

WHEN IS IT A GOOD TIME TO CHANGE YOUR IT



White paper written by Rahul Kumar Ajani,
Project Manager and Senior Application Expert at Codix



What new technology does is
create new opportunities to do a
job that customers want done.

~ Tim O'Reilly



Executive Summary

When you mean business, time is the ultimate luxury to afford. Yet, businesses in financial services, including even market leaders are seen taking time mulling over when to replace their IT applications. There are obvious, and not-so-obvious, reasons for switching over to cutting edge IT solutions. But with all the good things of new technology, the scale of change and the temporary disruption that it might bring during the transition, along with the cost and the toll it takes on the organization and its resources can be equally big. This article examines reasons why organizations withhold plans for replacing their IT solutions, why they must replace, and when it is the right time to change.

Why the dilemma?

“What is the definition of a legacy system? One that works!” said somebody in satire. Actually that might be *the* reason why managers face dilemma about replacing them: it *still* works. But there’s more to it. Legacy systems have come a long way to entrench themselves almost inextricably in organizations, making managers and investors equally perplexed as to whether and when to replace them. Here’s how.

1 24/7 availability: IT systems have become backbone of businesses. They need to be up and running, constantly. Even a glitch for a day could cost a fortune. If that sounds exaggeration, you might want to read Comair’s story where failure of their legacy system for one day resulted in a loss of \$ 20 million. No wonder, even the idea of replacing the systems might send shivers.

2 It’s not uncommon to have black-box type systems: they work wonders, but few understand how, if not nobody. Those few geeks who coded the system or had clues about it might have left long ago, and the documentation might have vanished, too. Things become worse when these *black-boxes* are mission-critical applications.

3 It’s tempting to patch up and keep going *just a little longer*: web-services, middleware, mid-tier platforms, virtualization can alleviate several problems and put a modern face on the ancient systems to show off to the customers; all at an attractive cost and much lower a risk – something that would entice any manager.

4 A lot is on the line: more often than not replacing mission-critical applications is like an organ transplant surgery. Business continuity, reputation, profitability and a lot more is at risk during the transition. As with any other project, unexpected delays, glitches and grey areas in costing compound the risk and uncertainties.

5 It’s not just about the system: as they say it, troubles never come alone. Replacing the system is often synonymous with process re-engineering, restructuring, massive training programs, and new skills... all on top of the responsibility of keeping the show going on as usual.

To sum up, it’s the *comfort* of maintaining the status quo, the *stakes* involved in the change, the *scale* of change, and the *cost* that make the leaders want to live yet another day with the legacy systems; after all, *it still works*.

Why replace?

Self-imposed prison: business paradigm has transformed, and is shifting ceaselessly. But adapting legacy systems to new era can be no lesser than a nightmare. The lack of skills in those dying technologies, the costs involved, and the limitations on capability of bygone-era-systems prove to be shackles every time managers think of new products or processes. Even the giants of financial services can be seen trapped in the systems that once made them leaders; shackled, they watch agile and innovative startups nibbling away their market share.

Systems get outgrown: just like office buildings, structures, policies... The problem is that most people can't see that coming. It is easy to notice that the manpower will outgrow office building when the company is expanding, but who pays attention to the systems? Often there are restrictions on volume of data and processing capacity of old systems. Unknown to nearly everyone, these limitations can be time-bombs waiting to explode during the period of extensive growth.

The elephant in the room: in every sense of the phrase. Over the years, the systems evolve to the extent that they lose their agility, require tremendous resources for upkeep, and become more of an obstacle; just like an elephant. And what about the security vulnerabilities? We better recap the meaning of the phrase 'elephant in the room': an obvious problem or risk no one wants to discuss...

They don't like to communicate: in a bid to stay ahead and stay alive, organizations have to go with newer systems. But when it comes to integration, the old and the new don't *communicate* so easily. At times, legacy enthusiast vendors might devote time and provide 'glue' code to make them talk easily with newer systems. But you might not be that lucky always.

“
Even if you are on the right track, you will get run over if you just sit there.

~ Will Rogers

Nothing lasts forever: those who know the legacy technology might well be grandfathers already. The legacy service providers are already struggling to justify whether they should continue supporting, and if yes, how long. On the other hand, young entrepreneurs are disrupting the marketplace with novel concepts. The day when your system might not be supported, or when market factors necessitate to retire them, might well be tomorrow.

As Bill Gates once said: ... *business will change in the next ten years more than it has changed for the last fifty years.* Change isn't just fast, it will be even faster tomorrow. Replace we must! But the trick is to know when!

When replace?

Business is a game of value: delivering value to the customers and deriving value for the investors. Above the value comes the strategy for sustained long term value. Whether to replace the legacy system or to carry on depends on two factors: its impact on value and its compatibility with strategy. By now you might have realized that there's no rule of thumb for replacement, but you ought to consider it seriously in some situations.

When it stops evolving: when Lehman gave laws of software evolution, he foresaw it back in 1974 that software – just like managers – must continually evolve and develop new capabilities or else... Well he just said that it becomes lesser and lesser satisfactory, but you know that when the software stops evolving, so does the underlying business to a great extent. Now, considering the tech and market revolution of our times, lack of evolution is an assured way to extinction. Look for the signs of slowdown in the ecosystem that supports your software. The moment you see loss of expertise, reluctance and delays in support, maintenance and change requests for your system... better start planning for the replacement by a modern application that is abreast with latest technology and current market trends.

When it starts decaying: yes, they do. It's a result of aging and evolution. Over the years a legacy system will gain a lot of orphaned, duplicate, redundant, and less than optimal source-code. You may wonder 'why?' Better ask HR department how many developers, analysts, and architects came and went. Better yet ask IT department what were standards of documentation back then. Unlike modern systems – which don't suffer aging and decay due to higher standards of documentation and sophisticated product management – the legacy systems invariably grow *fat* with broken architecture in it, popularly known as 'software rot'. This is the point of no return. Unfortunately, from here any action (or inaction) to improve the system will lead to disasters.

When it has a huge *technical debt*: if you haven't upgraded to version x yet, the costs and risk for upgrading to x+1 would be even higher. Successive upgrades not implemented are a kind of *technical debt*. And, the bigger this debt, the larger the stakes. At a certain point, it makes more sense to replace the system than to clear this technical debt.

There are many more signs, but call it expenditure or call it investment, there's no escape from replacement. It's then your call to decide whether to wake up *now*, or hit the snooze button... If you do choose the wake up option, then it is the right moment to contact a software package provider like Codix, who has been steadily investing in its iMX software solution over the last 25 years, to offer the widest and deepest functional coverage to lending and credit management businesses and to debt collection professionals both on the retail and corporate borrowers/customers. Codix continuous investment also aims at keeping its system on cutting and yet reliable and scalable technologies, leveraging the best of what technology can bring to business efficiency today.

Be part of the solution!



Immeuble Le Carat,
200 Rue du Vallon,
Sophia-Antipolis,
06560 VALBONNE,
FRANCE

Phone : +33 (4) 89 87 77 77

Fax : +33 (4) 89 87 77 00

info@codix.eu