has recognized four levels of data readiness and the associated levels of risk that emphasize the importance and consequences of data migration. These four levels are balanced between costs associated with the entire implementation and the risk of costly errors and delays created by incomplete, inaccurate and irrelevant data. Ignoring the impact of bad data in any ERP system will lead to a poorly performing system requiring constant and costly remediation.
The Four Levels of Data Readiness

1. Good Enough to Go-Live
   The first level of data readiness, is referred to as “good enough to go-live.” This is the point where a company accepts an error rate simply to get the system up and running rather than risk further delays. This happens frequently because the project has already extended far beyond the estimated deadline or would incur unacceptable costs if go-live were postponed. Most ERP implementations face this critical point regarding data, and the business consequences of that “acceptable” level of error are often unknown for some time. Unfortunately, this process is common practice and most companies are never presented with alternatives other than accepting the “apparent status quo” of data chaos.

2. Error-Free
   Realizing there is no “acceptable” error rate and that data should be “error-free” is the second level of data readiness. At this level, data is loaded without producing error messages. The data, however, is not complete. All data necessary to run your business is not available, resulting in costly delays in daily business operations. Because project planning has traditionally focused on configuration and other challenges, many managers have regularly compromised their expectations for error-free data and an effective data migration methodology. By ignoring the data, these managers paid the price in costly delays and business interruptions.

3. Business-Ready
   It may seem that error-free is the highest level of data readiness, but is the data business-ready? While at level two the data that has been loaded produced no error messages, is all the critical data complete and accurate for the loading process? To make sure critical data is not omitted, it is necessary to take one more step to become business-ready. By reverse engineering the supply chain, all data required to accurately power the system will be in place at go-live.

4. Validated
   Throughout all levels of data readiness data should be “validated” and traceable. However, for highly regulated, compliance-intensive industries like life sciences, this final step of validation is a legal and practical necessity. As an example, many life sciences firms not only need to validate and trace data changes, but also need to authenticate and audit these changes as well, so compliance can be demonstrated to meet federal regulations.
Tactical but not Practical Methodology

The common practice of data migration is based on a methodology in which the new ERP system is considered the central integration point for all peripheral systems’ data, as shown in the diagram below. In this approach, each database is tactically loaded into the new ERP system as an isolated task without respect to the activities simultaneously carried out in conjunction with the other systems. This tactical approach may seem logical to ensure focus and accuracy, but often results in an inaccurate and inefficient view of the aggregate data set and resulting dependencies. This approach promotes redundancies and allows for the proliferation of inconsistent and incomplete data.

This tactical methodology is based on attacking individual parts of the problem in isolated groups, hoping that the accumulated effort will accomplish the task. What is not considered with this approach is the complexity of a fully integrated system and the necessary interaction between the data including data dependencies. While each individual database may be properly sorted for loading, this approach does not ensure the target system will be duplicate-free or totally accurate when all the systems are joined. As a result, there is a high potential for redundant transaction execution with a negative effect on the daily business and cash flow of the firm.

Furthermore, when business objects are loaded in this isolated manner no qualified review of the actual data is carried out. This can result in the transfer of outdated and likely irrelevant data. When handling systems in this isolated manner, it is not possible to forecast the connections, interactions or duplicates across the entire set of systems. Not only does this result in a waste of time but, more importantly, the data is not business-ready.

Following common practice, a project may be underway for up to six months before any data is loaded into the target ERP system to check for errors. During this period, project costs accumulate and when data is loaded, a sample of only 10% is used (see diagram on next page). If a large error rate is discovered, actions may be taken. With less...
significant error rates, though, the project continues while these errors are sought out. What is not accounted for by using this methodology is the sample representation.

Even if no errors are found during the loading of the sample, there is no guarantee that the data represented in the 10% sample is truly indicative of all data in the database. Keeping the pool of business objects fragmented and loading the databases individually at different times further exacerbates data complexity and restricts a full overview of the business objects and their interactions in an application production environment.

Traditionally, the only time the entire pool of databases is loaded into the target application is at go-live and the effort begins two months prior to the actual go-live date. As a result, the company is required to begin parallel maintenance of all legacy databases as well as the newly constructed application database. This parallel maintenance imposes costs in terms of time, labor and the potential for errors.

Many errors not accounted for when loading the samples are often found at this stage, thus significantly delaying the go-live date and, in some cases, breaking the entire implementation. Rarely does a project fail because of overly optimistic time estimates. It fails because of a flawed approach and methodology for solving the task of data migration. In the cases where the go-live date is met, the result is often achieved at a much higher cost than first budgeted. Many experienced CEOs will acknowledge that the burn rate of the project increases dramatically around the go-live date in order to accommodate programmers working in 24-hour shifts to load data at a newly evolving benchmark for acceptable error.

Most businesses never get beyond the first level of data readiness and simply proceed to go-live with a level of error that may not match their original expectations for what is acceptable. The problem is that an acceptable error rate is a subjective measure that may even change over the project timeline. During blueprinting, most companies would aspire to go-live without any errors. As the project progresses, though, and time is running out, the majority of companies will have to accommodate an “acceptable error rate.” Often, that acceptable rate is just a number small enough to make the post go-live clean up seem less costly than the delay.

BackOffice Associates® believes there is no such thing as an acceptable error rate — ramifications of errors can lead to the unknown. It could be that 3% of your customer addresses are missing and you will not be able to serve that part of your client base, including your largest customer. Or perhaps a component used across all product lines is not loaded into your new ERP system, resulting in an inability to process any production orders. So the initial error rate is no measure of the impact on your business — it might be the tip of an iceberg that could be extremely costly to your enterprise.

What is the alternative?…
BackOffice Associates® does not believe that tactics alone can solve data migration problems. The only way to achieve a **Boring Go Live®** data migration and ERP implementation is with a strategic global approach. Isolating the current databases defies the logic behind joining the databases in the first place. The data must be transferred — not only error-free — but also business-ready. The BackOffice Associates methodology is a holistic approach where only 100% representation of the data is accepted. No sample sets are used. The way to achieve this is to load all data simultaneously from the start.

The BackOffice approach is to extract all the current databases into a central repository and then report the entire data pool against the ERP system on a continuous basis from the beginning. We are then able to flag the data that will not be accepted by the ERP system and have it corrected at once instead of post go-live. Besides making data error-free, this strategy enhances the search for omitted data since all databases are interacting.

The BackOffice technology and methodology enable a complete evaluation of the entire data pool. Reporting is much more robust because users and developers can see their actual data operating in the ERP environment. Ultimately, this approach enables the development environment to effectively progress through the different phases of a project’s planning and implementation timeline. When the actual go-live date arrives, the procedure has already been tested several times. In addition, errors in both data and business processes have been corrected along the way. No time has been wasted! This process is repeatable and once configured, requires no further interventions.

While we have proposed four levels of data readiness, it is important to understand that validation and authentication are prerequisites for certain regulated industries, but not a requirement for a Boring Go Live data migration. Validation capabilities are built into the BackOffice Associates technology and methodology. We initiate validation as a natural part of our data cleansing and migration processes through each level of data readiness.

---

**Strategic Approach**

This approach allows a holistic view of the business, data and processes by loading 100% of the raw data, which will **Let the Data Speak for Itself™**.
BackOffice Associates® has delivered over 550 Boring Go Live data migrations for satisfied ERP customers around the world since 1996.

Converting your data to your new ERP system requires more than mere extraction, transformation and loading. Your legacy data is the heart of your business operations. You need a repeatable process that focuses on analysis, construction and consolidation. To support this process you need the right technology, a proven methodology and expert consultants. BackOffice Associates has all three, delivering Business-Ready Data™ you can use today, resulting in time and cost savings for your company.

Business-Ready Data is evaluated for business relevance and completeness. Your entire data migration effort is documented and easily validated. Our methodology ensures a seamless migration with data that is ready for your new ERP system. Our Load Early, Load Often® methodology enables you to better understand your new system while allowing end users to train and build confidence with live data.

BackOffice Associates delivers a proven data migration approach for the most successful ERP implementations worldwide. Using our technology, methodology and experts we ensure your ERP investment delivers the value you expect and require on go-live day.

BackOffice Associates Data Migration delivers:
- Easy-to-use applications that don’t require coding
- Pre-built functionality
- Complete BackOffice Associates methodology for data migration
- Repeatable processes that ensure Business-Ready Data quality
- Staffing models designed to fit your unique business needs
- Experts who provide field-tested experience
- Targeted training for your team members to facilitate rapid system productivity

Our applications are built on a web-enabled, multi-lingual, Unicode-enabled platform for both strategic and tactical solutions.
Boring Go Live®
Next Steps for Success

Compiling the technology and skills for a massive implementation project is a difficult procedure for businesses. Many businesses will do only one implementation while others will do several. Regardless of the size of the organization or the number of implementations carried out, data migration is a segment of the process that can make or break the project. The challenges are difficult to predict for those who are not specialists in this unique craft that blends an understanding of business process with programming expertise. Regardless of the effort at hand, all firms should focus on achieving the performance potential of their new ERP, CRM or HCM application with 100% Business-Ready Data™.

For more information
To more fully explore how BackOffice Associates, LLC can help your organization achieve a successful ERP implementation, visit www.boaweb.com or email info@boaweb.com.