

# Legacy Modernization Options

## Executive Summary

The primary goal for any legacy modernization project is to ensure that the resulting application exceeds the functionality, performance and/or stability of the applications that exist today, and to complete the effort within a certain budget and timeframe. There are several options available to update older applications.

### Replace

- Requires suitable package available
- Demands time, money and resources
- Requires pending enhancements be included
- High operating costs

### Convert

- Maintains business rules
- Reduces IT spending in license, maintenance & support
- Reduces time to market for new services and products
- Creates new revenue via new capabilities

### Re-Write

- Introduces new capabilities
- Updates databases and languages
- Requires technical team knowledge
- Demands time, money and resources

### Status Quo

- Inhibits business process change
- Limits data access
- Confines business growth
- Constrains the ability to enhance, enable and extend
- Restricts integration

## Status Quo

When exploring alternatives, there is always the option to continue as is. Continue with the technology that is in place today, making changes and enhancements in current databases and current languages, using current application tools. If you are satisfied with the current functionality, current license fees, current productivity tools, current integration capabilities, and current look and feel of the applications for the users and your business, then continuing to maintain the current databases and applications is a reasonable choice.

## Re-Write

Software re-writes allow the introduction of new capabilities into existing software while also updating the databases and languages. Re-writing software can be labor-intensive, time-consuming and costly. Re-writes require that the technical team know and understand the language of the original application as well as the new target languages. The first phase of a rewrite project includes many months of analysis and research.



Project plans must be very detailed and all inclusive. Standards are critical to producing new code that gives harmony to the new applications. Re-coding can take time, with testing taking even more time.

## Replace

Off-the-shelf package replacement presents many opportunities to re-define business processing standards while also upgrading the software that runs a business. Purchased packages provide additional flexibility that is often not a part of in-house written applications. However, some applications may not have any viable off-the-shelf alternatives. Some of the applications may be so customized to meet unique business requirements that an off-the-shelf solution simply will not meet the needs. Installation of new packages still requires full analysis of the current capabilities in the applications, mapping of existing data elements to the new database, conversion of current data, and package customization to meet processing needs.

## Convert

Conversion of existing databases and applications provides a fast, low-risk solution to updating or modernizing databases and related languages. Conversion produces replacement databases and applications that perform to the exact specifications as the original applications. Testing is simpler because side-by-side testing is possible, and automated testing tools can further speed the process. Certain enhancements can be introduced during a conversion as long as these enhancements do not materially change the processing and flow of the existing applications, or the general relationships between the database data.

## ATERAS Solution

ATERAS addresses the Convert option. The unique automated conversion technology called DB-Shuttle™ is used to ensure that the conversion is well planned, well executed and completed within the specified timeframe and budget. The DB-Shuttle solution provides everything from comprehensive assessments of IT environments to fully automated conversions. The end result is 100% functionally equivalent applications and databases, 100% retention of business rules and easily maintainable n-tiered architecture.

