

CLOUDIFIED PRICING— COMING TO AN INDUSTRY NEAR YOU

By Jean-Manuel Izaret, Nicolas Hunke, John Pineda, Federico Fabbri, and Win Chia

ANY COMPANY THAT ADOPTS a subscription- or consumption-based pricing model will need to transform every aspect of the organization, from its overall vision and strategy down to its essential back-office functions. But exactly how fast are these cloud-like models advancing? How are they changing an industry’s underlying economics? And what new practices do companies need to adopt to capitalize on the growth opportunities this transition offers?

BCG’s survey of more than 600 buyers of business software and hardware in five countries, supplemented by vendor interviews and our own experience, yielded empirical evidence to answer those questions and help companies design and implement cloud-like models. We focus in this article on the tech sector and its anything-as-a-service (XaaS) offerings, but we believe that the pricing benchmarks and best practices we describe apply broadly to all industries that seek to “cloudify” their offerings.

Regardless of industry, companies need to better understand and more confidently

embrace the ways in which subscription- and consumption-based models will change their business, the new strategies that will apply, and the new practices they will need to establish. The companies that embark on this journey with a mix of vision, innovative products and services, and patience can achieve the financial upside that ultimately drives higher enterprise value—as long as they recognize and mitigate some significant short-term implementation risks.

The Evolution of XaaS Models

Five years after we first explored the effects and the future of XaaS pricing in business software, we can confirm that these models are not only a powerful means to increase enterprise value and deepen customer relationships in mutually beneficial ways. They are also rapidly becoming industry standards. (See “Profiting from the Cloud: How to Master Software as a Service,” BCG article, June 2013.)

How much new spending on hardware and software through 2021 would be sufficient

to confirm that XaaS models are entrenched as standard practice in the tech sector? As it turns out, the time to answer that question has swiftly passed—it is already clear that almost all new spending will be devoted to XaaS models. (See Exhibit 1.)

Our 2018 survey of tech buyers and analysis of market forecasts from IDC revealed that 96% of new spending on hardware and software through 2021 will come through cloudified (subscription- or utility-based) pricing models. In other words, of the \$147 billion in anticipated growth from the beginning of 2018 through 2021, only \$6 billion will be spent via traditional on-premise license and maintenance models. Furthermore, 81% of the buyers surveyed said that at least a portion of their spending already goes through a XaaS model, and 33% said they have abandoned traditional perpetual-licensing models entirely.

The XaaS models have become so pervasive and so desirable in the tech sector that cloud-like pricing is now a purchase criteri-

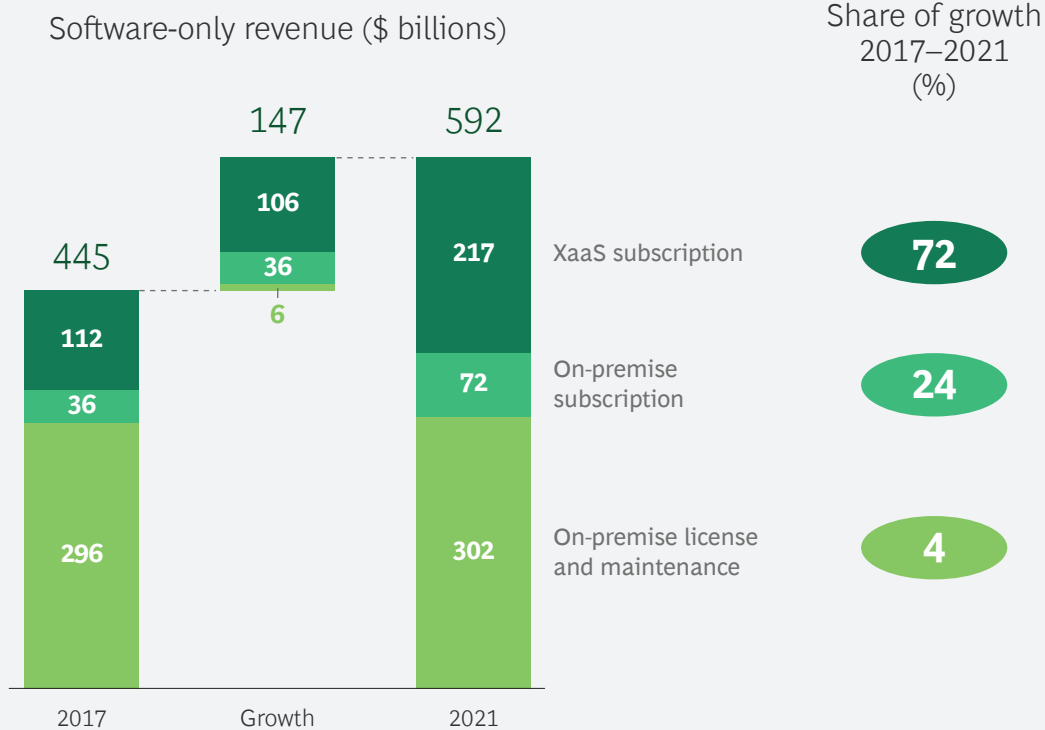
on unto itself. Of the buyers surveyed, 77% said they would reallocate some spending or consider switching suppliers entirely if their current supplier failed to offer a XaaS model and 17% said that a XaaS model is already an absolute prerequisite for doing business.

We see these numbers as harbingers for what may occur as cloud-like models penetrate deeper into a number of sectors—such as industrial goods, consumer durables, and even consumer products—where XaaS models are at an earlier stage of development and transition but promise to become an essential part of the pricing mix. (See “How the Internet of Things Will Change the Pricing of Things,” BCG article, December 2017.)

The Economics of the New Pricing Models

In transitioning to a XaaS model, a tech company abandons its traditional revenue model, which consists of big upfront pay-

EXHIBIT 1 | Cloud-Like Pricing Models Will Account for 96% of Growth



Sources: IDC; BCG analysis.

Note: Includes software only; does not include \$149 billion in 2017 and \$154 billion in 2021. Because of rounding, the sum of the segments may not equal the totals shown.

ments combined with maintenance fees, in favor of a continual stream of smaller payments across a longer time horizon. These new cloud-like pricing models can help unlock vigorous growth for tech vendors, because potential customer lifetime value (LTV) increases and because equity markets value XaaS-based revenue streams at higher multiples than conventional revenue.

But before a company can enjoy this upside, it must confront and overcome the harsh reality of short-term margin decline.

In the first years after making the transition to a XaaS model, tech vendors can expect gross margins to fall by 10 to 20 percentage points on average. The absence of large upfront payments is one cause of this decline. Longer monetization timelines, combined with the higher investment in customer acquisition that these models require, mean that new customers don't pay for themselves until several years have elapsed. The margin decline is exacerbated by the higher costs that result from one aspect of XaaS models: in XaaS, the vendor assumes service roles that the customer formerly performed in-house.

Relative to other service providers (such as software as a service [SaaS] and platform as a service [PaaS] vendors), providers of infrastructure as a service (IaaS) encounter the greatest pressures, because they have the lowest degree of differentiation, face more intense competition, and bear the cost of accommodating the infrastructure on their own balance sheet.

Competitive price pressures and switching risks mount as well for tech companies that adopt XaaS models. The buyers we surveyed expect to pay roughly 4% less under the new models, despite the cost savings and additional value that a XaaS model provides them.

The old “big sale plus maintenance” business model and its associated practices offer companies no escape route from this margin decline, because that business model strikes a much different balance between customer acquisition and retention

that can no longer be sustained under the new model. Companies still need to grow their way out of margin decline through aggressive customer acquisition, but they must combine that with an obsessive focus on customer retention and a strategic approach to revenue expansion with that base of customers. We elaborate on that aggressive growth-oriented strategy next.

Patience, “Farming,” and the 90–20 Rule

What ensures that a company transitioning to a XaaS model can weather the margin declines and enjoy the growth and greater enterprise value in subsequent years? Answering that question goes beyond the simple mechanics of managing the tradeoffs between price, volume, and margin. Companies that successfully migrate to cloud-like pricing models will be distinguished by their clear vision for how to unlock the growth these models promise. Companies need to combine that long-term vision—where to go, how far, and how fast—with patience as well as a thorough understanding of why the old economics and practices no longer apply. Winning new customers remains important, but perhaps the most critical new strategic objective in a successful long-term transition is customer retention.

This customer metric has become even more important since 2013, when we last conducted an in-depth study of cloud-like pricing models and recommended that tech companies switch the focus of their sales model from “hunting” to “farming”—that is, building a customer base to harvest rather than aiming for the adrenaline jolts induced by deals with large upfront payments. The need to focus on both acquisition and retention will always be a question of balance. Hunting is essential for any high-growth technology company, but the high associated customer acquisition costs are often overlooked. Effective farming supports the achievement of stable growth at a more reasonable cost.

Farming the larger retained base leads to what we call the 90–20 rule. It derives from

two thresholds that help companies avoid a “leaky bucket” and set themselves up for a successful transition to XaaS pricing. The first is a target of at least 90% customer retention, which in many cases requires a significant reduction in churn rates. The 20% represents the incremental revenue from cross-selling and upselling activities, which in turn depend both on actions the company takes and on the size of its retained customer base.

The difference that stronger retention makes stands out clearly in Exhibit 2, which shows the difference between establishing a healthy foundation for growth and risking a leaky bucket that results in shrinking the customer base and limits opportunities for upselling and cross-selling. Higher prices during the transition are not likely to change the financial math in the way that focusing on retention will.

In light of these insights, we recommend that companies resist aggressive attempts to defend price levels or raise prices with the specific goal of offsetting the declines

in margins inherent in the short term in the transition to a XaaS model.

This vision, patience, and growth ultimately manifest themselves in higher enterprise value. When we look at the ratio of share price to revenue per share (the P/R ratio) for select companies, we see a clear relationship between the extent to which a company has harnessed the benefits of a SaaS model and the level of P/R ratio that investors reward them. In other words, a dollar of revenue generated by a XaaS model is considered to be higher quality than revenue generated under the traditional licensing models. This difference starts to become apparent when a company reaches a critical mass in revenue from XaaS models, which is about 20% of total revenue on average.

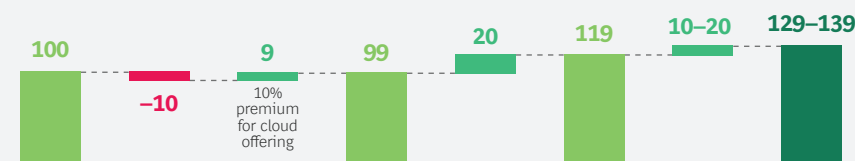
Best Practices

Several best practices make the difference between healthy growth and the leaky-bucket outcome. The combination of seemingly slight differences between stronger

EXHIBIT 2 | The 90–20 Rule Is Crucial to Long-Term Revenue and Margin Growth

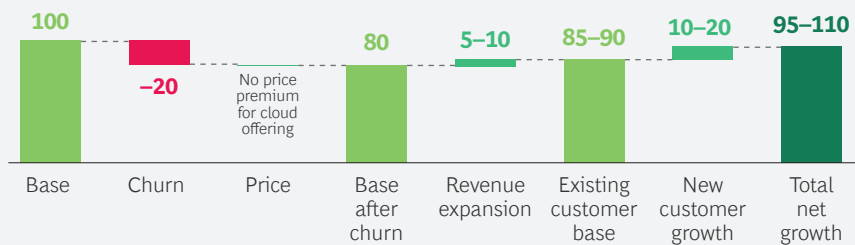
Profile with the 90–20 rule

(90% retention and 20% expansion)



Profile with a “leaky bucket”

(traditional practices)



Source: BCG analysis.
Note: Shows revenue indexed to 100.

and weaker performance in customer retention, revenue expansion, and more disciplined discounting practices can lead to far greater customer LTV. In one scenario, the compounded effects of higher retention (90% versus 80%), more effective revenue-building activities (10% versus 5%), and greater revenue expansion through more disciplined discounting (3.5% versus 2%) lead to an overall gain of 63% in LTV. The basis for such superior performance lies in these best practices:

- **Design the right pricing model.** It is vital to select the right set of price metrics—that is, the units by which the vendor meters its business and charges for it. These metrics determine the firm’s ability to scale its value and revenue. Regardless of the model, the chosen metrics must be easy to track, easy to understand, correlated with customer value, and aligned with the vendor’s costs and competitive situation.

It is impossible to generalize about price metrics across all XaaS platforms. IaaS models tend to have more metrics than PaaS models, in order to mitigate the risks of misaligned pricing. PaaS models, meanwhile, often take advantage of “freemium” (a pricing approach under which customers receive a basic product or service for free but must pay for additional features) and per-user models. SaaS vendors, in contrast, tend to focus primarily on per-user subscription models. These choices matter not only because they are essential drivers of future revenue and profit but also because once in place they are hard to change quickly. As one executive told us, “If I were to do this again, I would have set up our pricing model differently... but while we were able to tweak it, it was very difficult to change.”

- **Land the new customer base efficiently.** This is a core part of what we refer to as “try, land, and expand.” Acquiring and retaining customers early on is vital to the success of any XaaS transition, and a freemium model can be a powerful enabler for attracting new customers.

But the design and implementation of freemium models have several pitfalls. Freemium models can be difficult to deploy efficiently, and they risk drawing too many high-cost-to-serve customers to the free package. They also require vigilant monitoring both to track value and to ensure that more customers convert to the paid model. Once a customer chooses a paid model, the vendor’s focus widens to include retention, which may require tactics such as automatic renewal, incentives for early renewal, and price guarantees. The focus also shifts to expanding the revenue base, which we discuss next.

- **Pursue 4D revenue expansion.** Vendors should seek revenue expansion across four dimensions: upselling, cross-selling, price increases, and volume increases. A classic example of upselling is moving customers to higher-value tiers within a good-better-best suite of services. Cross-selling includes leading the customer to complementary or supplementary services, or into unrelated service areas. Price increases can take many forms, including year-on-year escalators built into contracts and a mix of value-added incentives a buyer can use to partially offset nominal price increases. Volume increases often come from higher adoption rates within a department as well as within the entire enterprise (more business units, more geographies, and so on). This 4D expansion is another reason why price metrics matter. Volume will scale faster if the vendor aligns its measures of volume and its volume-discounting guidelines with customers’ perceptions of value, and, in the best-case scenario, with the actual outcomes the customer derives.
- **Cloudify price implementation.** It should come as no surprise that the transition to a XaaS model places new and different operational demands on an organization. Ongoing revenue streams (versus upfront payments) present new challenges for quoting, discount models, sales incentives,

invoicing, and accounting. Without appropriate changes, the ERP, billing, and quoting systems will prevent a company from scaling its XaaS model efficiently. A company needs to address its discount framework and guidance, refresh its enterprise agreements and terms and conditions, and put in place an IT infrastructure to support a new model for transactions.

- **Support each internal function in fulfilling its new role.** It may take up to three years for an organization to be able to support new pricing models at full scale. Creating the basics alone—product design, pricing design, pricing metrics, and channel incentives—can take several months. As it prepares to launch its initial direct offers, the company needs to train the sales force on the new models and also make sure that its governance procedures (legal, escalation, guardrails, and so on) are in place. In subsequent phases, the

order-to-cash procedures, monitoring, and support tools get put into place and scaled up.

DISRUPTIVE ADVANCES SUCH as XaaS pricing models always come with the same bold promises and sobering caveats. They promise a complete transformation of the way customers and suppliers do business, yet their implementation is uncharted territory fraught with unexpected risks and unintended consequences. The best safeguard is empirical guidance around benchmarks and best practices that enable a company to understand its challenges, formulate the right new growth strategy, and approach the transition with greater confidence. Technology companies are navigating that journey right now. Companies in other industries will smooth their own journeys by watching and learning from the experiences of the tech-industry front-runners.

About the Authors

Jean-Manuel Izaret is a senior partner and managing director in the San Francisco office of The Boston Consulting Group. You may contact him by email at izaret.jeanmanuel@bcg.com.

Nicolas Hunke is a partner and managing director in the firm's Munich office. You may contact him by email at hunke.nicolas@bcg.com.

John Pineda is an associate director in BCG's San Francisco office. You may contact him by email at pineda.john@bcg.com.

Federico Fabbri is a principal in the firm's San Francisco office. You may contact him by email at fabbri.federico@bcg.com.

Win Chia is a project leader in BCG's Los Angeles office. You may contact her by email at chia.win@bcg.com.

The BCG Henderson Institute is The Boston Consulting Group's internal think tank, dedicated to exploring and developing valuable new insights from business, technology, and science by embracing the powerful technology of ideas. The Institute engages leaders in provocative discussion and experimentation to expand the boundaries of business theory and practice and to translate innovative ideas from within and beyond business. For more ideas and inspiration from the Institute, please visit <https://www.bcg.com/bcg-henderson-institute/thought-leadership-ideas.aspx>.

The Boston Consulting Group (BCG) is a global management consulting firm and the world's leading advisor on business strategy. We partner with clients from the private, public, and not-for-profit sectors in all regions to identify their highest-value opportunities, address their most critical challenges, and transform their enterprises. Our customized approach combines deep insight into the dynamics of companies and markets with close collaboration at all levels of the client organization. This ensures that our clients

achieve sustainable competitive advantage, build more capable organizations, and secure lasting results. Founded in 1963, BCG is a private company with offices in more than 90 cities in 50 countries. For more information, please visit bcg.com.

© The Boston Consulting Group, Inc. 2018. All rights reserved. 5/18