

Authored by: Mark Dildilian, Dir. Marketing and Business Development

"Here Today, Gone Tomorrow." That idiom dates to the 16th century and was coined by John Calvin in 1549.

Originally written to lament the limited lifespan of us humans, it could just as well apply to our outdated technology such as tube TV sets, Kelvinator refrigerators, transistor radios or a myriad of technology that once served a great need and still could (remember Betamax and VHS?). However, all things do come to an end and eventually replaced!

Hence the term, *"Here Today, Gone Tomorrow!"* Or, should it read, *"Legacy Systems - Here Today, Gone Tomorrow (emphasis question mark)?"*

In the realm of the computing sphere, a "Legacy System" is an older method, technology, or computer system, or application/program that relates to, or being of a previous generation or outdated system. The first use of the term "Legacy System" dates to the 1970s. By the 1980s the term "legacy" was firmly entrenched as referring to an existing computer system especially when a conversion process was taking place (i.e., when moving data from one system to a new database). While the term might designate that a system is out of date, a legacy system could still be used for many reasons, and therefore, generate reasons why not to change. Reasons to not change could include:

- Technology will always be new
- The system still works satisfactorily
- The costs of redesigning or replacing the system is too complex
- Economic issues such as impact of ROI/investing in a new system
- Replacement is painful due to unknown or high risk of project failure
- User's do not like change and training could be disruptive to the organization
- My current legacy system continues to perform in terms of what it was designed to do
- Upgrading components is often cheaper and improves the existing system vs. a replacement
- Your current legacy system may represent a competitive advantage — retiring it may hurt your business

These are all valid reasons, and many organizations continue to realize value from their current legacy system. However, while older systems are good at what they were designed to do newer systems will provide a higher level of functionality, capabilities and alternative computing options needed in today's hypercompetitive business environments. Is this a real concern, or is it an overriding phase concerning legacy systems in general?

Two thoughts:

1. **Real Concern?** A legacy system could become a singular repository for organizations regarding business information and knowledge that does not exist elsewhere.
2. **Overriding Phase?** Organizations must consider performing a detailed audit of their overall IT portfolio that will serve to provide guidance in developing a holistic and strategic approach in identifying core systems - structures - components that can be targeted for upgrades or modernized or a total replacement.

No matter what your particular organization's IT/systems strategy and focus is or what the current demands and needs are we can agree on one premise. Most things are built with the intent, design, and plan that they will eventually become obsolete (i.e., the concept of planned obsolescence dictates that after a period of time the useful life or functionality of a product will diminish). Certainly, this holds true in the technology industry.

Bernard London wrote in 1932, *"Obsolescence frequently occurs because a replacement has become available that has, in sum, more advantages than the inconvenience related to repurchasing the replacement."*

Reasons to replace your outdated legacy system are just as strong as those reasons to keep your current system in place. Please note the following **“Reasons to Change.”**

Focus Factors	Reasons to Change
Maintenance Costs	Due to aging systems maintenance can be problematic with escalating costs: • Older systems are very complex • Older systems are difficult to maintain • Older systems have few service providers, and parts are scarce and often very costly
Compliance	Outdated legacy systems may be harder to update to meet compliance with changing laws, regulations (e.g., Healthcare, Financial) and most important industry standards.
Skills Gap	A definite skills gap is apparent when newer staff and contractors do not have the experience, ability and knowledge in applying older source code structures and programming languages.
Support	Depending on the provider new services may no longer exist or no longer support older products.
Access to Data	As data structures age information can become increasingly difficult to extract and analyze.
Client Need(s)	Older systems run the risk that they cannot be modified to support newer/modern technologies in terms of 24/7 availability and workflow requirements.
Security	Legacy Systems may present problems/difficulty in conforming to new and changing security requirements and protocols.
Environmental IT Issues	Older systems are not energy efficient and in most cases cannot be modified to reduce environmental impact.
Disaster Recovery	The older the system, the harder it is to recover data after a disaster.

By keeping your legacy system in place are you prepared for tomorrow? Or, could new trends force a change in IT’s focus to stay current? In large organizations, the trend was to invest in upgrading information systems, infrastructure, and platforms. Overtime (i.e., the past 20-30 years) systems that were originally designed to fulfill specified and defined business information and data requirements were upgraded with “fixes” appropriate for the technology, and systems in use. However, based on shifts in global business trends, environments and conditions the need for new requirements for improved information, data manipulation/extraction, and technology platforms are now becoming a discussion point of many CEOs. New terms such as “Digital Transformation” and 3rd platform technologies, solutions, and services are now emerging as core business strategies and imperatives.

IDC states (2016), *“By the end of 2017, two-thirds of the CEOs of Global 2000 enterprises will have digital transformation at the center of their corporate strategy.”*

The Benefits of New Technology – Unlike existing legacy systems, newer technologies are based on a more open architecture and are relatively platform independent/agnostic, making it easier to implement, use, customize and lowering overall operational and maintenance costs. The benefits of new technology versus the opportunity cost associated with doing nothing can form a compelling and essential business case.

Decision Points – As with any new business initiative, decision points must be understood and carefully navigated. Changing a Legacy System is no easy, quick or issue free task. Even thinking of implementing a **Legacy System Replacement Initiative** an organization must recognize some early and very fundamental “warning flags.” These could include consistent slowdowns in the software ecosystem (i.e., processing), loss of internal organizational expertise, support and maintenance issues impacting revenue and CSI (internal/external), software or upgrade issues become extensive and expensive, etc. Remember, technology is about evolution and if evolution does not take place that technology becomes extinct!

Intel states, *"The bulk of enterprise software still runs on legacy platforms and on infrastructure that simply isn't designed to achieve the levels of manageability, agility, and self-serve convenience that users now demand. The vast majority of enterprise data centers today are complex environments — expensive to maintain and manage, lacking in flexibility, and unable to cope with growing business and service delivery goals."*

Compelling Question – To reach a decision point organization must challenge IT with a simple question:

In today's competitive environment what has our current system done for the business lately?"

Replacing a legacy system can cause significant interference especially if the system is mission critical. Therefore, senior management and IT must weigh the strategic value, costs, and future requirements. Note:

- If the cost structure for the technology is way out of alignment with budgets and if costs are escalating
- If the current legacy technology is causing the company to lose ground in the marketplace (factors: technology is not global, cannot allow the company to serve customers effectively, or is unreliable)
- If the organization cannot find trained staff to maintain the system(s) and an apparent "skills gap" exists

Organizations should start to determine and develop a well thought out financial analysis that includes cost benefit strategies, projections, and approaches that outline the legacy system and corresponding operational alternatives. The cost/benefit study should contain a 5-year projection of all costs and savings with calculations for ROI (Return on Investment) based on NPV (Net Present Value) as well as payback and IRR (Internal Rate of Return). IRR is the interest rate at which the net present value of all the cash flows (positive and negative) from a project or investment equal zero (positive – desirable/negative – should be rejected).

At SITEK we understand the importance of developing and implementing a comprehensive Legacy System strategy. Is your current system and infrastructure curtailing, impeding and inhibiting growth and strategic business options? **Vs.** Moving your business forward and driving competitive advantage?

SITEK Can:

Offer creative solutions and development know-how in meeting your business challenges and needs

Provide and leverage specialized expertise, methods, and approaches in migrating legacy systems to new technologies (e.g., Microsoft, Open Source)

Deliver leading and proven development "practice-sets" that are designed to create seamless, successful and effective migration strategies and overall implementation success for your organization

Please feel free to contact **SITEK** so that we can discuss your business needs, priorities and offer solutions that are designed for success: www.siteksolutions.com.

About SITEK Inc., founded in 2006 and headquartered in Lexington, Kentucky, SITEK provides technologydriven solutions for clients large and small. SITEK has delivered solutions for global clients in diverse industries including; Healthcare, Manufacturing, Utilities, and Education. SITEK also provides innovative solutions to technology staffing needs. SITEK has the experience to place qualified candidates in the U.S. and internationally, delivering the right resources for any company.

SITEK – Core Competencies

- System Architecture and Design
- Application Development
- Project Management
- Document Management
(SharePoint/ImageNow)
- Testing and Quality Assurance
- Placement and Recruiting

SITEK – Key Differentiators

- Proven track record
- A decade of customer satisfaction
- Complete software life cycle experience
- Experienced in diverse technologies
- 100% Minority owned small business
- Located centrally with global reach

Contact Information: Ganesh Babu

Mobile: 859.327.3331 | Email: ganesh@siteksolutions.com | Site: www.siteksolutions.com