

Taking the “Entitlement” Out of Enterprise Software

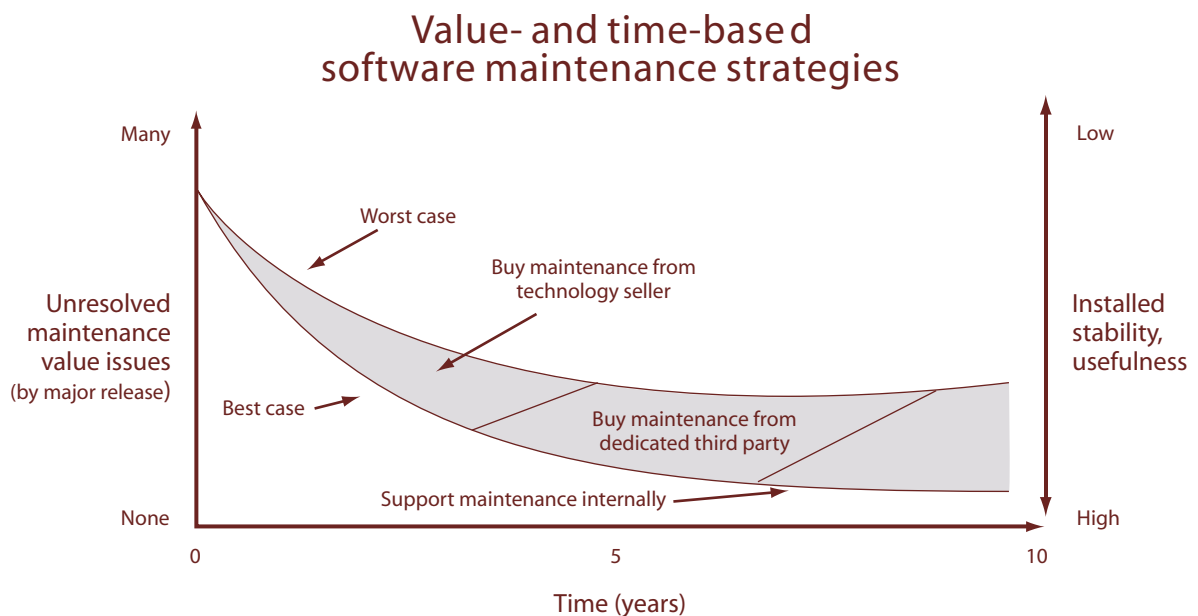
A combination of lower cost models, new maintenance options, and a focus on value are compelling companies to reassess spending models in order to free up dollars from constrained IT budgets.

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to Get More from Information Technology”*

EXECUTIVE SUMMARY

Enterprise software changed the face of business over the last decade. However, after years of aggressive enterprise software buying, corporations are now saddled with a large portfolio of solutions that are expensive to upgrade and have become equally expensive to maintain and support. Though most buyers did not realize it when they made the initial purchase, enterprise software installations have left them with a legacy of entitlement payments (e.g., annual vendor maintenance payments, frequent upgrades, etc.). These maintenance expenditures keep IT costs high as well as limit the options to efficiently focus on more valuable revenue-generating or cost-saving projects.

Because of new market catalysts including a stabilization of enterprise software functionality, lower cost models for service delivery, and new maintenance options, buyers can now slash significant costs out of IT "entitlement" budgets. Key to this reduction is a yearly review of enterprise software value and lifecycle as well as an active management of the maintenance budget to better understand how software should be supported and enhanced to best support corporate goals (see following chart).



Maintenance savings are for the taking as gross margins are in excess of 80 percent and represent the lion's share of profitability for most software providers. By better managing the software portfolio by value returned, many buyers can remove the entitlement from their enterprise software budgets.

How did we get here: The big leap

Technology purchases during the 1990s represented the business equivalent of a cold-war arms race with many corporations attempting to outdo each other in how much technology they could acquire and exploit within their companies. The buying spree was kicked off during the early part of the last decade by multiple catalysts. Like other management manias, this one was funded from the highest levels of the corporation and led to excessive IT spending, and with different “measures of success.” For example, projects that came in 30 percent over budget were considered “well-managed;” companies in the Fortune 100 were facing expenditures up to \$1 billion over a period of years for global enterprise resource planning (ERP) installations.

Most organizations felt they had no choice. The push to install ERP at first to meet the goals of business process reengineering (BPR) and then to fix Y2K problems rubbed off on other initiatives, accelerating spending in the areas of customer management, supply chain, logistics, etc. A rapidly growing economy and excessive capital spending also contributed to the growth. As a result, IT management focus during the 1990s was centered on getting solutions up and working at any cost. These behaviors set the stage for long-term costs and maintenance spending “entitlements” that few companies considered when they initially acquired technology. But in the early days of enterprise applications, seller-provided maintenance was quite valuable and necessary.

The value of maintenance: buyers versus sellers

The software purchased in the early 1990s was changing the business operations significantly and addressing needed corporate initiatives. Unfortunately, the software had incomplete functionality, uneven stability and poor scalability. Thus, in the 1990s buyers found high value in maintaining and upgrading their software on a much more frequent basis than they had done in the past (when they had built it themselves) so that they could access needed functionality as well as run less buggy versions of software.

For software sellers, the value of maintenance-based revenue streams was minimal in the 1990s as their growth was predicated on new software license sales. Product upgrades – and maintenance releases – were targeted to satisfy promises made to current customers and meet the needs of new ones. Maintenance revenue on these products was low but steadily growing quarter to quarter.

However, in the first few years of this century this value equation changed. Maintenance revenue streams have become the primary driver of profitability for software companies as growth in new software licenses has tumbled. Sellers realize that maintenance revenue has the highest margins and lowest incremental costs of anything they sell. It is also the most jealously guarded revenue stream and is carefully managed and negotiated by sellers.

For buyers, the value equation has also flipped as enterprise software has become much more stable as well as functional. The need (either technological or business) to consider a major upgrade has decreased tremendously. Thus the value from maintenance payments is decreasing constantly for many companies.

This change in view is due to the inherent value of software maintenance to buyers, which is a function of six key factors, in the following priority:

- **Product quality.** Though few software sellers admit such problems, poor product quality is the number one value of maintenance. Issues including bug fixes, scalability and stability are areas that only the provider of software can typically address. Rare is the seller that has not had a significant problem in this area over the lifetime of its products. Once these issues become addressed, however, then quality is no longer relevant until (potentially) the next major release is made available. Quality issues tend to arise during major functional or technological product upgrades.
- **Functional completeness.** When software is initially released, most buyers desire maintenance from the seller as the functionality delivered is often very elemental. Unless the software's functionality is very bounded, a functional footprint that fulfills the needs of most buyers is not available for three to five years after initial product introduction.
- **Expansion potential.** Software products are used by differing buyer populations. Those companies wanting to expand their use (and population of users) of a given package find themselves in a better business position if they have an ongoing maintenance relationship with their software vendor.
- **Technological-functional timeliness.** One aspect of maintenance is to offer releases of software that can run on current, as well as future, technology platforms. This is important to customers that desire to run their packages on typical combinations of hardware and software. In addition, for functional initiatives such as Sarbanes-Oxley or other regulatory requirements, maintenance can provide key updates for these unknowns that were not part of the original purchase criteria.
- **Software seller interaction.** Certain buyers require more attention than others because of long global rollouts, complex integration needs, customization, participation in a vertical/functional special interest group, etc. Also some buyers consider certain sellers a strategic partner and want to have a direct say in product direction and focus.
- **Value enhancements.** This last area represents extra capabilities that are provided by the vendor and includes timely response and service, implementation and debugging tools, training, etc. that ease the management and operations of a given software package.

These six key factors determine how often and how enthusiastically buyers will upgrade and find value from maintenance payments. But these factors became only the beginning consideration of maintenance value once customers started to discover the “long-tail” of support and maintenance costs.

The cost challenge of enterprise software upgrades

Early on, many companies did not realize that for every dollar spent in software licensing anywhere from \$3 to \$20 could be spent for the initial installation of technology. However, these costs were just the beginning as the initial enterprise software installation typically represents only one-third of the total cost of ownership over the lifetime of the software package. The following chart, created by Gartner in the late 1990s, illustrated to customers the expenses that they were accumulating over time for each new piece of software capital that they were installing. It also showed that in many areas buyers were under-budgeting and under-estimating the cost of large upgrades. While certain costs including the initial license fee were well understood, the overtly disproportional and large impact on future costs including internal and external consultants and overhead were not.

Enterprise Application TCO

	Hardware	Systems Software	Application Software	External Services	Internal Staff	Overhead Allocation
Plan	N/A	N/A	N/A			
Acquire						
Implement - Pilot - Rollout						
Maintain - Year 1 - Year 2 - Year 3						
Major upgrade - Release 1 - Release n						

Well-planned by most users
 Costs under-budgeted by 10% to 30%
 Costs under-budgeted by 40% to 75%

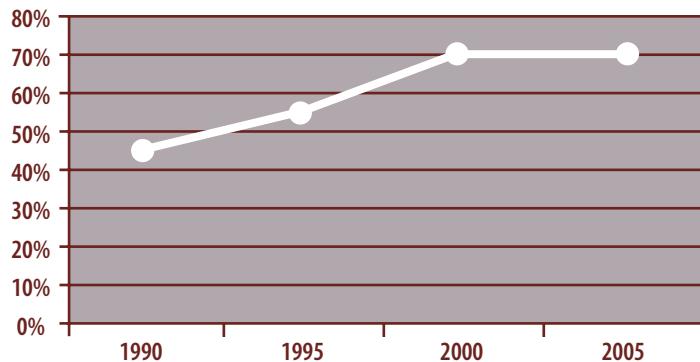
Source: Gartner

These factors forced companies to view maintenance payments and the subsequent upgrades very differently than initially anticipated. Upgrades were not only consuming large resources but also became front-page stories for companies who botched such efforts. In fact, a recent survey stated that the number one reason that CIOs have been fired in the past few years was software upgrades.

This increased level of unanticipated expenses was a direct manifestation of a fast-growing IT inventory, led by software. During the 1990s these spending initiatives pushed U.S. IT-led capital spending from 28 percent of the total at the beginning of the decade to over 50 percent by its end. Of this total, software spending went from 20 percent of the capitalized IT budget to nearly 50 percent during the same timeframe.

The net result of this growth in budgets and capital base has been a flattening of IT spending growth today and for the foreseeable future. As IT has become a considerable operating expense within most corporations, its rate of growth is now governed less by fad and more by the installed base, business rationale, GDP and corporate growth. But this era of IT build-out, particularly the issue of installed base, has had an unfortunate consequence: budgets that are increasingly locked into supporting the base of purchased capital (see following diagram.)

Entitlement portion of IT budget



Source: Wapiti LLC

The maintenance treadmill

As they were installed in corporations, each new initiative, ERP, SCM, CRM, etc., became a new “entitlement” that consumed IT resources and budget dollars. Every year an 18 percent to 28 percent expense would need to be dolled out to software companies regardless of benefit or need to upgrade solutions. In addition, buyers were told by their software vendors that support for certain versions of software would last but a few years, forcing companies to upgrade regardless of the business need. Companies have now found themselves on a treadmill – constant change, forced upgrades, increasing annual maintenance and support cost. This treadmill is run by the need to maintain seller margins rather than by business value derived by customers.

These upgrades would not just include one piece of software but a wide variety of supporting and complementary systems. As a result, the maintenance cycle created two vicious spirals of change and cost that did not necessarily generate any business benefits to the customer – upgrading the applications and dragging along the underlying hardware and software infrastructures. These actions forced companies to make painful business choices: upgrade to stay technologically current or spend the money on a business initiative that could potentially improve margins or reduce costs.

Ironically, the purchase of enterprise applications was originally supposed to rid IT staffs of the onerous tasks of maintaining software. While certain tasks were eliminated, they were more than compensated for by a maintenance focus and upgrade cycles that flipped from a user- or business-dictated schedule to one that was mandated by the sellers of the individual packages. This change has contributed to entitlement costs reaching their current plateau.

The “new” economics

Attention to these entitlements is increasing as companies have quickly found themselves in a difficult position. Economic and IT rationalization conditions have caused most companies to limit yearly budget increases to three or four percent; more typically today they are lagging rather than leading individual company growth. Added burdens of increased spending on security as well as regulatory compliance has given many corporations little wiggle or innovation room within their budgets. All are left asking “where is the value” in the IT spend?

A January 2006 spending priority survey of CIOs from Morgan Stanley paints a very tactical picture. Of the top 20 areas where CIOs plan to increase spending, only a few could be considered anything but tactical technology improvements. The top five – security (software), security (network equipment), storage area networks, wireless networks and storage software – do little to directly help corporate profitability or increase revenues.

Savvy buyers look to slash the entitlements

But CIOs are no longer turning a blind eye to this issue. They are considering a wide variety of means by which they can decrease their costs and increase the amount of attention paid to innovative initiatives. As software represents one of the largest portions of expense (and drives spending in other areas) buyers are seeking ways to decrease spending in this area. Current initiatives include:

- ✦ **Maintenance renegotiation.** A September 2005 Morgan Stanley survey of CIOs stated that 72 percent of those interviewed said that they would seek maintenance payment reductions in 2006. Both *The Wall Street Journal* and *Forbes* magazine ran extensive articles in 2005 on the high price of software maintenance and how leading companies were looking to decrease spending.
- ✦ **Emphasis on inventory, portfolio management.** Realizing that there is a great deal of potential waste in their software assets, buyers have started to actively manage their solution suites. Over the last few years Motorola has slashed its IT spending by over 40 percent using such techniques. Key to these cuts were inventory management techniques that let them better understand and bargain with their key software suppliers. Such actions may gain traction as AMR Research recently stated that nearly half of ERP license seats remain unused. Such realization and inventory management can let customers dramatically cut support costs as well as the need for future upgrade license purchases.
- ✦ **Upgrade slowdowns.** After many years of painful and expensive upgrades, buyers have started to slow down the pace of enterprise software upgrades. With software that is now stable, scalable and containing the needed functionality, buyers no longer see the need to use the latest release offered by current vendors. By extending the life of a release that is working well and serving the needs of a company, companies can redirect upgrade costs to initiatives that have a greater impact on corporate profitability. In response, software vendors have been forced by buyers to offer longer-term support for older software releases. In the 1990s vendors typically supported releases for three to four years. Today, such support has been doubled or tripled in time to accommodate the needs of buyers as well as insure a steady stream of maintenance payments.
- ✦ **Use of third-party maintenance providers.** Until recently, software buyers have had little opportunity to purchase maintenance from third parties and needed to rely upon the selling software vendor to provide such services or look to manage the software themselves (if permitted by the terms of the contract.) Companies are offering services that permit customers to maintain their current solution set at a lower maintenance price point. Such offerings represent a maturing of the software industry as there are very few industries that hold “exclusive” control over the maintenance and support of their products. This ranges from simple washing machines to complex and expensive industrial equipment including CAT scanners and jet engines. As in all areas when competition comes to the fore, this opening of markets has the customer effect of lower prices and higher quality that enhances value.

In fact, buyers should evaluate their entire portfolio of software every year using this methodology. In doing so, they can save significant maintenance revenue as well as the associated technology change and support costs. It permits buyers to best spend monies where they will have the largest impact rather than just merely paying into an entitlement year after year.

Sellers responding with new economic models

As buyers make changes in the ways in which they manage their software spend, it is being felt by all sellers. It is generally agreed that the heady days of traditional software license growth is over. According to AMR Research, in 2004 application software maintenance represented 35 percent of total revenues to all the ERP vendors compared with 31 percent for software license fees and 32 percent for services. This is a typical revenue spread in the software industry for “mature” markets and companies. What is not typical, however, is how new offerings and technology on the horizon are changing the economic basis and model for software companies. For example:

- † **Software license discounting is seen as permanent.** The market for enterprise software has gone from a sellers' to a buyers' market. As a result, the price points for older packages such as ERP have fallen sharply. Pricing of \$3,000 per user in the mid-1990s for a functionally limited suite has dropped to less than \$2,000 for a greatly expanded one. One of the more damaging (to software sellers) pieces of information that arose from the Oracle-Department of Justice trial was the large discounts – in excess of 70 percent off list – given to buyers regardless of seller. In December 2004, the Meta Group (since acquired by Gartner Inc.) predicted that prices for packaged software will slide for three to five years.
- † **Use of India and other low-cost, high-quality labor pools are slashing internal costs.** Not surprisingly, technology and service providers are leading the charge to redeploy service, maintenance and R&D resources outside of expensive North American and Northern European locations. This is leading to huge labor savings for technology sellers, though such savings have yet to be reflected in price changes of maintenance and services offered by software providers. The magnitude of savings was reflected by internal IBM documents that were acquired by *The Wall Street Journal* in early 2004. The documents showed that a four-to-one cost advantage was possible for Chinese outsourced work over a U.S.-based workforce. While recent wage inflation has shrunken this advantage, global labor arbitrage is being aggressively used by software providers to maintain and increase margins.
- † **Open-source components are being substituted for “for-profit” ones.** Many open-source infrastructure components are becoming more well-used within enterprise software offerings. Vendors are substituting open-source components for ones that used to be included, and paid for, as part of a standard software license. This has permitted sellers to decrease the cost of current licenses as well as the cost basis of past licenses sold.
- † **Software as a Service (SaaS) offers licensing alternative for enterprise software.** The success of mostly CRM-oriented sellers with a SaaS licensing model is leading the charge by buyers to revisit how software is acquired and managed. Regardless of its current suitability across the board for all enterprise applications, the ability of SaaS sellers to guarantee delivery of a sales-force automation, call center, financial management, etc. process has great appeal to buyers and will gain in use and acceptance. It is attracting new customers who do not have enterprise software as well as customers that are dissatisfied with their current enterprise software vendor.
- † **Emergence of non-traditional platforms.** There is a groundswell of interest occurring in non-traditional commerce platforms in two areas. Traditional small-business providers such as Intuit are aggressively moving into the enterprise software space. The emergence of Amazon.com, eBay, FedEx and others as a business-process platform that supports distributed selling and fulfillment have started to supplement (and supplant) traditional enterprise software packages. In addition, nearly every vendor is stating that within the next two or three years they will be offering a services oriented architecture—based offering that will both increase the flexibility of software as well as contribute to lower costs.

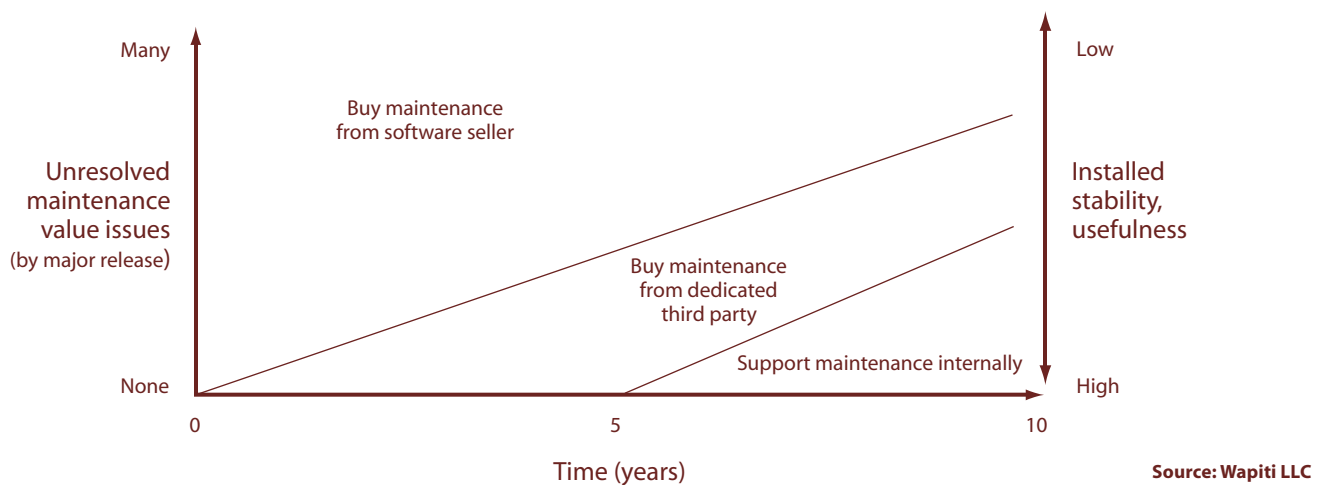
These changes in perspective by both buyers and sellers are leading the market to explore new options in how software is installed, maintained and retired over time (see Addendum, “Moving to buyer-led maintenance models.”)

Wasteful spending

As mentioned before, buyers look at six key value factors (product quality, functionality, expansion potential, technological-functional timeliness, seller interaction and value enhancements) when they evaluate maintenance. These factors, and their impact on how a piece of software is maintained, evolves over time. Maintenance has a high value to those who are consumed by all of the aforementioned factors. It has little, if any, value to those buyers who believe that none of these factors impact the useful operation of a software package.

When these issues are examined together as a function of time (see following chart), software buyers chose one of three different maintenance options: purchase standard maintenance from the seller of software, the most expensive option; purchase maintenance from a dedicated third-party provider, the medium-priced option; or support it internally, the least expensive option assuming that very little modification or change will be needed to the system. (Note: This last choice requires that the buyer becomes responsible for any and all mandated compliance, regulatory or tax modifications. It should only be attempted by those companies with a great amount of software expertise and ability to leverage changes across a large organization or for packages that are not impacted by such mandated changes.) The cost of these options is based on 2006 prices.

Buyer maintenance decisions over time



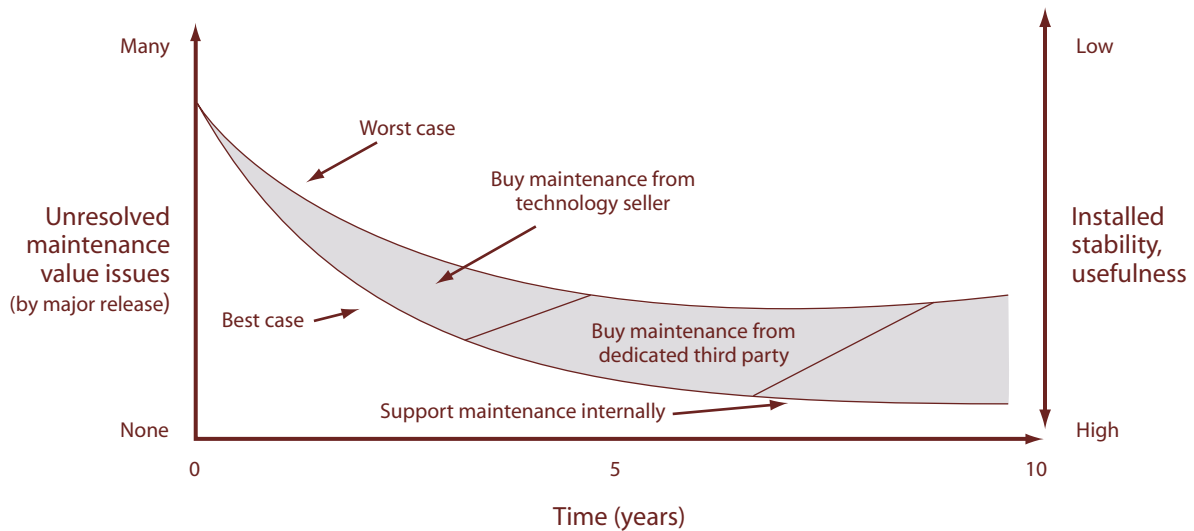
As can be seen by the above chart, buyers should consider looking at different means of maintenance support as a function of time and how badly they need specific types of maintenance services that are delivered. The higher the number of unresolved maintenance issues (poor quality, functional enhancements needed, etc.) that exist, the greater the likelihood that buyers will obtain maintenance from the primary software seller. On the other hand, the longer a company remains on a single release with little desire to upgrade in the near future, the less monetary and strategic advantage there is to remain on traditional maintenance plans.

For instance, it is easy to determine that when a company is starting to use software or will sunset the solution, buying maintenance from the software provider or supporting it internally are the “no-brainer” respective choices. For each of these divergent choices customers often need lots and little respective help given the lifecycle of a release that is installed; the installed stability and usefulness of software is inversely proportional to the number of unresolved maintenance value issues.

The difficult and reasonably new decision to be made is when (or if) maintenance should be purchased from a third party given the six aforementioned issues that are of value to buyers. This is a growing market and opportunity; in the past third-party support was limited to “gray-market” providers for legacy packages such as were offered by Dun & Bradstreet. Today, a wide array of third-party providers are emerging that will support ongoing software products.

There is a wide gulf, however, between the introduction of a package and its demise. In this regard, the key decision for buyers to make becomes when they should look to change maintenance strategies. By examining

Timing maintenance strategies



the history of software releases, buyers can determine the time posts for when they should consider making any switch (see above diagram.)

Regardless of type, software sellers have a range of unresolved maintenance issues (quality, functionality, etc.) that vary by product release over time. The band above represents the difference between the best- and worst-case examples of when the installed stability or usefulness of a software release warrants consideration of a new maintenance strategy or provider.

In fact, buyers should evaluate their entire portfolio of software every year using this methodology. In doing so, they can save significant maintenance revenue as well as the associated technology change and support costs. It permits buyers to best spend monies where they will have the largest impact rather than just merely paying into an entitlement year after year.

Summary

As companies seek to take the entitlement out of their enterprise software they should start with the following steps:

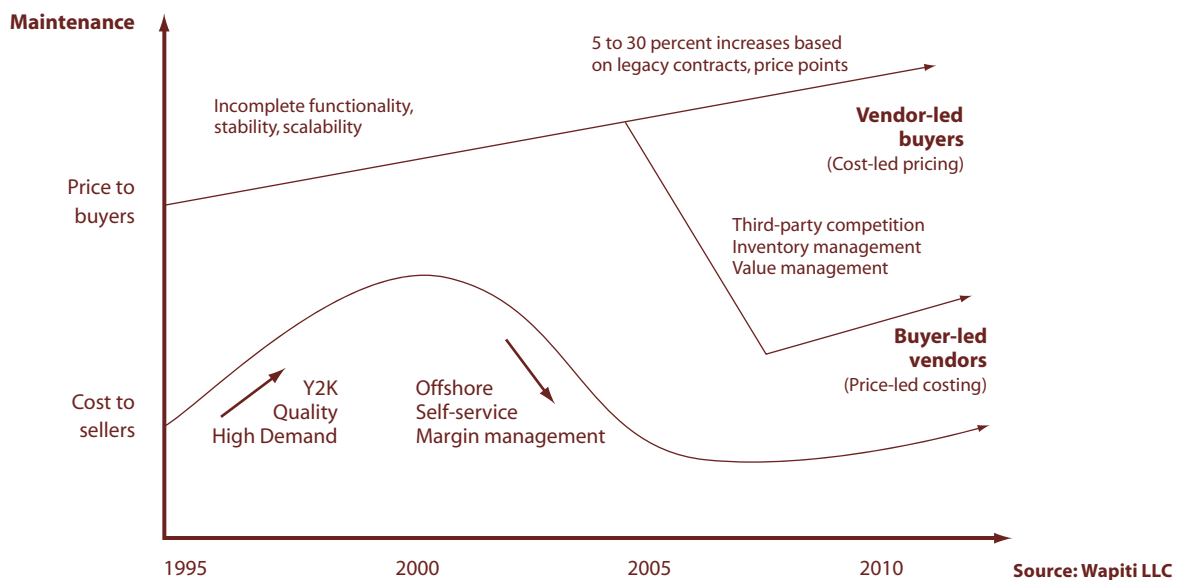
- **Inventory assets and review contracts.** Companies cannot manage what they do not know. An inventory of licenses used as well as the supporting contracts permit companies to create a base line of assets that they can link to the business processes and benefits derived from them. In particular, contracts should be reviewed every year and examined for value delivered and potential for savings.
- **Review use and corporate impact.** Next the use and usefulness of software should be considered. Many companies have portfolios of unused licenses that they are fully maintaining. This should be compared against the corporate impact and value derived from the software so a cost-benefit analysis can be determined.
- **Examine stability and future plans for software packages.** After inventory is counted and value determined, buyers should then consider how packages are supported and whether new options are appropriate. This can entail negotiating with current providers or comparing and contrasting new market offerings.

Enterprise software has huge value for corporations. However, it must be managed as would any asset so that its care, feeding and expansion is actively managed against other corporate initiatives and the need to deliver value to the corporation. One of the best ways to do this is to eliminate as much of the entitlement of enterprise software as is reasonably possible.

Addendum: Moving to buyer-led maintenance models

Software buyers and sellers are at the cusp of a major change that will be more business-model and deployment driven than technological. Two factors—better value extraction from buyers and much lower cost models from sellers—are colliding to facilitate this change. As a result, buyers can now make two distinctive choices in regards to how their software is supported in the future (see following diagram.) The most savvy corporations will move toward buyer-led maintenance models.

Buyer- versus vendor-led maintenance models



Software maintenance has always been a necessary evil for buyers and has provided an excellent margin cushion for sellers. Unlike many other capital expenditures, the need to continuously update and alter the latest version of software is accepted as common wisdom; it also serves to functionally update and enhance the quality of the purchased solution.

During much of the 1990s, maintenance releases were a mechanism by which many promises of prior years were finally realized. For many products and companies, the turn of the century became a turning point: enterprise software releases became much more stable and new mechanisms to decrease their costs were being explored.

For most software companies today, maintenance is their most profitable business and has become more profitable as a combination of better management, offshore labor and self-service capabilities built into their software have decreased internal costs. Buyers, however, have not been on the receiving end of these efficiencies as their contracts are based on cost models and buying assumptions that in many cases are five to 10 years old, when costs and prices of enterprise software were at their peak. During that era costs were rising due to Y2K issues, a need to deliver high product quality and high demand.

As can be seen in the prior chart, a widening spread has emerged between the price buyers pay for maintenance and the cost to sellers that provide this maintenance. (This does not include the additional service costs that are required to upgrade a major release.) But this spread has created new opportunities for buyers and sellers and has led to new maintenance choices: cost-led and price-led.

Cost-led vendors are traditional software vendors that have based their pricing model not on the ultimate value to the customer but rather on the business model they need to remain viable. (This concept was first discussed by industry-management guru Peter Drucker, who advised companies to abandon cost-led pricing.) Many of today's traditional software vendors are burdened with this model and are unable to change it easily without major revenue disruption.

While they have not changed the price by which they license maintenance to their customers, they have changed their cost basis. Through a combination of offshoring, automating technologies, self-service, etc. they have been able to rapidly decrease the cost of customer maintenance. These benefits are being passed on to corporate shareholders rather than the customer base.

On the other hand, price-led vendors are newer players that are choosing to take advantage of these recent cost trends and offer buyers a less expensive offering to support a stable software release. They address a portion of the market that is satisfied and productive with their current software offerings and with little need to use future functional enhancements or releases.

These companies have built a financial and business model around maintaining the value of a current software asset and helping the customer best realize it. Customers are using these providers in combination with inventory and value management techniques to optimize their software spending. By embracing companies who use price- rather than cost-led costing, savvy buyers are leading the way to decrease their enterprise software entitlement spend.

Erik Keller has over 25 years experience in the information technology industry. He spent more than a decade at Gartner Inc., where he managed the enterprise software group and helped coin the term "ERP." In his various roles at Gartner as research fellow, director of research and vice president, Keller advised over 1000 companies worldwide on the development and deployment of IT strategies, with an emphasis on the manufacturing sector. Keller formed Wapiti LLC (www.wapitillc.com) in 1999 and remains there today as principal.