

Legacy Modernization Delivers Agile Business in the Nick of Time

Warning: Do not attempt this on your own

It's a given: Most legacy systems and applications supporting business and government today are the product of 40 years of technology sprawl.

With each new CIO comes a new system modification using the technology of the day. This disjointed, uncoordinated approach makes legacy systems difficult and costly to maintain – much less able to provide any bankable value.

The same enterprises that own these legacy systems are challenged further by the fact their systems run on older programming languages, such as Cobol. This is a reality my company knows well.

As a global technology services company, EDS manages more than a million applications for our clients. About 80 percent of the business critical applications are run in a mainframe environment and are coded primarily in Cobol. All total, this adds up to 2.5 billion lines of Cobol code.

A mainstay for mainframes, Cobol applications served companies well over the years. They are, however, difficult to adapt to the accelerated pace of marketplace change.

Making matters worse, experienced Cobol programmers are harder to come by, and many are nearing retirement. As they leave, so goes their technological know-how and institutional knowledge.

It's also a given that the key to being an industry leader is the ability to quickly respond to market trends with new services or products. Such responsiveness requires – at the very least – a flexible, rapid applications development framework. One that runs on a modernized information technology (IT) infrastructure.

Modernizing an enterprise legacy system is a complex process. It means operating the business without missing a beat in the midst of a major systems overhaul. Such change should be – as we're fond of saying – seamless.

Some companies shy away because of the inherent risks involved. You cannot put off the inevitable, however. Denial is not a strategy. Modernization, planned well and executed wisely, is the right choice for businesses that intend to stay in business.

In a perfect world, you might rebuild your IT system from scratch in a modern environment. You'd use the latest hardware and software, then populate it with your data. This approach, however, is not always the most efficient and cost-effective.

The only sure path to success is through a strategically designed, methodically executed master plan – a plan that might move slowly at the beginning to ensure you get it right.

Based on our experience with clients, the near- and long-term benefits of legacy modernization make migrating to a 21st-century environment worth the effort. Not only that, but based on current trends shaping the marketplace, legacy modernization is now a business imperative.

The fact is, many enterprises' technology footprints have reached middle age and cannot support today's business demands – let alone tomorrow's. Forty-plus years of technology sprawl and billions of lines of code on thousands of mainframes cannot handle the explosion of technology devices and demand for information services.

This fact is compounded by a triple threat for business:

- Ever-accelerating globalization;
- Changes in where, how, and by whom work gets done;
- A new business ecosystem, where traditional roles are changing for supply chain partners.

As the saying goes, you can either feed the bulldog now or you can feed it later. Wait too long, and it might take a pound or two of flesh from you.

Two things are key to migrating to a modern environment:

- Technical professionals who are fluent in the old and new languages;
- Experts who possess a deep understanding of business processes in your industry.

For this reason, EDS formed strategic alliances with partners such as Sun and Microsoft. These alliances combine EDS' deep industry expertise and systems migration experience with our partners' modern language and technology development capabilities.

Together, we develop systems and methods to migrate older applications to a modern environment as fast as possible in a secure and cost-effective manner. Such migrations can reduce the total cost of ownership by as much as 65 percent.

Cost savings, however, are not the main driver for most of our clients. Clients are even more interested in the new business opportunities enabled by a modern, agile platform. Clients want an object-oriented environment to develop quickly and efficiently new system solutions. These solutions include Web-distributed, interactive applications that better serve their customers and capture market opportunities.

Ultimately, a modern IT environment provides a much-needed platform for future growth. The technology needed is widely available now. Getting there successfully requires an astute game plan and smart people with the right skills – from yesterday, today and tomorrow – to execute it.

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