Technology Institute

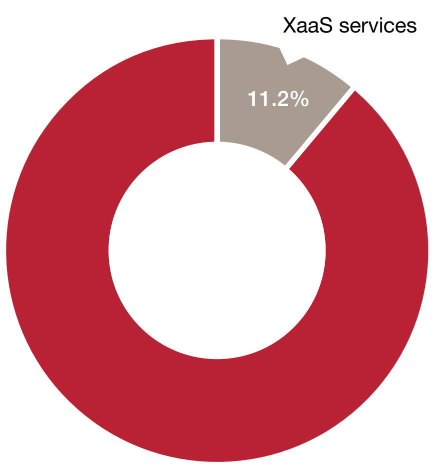
The future of software pricing excellence: An introduction

Executive summary

The shift in the enterprise software sales model from license to services is amongst the most dramatic and traumatic upheavals in the technology industry since the unbundling of software and hardware more than four decades ago. Moving to a services-based model is proving to be tremendously disruptive to the industry's internal organisation, management and processes, as well as its customer relationships.

Indeed, anything as a service (XaaS) already accounted for more than $26 billion of 2011 revenues of the 100 largest software companies, according to a new study by PwC (see sidebar, A new era for the software industry page 2).

Figure 1: A growing piece of the pie



In 2011, XaaS services represented 11.2% of the $237.3 billion of software industry revenues for the 100 largest companies in the industry.

Source: PwC

PwC first alerted the industry in 2007 to the wide and deep impacts it could expect from the proliferation of software licensing models from perpetual to term as well as the cloud-based shift to SaaS. Since then, we have developed an extensive knowledge base of strategies and tactics to help the software industry transition to new business models—whilst still maintaining traditional models where the market demands it.

This transitional period is affecting the industry across the board. A small minority, primarily infrastructure software providers, remains committed to the traditional pricing model, at least for now. However, a small but growing number—start-ups but for a handful of notable exceptions like Salesforce.com—are focused exclusively on emerging models. The remainder, including most consumer and enterprise software companies, are combining both traditional and emerging pricing and licensing approaches in a hybrid model (see Figure 2).

The majority of the companies in the industry, therefore, faces significant challenges due to the hybridised nature of their current approach to pricing. Many companies currently find themselves straddling two or more radically different types of business models, incurring the costs and complexities of the traditional ***and*** the emerging models.

This paper is an introductory overview of the changing ways that software is valued, priced, delivered and consumed. Over the next several months, PwC will present a series of reports exploring the issues in greater depth, with particular attention to how these changes have and will continue to disrupt the software

Figure 2: One pricing model replaced by five

Traditional model	Emerging models			Hybrid model
	Subscription SaaS	Pay-as-you-go	Freemium	
Customers pay to license software as a product.	Combines a software subscription model with cloud deployment.	Customers pay for actual usage based on transactional metrics.	Basic service is free; customers pay for premium features.	Vendor offers both traditional and emerging solutions.

Source: PwC

industry's internal operations and customer relationships. In addition, we'll present our recommended strategies and tactics for the industry to overcome the challenges implicit in the shift.

Unprecedented challenges facing the software industry

Shifting from permanent licensing to per-use, time bound or other type of subscription model requires a fundamental rethinking of pricing and delivery. For understandable reasons, many vendors are reluctant to overhaul their business all at once and are instead taking a piecemeal approach. This decision may satisfy both vendors and customers in the short term, but over time, it challenges vendors to explain to their customers' satisfaction that the transition to alternatives such as cloud-based and hybrid models delivers equivalent value for the price.

Further clouding the environment is a huge shadow over the industry as the customer perception of value itself is shifting. In addition to comparing the cost of an enterprise application license purchase to the cost of competing products versus developing a solution in-house, customers now commonly consider how much business value they believe they can derive from their purchase.

Billing incrementally by time or per user—one of the emerging models growing in popularity—may lower the initial barrier to purchase. However, it also gives customers greater leverage to negotiate prices downward based on actual and projected patterns of consumption. Vendors therefore need strategies to create new value relative to price.

New pricing and delivery models are also emerging at the same time that several broad industry trends are also buffeting pricing and the expectations of value, in both directions. As a result, the software industry is seeing far-ranging shifts in fundamental aspects of its business operations.

For example, the consumerisation of IT has raised the expectation that technology can deliver high performance at low cost. As a result, the perceived value of software may drop as cost-conscious users accustomed to consumer smartphone apps that rarely cost more than a few dollars balk at paying higher prices for enterprise solutions, even those more powerful and complex than anything found on the consumer market.

A new era for the software industry

The extent to which top software companies have already begun to adopt new business models is clearly visible in the PwC Global 100 Software Leaders report for 2011, to be published in early 2013. This exclusive report, based on data compiled by IDC from public and non-public sources, lists the percentage of total revenues the world's 100 largest software companies earned in 2011 from "as a service" offerings (XaaS), including software, business application services, high-level storage services, backup as a service, and security as a service (XaaS does not include bulk storage solutions, network services and cloud servers).

Amongst the Global 100 Software Leaders:

- Total revenues, 2011: $1,171 billion
- Total software revenues, 2011: $237.3 billion
- Total XaaS revenues, 2011: $26.2 billion

This is the first time the PwC Global 100 Software Leaders annual report has extracted revenues from XaaS offerings as a percentage of software revenues. As a result, it is not yet possible to track over the past few years the rise of XaaS revenues as compared to revenues from the traditional software sales models. However, given how the uncertain global economy of the last decade has consistently driven organisations to seek out cost efficiencies, it seems likely that enterprise software will continue to move toward SaaS, term licensing and other pricing and delivery models that maximise perceived value.

Other important industry trends pressuring software industry pricing and margins include the following:

- Mobile has become a priority for software developers, but the proliferation of mobile devices and mobile interfaces requires vendors to develop multiple versions of each product.
- Developers must integrate security into cloud and mobile delivery platforms, as the sheer number of potential touchpoints for these platforms makes securing each touchpoint individually both impractical and excessively expensive.
- Globalisation and market consolidation are drawing significant investor attention, driving royalty revenue, and spurring innovation around existing product portfolios.
- Virtualisation enables multiple users to run a single programme from a central server, reducing sales of individual software licenses.

Figure 3: Technology macrotrends fueling growth, innovation and complexity

Software firms are grappling with ten "macrotrends." The collision of each trend has created a quickly changing, sensitive environment that is causing confusion and complexity across the software firms and their customers.

Source: PwC

- Managing hosted applications across on-premise, hybrid, and cloud environments requires vendors to increase their investment in infrastructure, services and support.
- The rise of Big Data and Analytics require companies to create efficient, automated processes to manage and analyse the vast amounts of unstructured, contextually relevant data they collect each day.

Figure 3 summarises the macrotrends shaping the technology industry.

Positive and negative impacts of new business models

In the face of these trends, PwC has observed a number of overlapping areas in which moving to new licensing, pricing and delivery models has already begun to affect industry business models and internal processes:

Pricing and profitability

Pricing. As customer perceptions of value continue to drive prices lower, vendors are revising their value propositions to include service and support whilst more explicitly linking the price of products to the business benefits they deliver.

Profit margins. SaaS vendors have a lower gross margin almost by definition, as cloud-based delivery inherently involves higher infrastructure and related expenses. In general, new business models must be carefully structured and managed in order to avoid eroding margin with discounting and other pricing choices. Several pure play adopters of the emerging subscription SaaS and pay-as-you-go models are already struggling with this challenge.

Finance

Revenue recognition. Software delivered as a service (i.e. where the customer accesses the software via systems belonging to a vendor or third party instead of licensing it to run on its own systems) is considered a service, not a product delivery, by Generally Accepted Accounting Principles. Vendors must recognise the revenue incrementally over the service period—a change that minimises fluctuations in sales and income cycles, but leads to less upfront cash. Several of these leading edge adopters have had substantial challenges explaining their income statements and balance sheets to investors more familiar and comfortable with the industry's more traditional revenue recognition policies.

Cash flow. Replacing up-front payments with ongoing fees reduces cash flow volatility, allowing vendors to forecast budgets with greater accuracy. On the other hand, it also increases the difficulty of maintaining sufficient cash reserves to fund R&D or carry a new company through its earliest years before break-even and positive cash flow. These emerging model vendors must consider new approaches to financing and develop additional opportunities for revenue. A few of the more mature emerging-model vendors using one or more of the emerging pricing models have already developed substantial consulting and implementation revenue streams.

Research and development

As already noted, steadier cash flow offers fewer opportunities to stockpile cash reserves for R&D spending. In the early stages of the transition to a new business model, particularly SaaS, vendors that lack an established reserve must limit their R&D budgets to available capital, which may be minimal. Vendors who are settling into the business model shift are approaching R&D less as a series of discrete releases and more as an ongoing series of functional improvements.

Customer relationships

Sales and marketing. New business models are nudging software sales from a "push" to a "pull" model by lowering the initial barrier to entry for new customers. The lack of a large up-front payment per incremental customer enables customers to "try before they buy" whilst making it difficult to justify in-house sales forces focused on landing big accounts. Since most companies are currently in the hybrid model, they have the worst of both worlds—supporting a sales force and at the same time offering online self-service, sales tool development and support.

Customer service. As customers adopt the periodic payment model, customer service is becoming increasingly central to retention and further sales. Vendors are learning from the open-source ecosystem, in which customers who are satisfied with essentially free products have proven happy to pay for support and add-on services that further enhance value. Just as importantly, closer customer relationships provide an ongoing stream of data that allows vendors to adjust pricing dynamically.

Ecosystem management

SaaS in particular dramatically reduces the role of channel partners as the intermediary between vendor and customer, though this change has not been widely discussed. On the other hand, cloud-based delivery creates the potential for a more robust ecosystem of software partners offering complementary functionality. Creating this new partner ecosystem—or converting existing partners to a new form of relationship—requires capabilities and technology strategies not often found in traditional software companies.

Figure 4 summarises the functional impacts caused by the macrotrends.

Establishing the right pricing strategy has proven particularly challenging in the face of evolving business models, so we take a close look at pricing excellence in the final section.

Figure 4: The varied impacts of the macrotrends on selected software companies' operations

	Most vulnerable component	Other affected functions	Relative severity of the impact
Finance	Profit margins	Cash flow, revenue recognition	Substantial
Customer service	Customer expectations of value	Sales, ecosystem management	Substantial
R&D	Funding consistency	New release schedule	Moderate
Sales	Large in-house sales forces	Channel partners	Substantial

Source: PwC

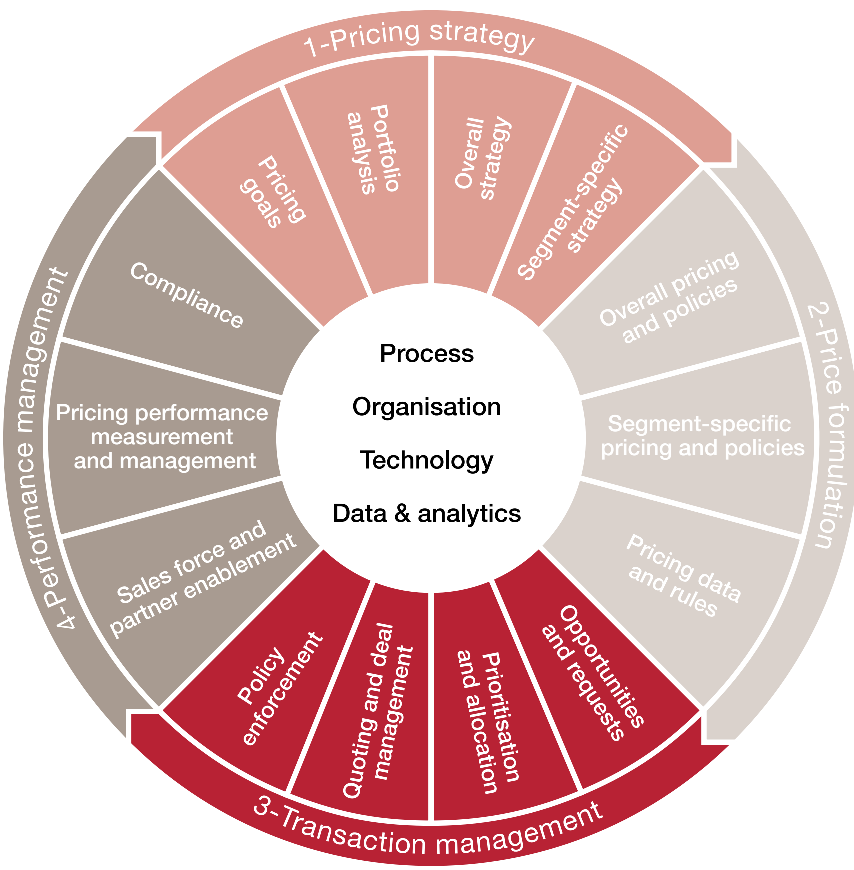
Pricing excellence as a discipline

Pricing excellence is achieved by a dynamic, proactive process of optimising the price of goods and services based on understanding what customers value, predicting what the customer is willing to pay, and aligning various functional areas (finance, R&D, sales, marketing and other functions) to ensure products meet customer needs at an attractive price.

This strategic process needs to take place within a framework that includes pricing strategy, price formulation, transaction management and managing performance. All four of these elements must be taken into account across the organisation's internal process, organisation, technology, data and analytics:

Figure 5: PwC's pricing management framework

For each framework component, companies need to focus on the elements that drive pricing maturity and impact financial results.



Source: PwC

- Pricing strategy requires companies to analyse their portfolios, overall strategy and specific goals (by products, segments, customers, etc.).
- Price formulation must note all the segments that require specific prices and ensure that the organisation has rules around discounting at various levels.
- Transaction management demands that organisations consider "real" costs to create reasonable discounting thresholds and floors, define and appropriately price bundles of products and services, and determine the number of approval levels within the company for various types of sales. To do this, the organisation must clearly understand its channel programmes and the value of various customer segments.
- Performance management, a key component of pricing, delivers the best results when a company has ample holistic and real-time analytics to inform its application portfolio and pricing model. Corporate dashboards that include pricing performance across products and vertical segments, key pricing metrics and customer retention rates allow vendors to track what is and isn't working.

Figure 5 is a schematic representation of PwC's pricing management framework.

When an organisation monitors all four of these elements on an ongoing basis, it can adjust its pricing and product offerings as it gathers competitive data on new business models, bundles and specific wins and losses. Companies can also use this data to clarify target markets and use models, prevent multiple business models and product lines from cannibalising each other and develop innovative approaches to customer service.

We do not currently see many companies that have mastered all four of these elements, a few companies have adopted some aspects of one or more. For example, it is becoming significantly more common for software companies to use analytics to support the sales team in introducing pricing by segment and in measuring and managing pricing performance. Our upcoming reports will provide more detail about the current and future adoption of these four elements by emerging model companies as well as those remaining in the hybrid environment.

Conclusion

In 2007, when PwC foresaw the coming shift to new pricing, licensing and delivery models, we predicted, "Savvy vendors will adjust their pricing models to create a win-win scenario, where customers can see the value of software more closely reflected in their business processes and vendors can reduce their internal costs and realise more of their revenue from recurring payments."[1] We no longer need to speak of those changes in the future tense; they're upon us. The business model has already begun its irrevocable shift.

To achieve the win-win scenario PwC knows is possible, vendors must bring their pricing framework into tighter alignment with the concept of "pricing excellence." In this paper, we have provided an introductory overview of the basic principles.

Our forthcoming series of reports will delve more deeply into pricing excellence, along with the impact of new pricing, licensing and delivery models on other parts of the industry. These articles will help software vendors make wise tactical and financial choices as their product portfolios and business models evolve.

1 Software Pricing Trends: How Vendors Can Capitalise on the Shift to New Revenue Models, PricewaterhouseCoopers, 2007.

PwC can help

If you'd like to discuss the challenge of software pricing in an ever-changing business environment, please reach out to one of our technology industry leaders listed below.

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In addition to the above contacts, Amit Dhir, Director, Management Consulting, provided key insights and clients' real-world experiences for this report.

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