CUSTOMER NEEDS AND STRATEGIES

The Coming of the 3rd Platform and What This Means for Software Business Models

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IDC OPINION

IDC is observing that a new computing platform is emerging. This "3rd Platform" has cloud as its core, and 3rd Platform solutions will offer anyplace, anytime access to application functionality. Lightweight mobile apps running on ever-changing classes of mobile devices will be critical access points for these cloud services and solutions, leveraging 4G+ networks and WiFi rather than MPLS networks for connectivity. The new platform makes possible a broad proliferation of two important, value-generating overlays on top of this foundation: big data analytics and social technologies.

- IDC believes that 3rd Platform solutions will be the primary growth driver of the ICT industry over the next decade, responsible for 75% of the growth as worldwide industry spend moves from $3.2 trillion in 2013 to $5.3 trillion by 2020.
- The 3rd Platform has massive scale, reaching trillions of IP-addressable "things" — devices, monitors, and sensors — and billions of users through millions of new applications and services with a potentially global user base and unlimited hardware resources.
- The 3rd Platform is not just a technology revolution; it's also a customer revolution. As a result, another key tenet of the 3rd Platform is the rise of new business models that align more closely with business outcomes and customers' experiences. Where platforms form, devices, developers, and customers form, creating the same stable ecosystem that drove 2nd Platform growth.
- The proliferation of 3rd Platform solutions — and expectations — is rapidly disrupting software business models, changing them forever. But disruption rarely, if ever, leads to "wholesale replacement." IDC believes that while packaged software applications are being slowly re-platformed for virtualized use on converged systems in datacenters, they will be available for distributed client/server computing environments (the 2nd Platform), and they will be priced and licensed accordingly. These applications will just become less interesting than they once were, as software developers shift innovation to where the growth opportunity exists — the 3rd Platform.
- Disruptions are rarely an "overnight success." The successful rise of the 3rd Platform will be determined by the rate of development of a supportive infrastructure including the application itself and the technology underlying it. In addition, the rise and acceptance of business models to support the adoption of 3rd Platform solutions will play a key role in the growth rate.
IN THIS STUDY

In the software industry today, there are many trends driving changes in business models. This document focuses on the rise of the 3rd Platform and the ways in which software business models will change as a result. Advice to customers on the pricing and licensing of software-based applications and services is provided.

SITUATION OVERVIEW

The IT industry is in the midst of a massive structural shift toward what IDC calls the 3rd Platform. The 3rd Platform is the next-generation compute platform characterized by a proliferation of always-connected smart mobile devices, coupled with the widespread usage of social networking, and layered over a cloud-based server infrastructure supporting important new workloads such as big data analytics (see Figure 1).

FIGURE 1

The IT Industry's Shift Toward the 3rd Platform

![Diagram showing the 1st, 2nd, and 3rd Platforms of IT industry evolution]

Source: IDC, 2013
Most net-new commercial applications — as much as 82%, according to IDC — are being built specifically for cloud delivery in 2013. By 2016, nearly $1 of every $6 spent on packaged software and $1 of every $5 spent on applications will be consumed via the software-as-a-service (SaaS) model. The shift is driven by the insight that SaaS delivery, which comprises the applications and system infrastructure software (SIS) markets, will significantly outpace traditional software product delivery — continuing to grow at nearly five times faster than the software market as a whole and becoming the significant factor driving growth for all software markets.

At the same time, developers of business applications are focusing innovation on ways that companies can take advantage of end-user connectedness and mobility, with some software companies developing applications for mobile access instead of — not in addition to — client devices. Indeed, CIOs are finding that virtually anything that they put out has to have a mobile component and that laptops are increasingly out of scope. Some are even on the verge of eliminating their hardware infrastructure altogether.

Applications, content, and services residing within the 3rd Platform will be accessed by billions of users. The 3rd Platform is more than just end-user access; just as important is the bidirectional value-add that end-user interaction via smart devices brings to the market. In addition to being data consumers, these devices also serve as the hub for social networking. With the 3rd Platform, applications become much more nimble and open than they have been in the past, acting more like a service that can be deployed where and when needed. This is the pinnacle of anytime, anywhere access and has been a long time coming in the software industry.

Different from the 2nd Platform

In the era of the 2nd Platform, distributed systems helped usher in the era of packaged software applications. Customers would acquire software via a perpetual license, install it themselves, and begin to use the product. Compared with mainframe-class software technologies (the 1st Platform), application software in the distributed era was low cost, broadly available, and easy to use, with little or no training required. This enabled the development of mass software markets.

A combination of factors are actively driving the adoption of the 3rd Platform, some of which are an evolution of previous drivers (including lower cost and ease of use) and others are brand new. Unlike the 2nd Platform, however, 3rd Platform applications will be designed for the consumer and enhanced for the enterprise (as opposed to being designed for the enterprise first). Consumer-like expectations for ease of acquisition and access as well as simplicity and transparency of pricing models will dictate pricing models and payment terms. In addition, expectations for ease of use and interoperability will also be gleaned from consumer experiences. Following are some of the key tenets of the 3rd Platform:

- **Ease of access:** Just as with the 2nd Platform, expanded access is a driver for 3rd Platform technologies. This means anytime, anywhere access via any device.
Cost: The 3rd Platform is driven by a desire for more flexible pricing models that align cost more closely with actual consumption or experience. Measurements could include user- or feature-based metrics as well as infrastructure-related metrics such as per-gigabyte storage or bandwidth. Other elements related to service elements such as availability or scalability could also factor into the cost. In addition, a key characteristic of cost in the 3rd Platform is the ability to track and bill on metrics that scale up or down. Per-unit costs may be higher (more flexibility generally equals higher cost), but units will be purchased at a more granular level than in the past, which will enable cost efficiencies.

Sales channels: While 2nd Platform applications were typically sold through a wide variety of channels, including reseller and value-added reseller, retail, OEM, and online retail, 3rd Platform applications are increasingly moving to an application store or online marketplace model. IDC predicts that by 2014, 30% of net-new business software purchases will be made through an online marketplace operated by an ISV or third party.

Self-service/self-provisioning: Capital investments and lengthy installations punctuated 2nd Platform scenarios. With the 3rd Platform, costs are operational and implementation is nearly immediate. Line-of-business (LOB) users can select, pay for, and access the application functionality that they need to get their jobs done.

Hubs and value-added application mash-ups: With the 2nd Platform, a hub-and-spoke ecosystem developed around a series of interconnected business applications centered on hubs. The idea of hub-and-spoke connections exists today — think salesforce.com with its CRM hub including many third-party applications that extend its functionality and add value. However, 3rd Platform ecosystems will evolve beyond vendor-centric application frameworks — interoperability requirements of 3rd Platform consumers mean that value-added services offered to any given cloud will need to be made accessible by and consumable to applications available on board competing 3rd Platforms. Over the longer term, 3rd Platform applications can evolve into a mash-up of services offered from other 3rd Platforms available on the Internet.

A Focus on Business Models

The 3rd Platform is not just a technology revolution; it's also a customer revolution. As a result, another key tenet of the 3rd Platform is the rise of new business models that align more closely with customers' experiences (for more information on customer experience and pricing, see Focused on Customer Experience? You Need to Look at Your Pricing, IDC #236403, August 2012). Customers want access to positive experiences, and subscription pricing has proven to be a better means of facilitating this access than the perpetual license model. Most software customers have already been exposed to subscription models, either for cloud or for on-premise software, and the prevalence of these models will expand as the 3rd Platform unfolds. This is one reason that subscription models are on the rise, growing much faster than traditional license models. And, it isn't just start-ups offering subscription — 16% of the top 100 software vendors have greater than 50% of their revenue coming from subscription.
Though important, subscription models are just the tip of the iceberg when it comes to business model change brought about by the 3rd Platform. Customers should also expect to see models that enable access to and consumption of applications when you want, where you want, for whomever needs them. Pricing will scale up or down according to consumption or need, allowing customers to pay only for what they use. There will always be applications that are needed every day (e.g., accounting), but there will be others (e.g., quality assurance testing, annual benefits enrollment process, and pop-up holiday stores) that are needed only for a brief period of time.

Change is in the air in the software industry. Virtually all software vendors are at various stages in a seminal transition in how they build, sell, and deliver their products as services. IDC’s Key Trends in Software Pricing and Licensing Survey, a fall 2012 survey of 123 software publishers, found that 42% of respondents made changes to their pricing and licensing strategy in the past 18–24 months. The primary reason? These companies were hoping to generate more revenue and improve customer satisfaction (see Figure 2).

FIGURE 2

Reasons for Changing Company’s Pricing/Licensing Strategy

Q. Why has your company changed pricing/licensing strategy?

- Generate more revenue
- Improve relations with customers
- Accelerate the sales cycle
- Enter new market
- Reduce hardware costs
- Free R&D resources/decrease dev. cost
- Enter new geographies
- Simplify licensing

n = 116
Source: IDC’s Key Trends in Software Pricing and Licensing Survey, fall 2012

Software pricing strategy is clearly connected to revenue generation and profit. In addition, software pricing and licensing can have a big impact on the customer experience (see Focused on Customer Experience? You Need to Look at Your Pricing, IDC #236403, August 2012). In the next 18–24 months, software publishers will continue to adapt their software pricing and licensing strategies (see Figure 3), as they look to gain competitive advantage and respond to market conditions including the IT industry’s shift toward the 3rd Platform.
IDC expects that with billions of users on an average with three devices apiece, there will be a shift from device-based pricing models to user-based models. Customers have valid concerns that the user-based model could cost more — technology companies are adjusting their software pricing to reflect the growing number of devices relative to the number of users accessing the same application.

Furthermore, the billions of users that access the 3rd Platform via mobile devices provide a big data trail that can be harvested, curated, and sold back to interested parties (e.g., retailers) or otherwise used to improve user experience. For example, location awareness built into mobile devices can help generate a better user experience and can also be used to enhance the overall image of users' online activities and personal behaviors. This capability, along with users that allow data capture associated with their activities, generates components for a big data store. Software vendors will create new services to provide information back to markets (e.g., IBM is already doing this with Smarter Commerce) as they mine the information entered by their customers into public cloud systems. End users will have new ways to benchmark their work processes against their peer groups that are using the same software, creating opportunities to refine and improve their own productivity.

**Everyone Is a Software Company, Everything Is an App**

In today's world, software is inside almost everything we interact with — automobiles, vending machines, various mobile devices, building systems, and "smart" devices.
many cases, the value associated with these physical goods is monetized primarily with the sale of that good. Increasingly, manufacturers are turning to software to help recognize the value of embedded software by:

- Providing an additional, high-margin revenue stream
- Protecting intellectual property (IP) from misuse
- Simplifying product packaging while allowing for more flexible configurations
- Lowering inventory costs by decreasing the number of SKUs needed to satisfy unique customer demands

For more information on this trend, see *Hardware Companies Face Unique Challenges in Growing Software Revenue* (IDC #240360, March 2013). In response to customer connectivity and demand for solutions to business process problems — not technology for technology’s sake — traditional enterprise applications are being redefined as cloud services, offering a more modular and granular way to deploy and configure business processes. This "deconstruction" of the packaged app and the "app-ification" of embedded software will impact software pricing in a big way. The industry is moving toward lower cost and higher volume. Price points are radically different for 3rd Platform solutions than their 2nd Platform counterparts. IT incumbents will rail against this transition. Companies with a long history of competing in the 2nd Platform are looking at a two order of magnitude increase in volumes — with a two order of magnitude decrease in the unit price.

**The New Bottom Line**

There will still be applications on-premise, licensed in the traditional sense. But growth is in subscription and cloud offerings. This means that most customers will be managing a hybrid scenario, from both a technology and a business model perspective. Customers will be facing a complex combination of many more applications and devices to manage; decentralized application purchasing and the proliferation of application access will challenge enterprises. The net software pricing scenario:

- A mix of on-premise, cloud, and embedded software
- Perpetual and subscription licensing
- Fixed and variable costs
- New software license costs associated with embedded software

CIOs should expect that they will continue to do business with some of the companies they have a history of working with. Indeed, the most trusted cloud providers still line up closely with the long-standing hierarchy of software providers. However, we see this changing over time. The shift to the promise of the 3rd Platform is going to be very challenging for these companies from a technology perspective. Not only do they have legacy business models that pervade their cultures, organizational structures, and shareholder expectations, these companies also have systems that were set up
for selling distributed software. These systems are not flexible enough to support subscription pay-per-use (PPU) products and services on a large scale. Pricing will also be more transparent and simplified to a certain extent, although the mechanics around the enablement of these models will be anything but simple.

The promise of the 3rd Platform is indeed lower cost. However, customers will need to determine carefully which workloads should move to variable cost models because individual unit costs will be higher. Another consideration should be cost predictability. Since most enterprises do not track granular statistics today, it's hard to compare the costs of variable models versus fixed costs. Other considerations include:

- **Concerns over increased complexity.** Customers already feel that current licensing practices are overly complex.

- **An increase in complexity, and better means of abstracting this from users.** More granularity and flexibility in pricing will add to this complexity. It will be important to hide the complexity from customers, as in the example from the music industry. Technology will play an important role here.

- **Lack of tools.** Technologies from companies such as Flexera Software and SafeNet that enable granular packaging of software as well as pay-per-use pricing exist today. However, only a small percentage of vendors and customers are using these technologies for packaging and pricing purposes today. Since the majority of customers are not currently collecting granular and frequent usage statistics, it will be difficult for them to ascertain the impact of PPU and manage the complexity.

A huge change in what constitutes an application will also challenge IT organizations that are trying to figure out how to source and pay for solutions to business process challenges. In complex cloud services, applications are just containers of rules (or groupings of modular pieces of code that perform a specific function), have specific logic, and leverage APIs for access to "syndicated" data streams. Services will be associated with data, not apps. Nontraditional data sources (e.g., Hadoop, social, video, sensors, and "network of things") dictate that information models and management will transcend traditional canonical three-tier apps. These offerings will have composition across on-premises/off-premises for fluid services, not containers, and will have composition at multiple levels, customer self-service provisioning/deployment, service elasticity, and built-in high availability. Big data in all its forms will be the new currency, and applications will leverage a variety of shared services — identity, workflow, logic, information management, and integration — with relatively little brainpower built into the client (a browser is mostly about rendering, after all). For designers (and purchasers) of enterprise applications, it's a whole new world. And, formally "operationalizing" this inside of technology companies (i.e., policy, revenue recognition, billing, inventory management/order entry) is nearly impossible with the systems they are running today. This is also true inside many customers as the asset management processes and tools they have are not up to the tasks that 3rd Platform solutions can dish out.

Given the way that 3rd Platform technologies are sold (app stores), operational costs, and the business process needs that these technologies address, more purchases will involve the line of business. Indeed, IDC had predicted that line-of-business
executives will be involved with 80% of IT sales — and will be the decision makers in 40% of them — by 2016. Some IT departments might be threatened by the fact that a partner and an LOB are "going around them" to select technology. For their part, LOB managers would be happy to involve IT, as long as IT doesn't slow them down. The trade-off between providing fast solutions to the business and staying within a well-thought-out integrated IT strategy will be a fine balancing act.

This opens up an opportunity for solution providers to play the role of "referee" or "broker" between these two organizations within a company. Many of these partners have made their living over the past 20 years working closely with IT departments but have been adapting to the trend of selling to the business. What better organization to help bridge the gap between the two? There will be times where the business wants to implement an application as a test or a pilot or in response to a competitive situation. In this case, the broker role would be to deliver the customer needs but also to keep IT in the loop. If the partner is an effective broker, it will become more important to both business and IT managers. It can become a key trusted ally.

FUTURE OUTLOOK

In addition to bringing new possibilities for what applications can do and for whom, new business models associated with 3rd Platform solutions will generate opportunities, and challenges, for software customers. There is the opportunity to spend software budget more efficiently and in such a way that allows operational expenses to replace capital investment. Pricing models such as pay-per-use can also support chargeback scenarios internally. At the same time, there is the opportunity to push IT spending out to the line of business for certain business process workloads. CIOs are also finding that virtually anything that they put out has to have a mobile component and that laptops are increasingly out of scope. Some are even on the verge of eliminating their hardware infrastructure altogether.

Customers are building investment plans not just around cloud, social, mobile, or big data. They are building them around business solutions that include two, three, or all of those things together. However, the transition to 3rd Platform business models will happen incrementally. During the transition and beyond, CIOs will have to contend with a complex hybrid mix of on-premise/cloud, perpetual/subscription, and PC/mobile software.

In addition, expect to buy from a different set of technology vendors than you have in the past. In today's world, everything is becoming a mobile device, everything is an app, and every company is becoming a software company.

We've seen throughout history that incumbents will ignore the new market being developed because it is too small for them to pay attention to, or because they attempt to develop a solution only to be frustrated by channel conflict and inability to execute the business model. Traditional software companies that wish to evolve to the 3rd Platform will face an uphill battle operationalizing new pricing models internally and gaining enough support from management to receive the resources needed to grow them. In addition, the development of a supporting value network made up of complementary innovations and channel partners around 3rd Platform
solutions will be key to the growth of solutions. A new value network supporting these solutions will take a while to form, but once in place, it will sustain the innovation and become the basis for why incumbents find it so difficult to defend themselves: Not only are the incumbents' solutions being disrupted, but so are their partners'.

**ESSENTIAL GUIDANCE**

Variable-use software licensing or licensing that accounts for the scale-up/scale-down nature of virtual environments — these things are complex. Software vendors will try to mask this complexity by layering on technologies for metering and billing. However, for reduced complexity with increased flexibility to be a reality, customers will play an important role as well. They may need to give something up; this could be some level of privacy, as technology providers track application usage for the purposes of billing. Or, they might give up some level of customized flexibility in licensing terms that they may have negotiated in the past.

Customers may also need to adjust expectations about the acquisition process, especially if they have had a lot of experience purchasing distributed software. At many organizations, the people responsible for sourcing 3rd Platform software applications and services will be the same people who have bought traditional software. Yes, there will be line-of-business purchases, but if the footprint of the solution is large enough or strategic enough, traditional IT procurement will be involved. At the same time, many of the sales executives at cloud firms have had years of experience selling software at traditional firms. The 3rd Platform will not lead to the complete disappearance of traditional IT — or the software sales executive.

No matter who is planning for or negotiating 3rd Platform solutions for your company, it is important that they remember the following:

- **Ambiguity is not your friend.** Negotiations for 3rd Platform solutions often start with definitions. What exactly is cloud or social? What exactly is a device? Is access unlimited? What is access? A user? It is important to understand the definitions for just about everything in your specific situation (one enterprise application vendor has over 50 definitions of what constitutes a "user"). Just as with traditional software, if you submit an RFP with inconsistent or vague definitions, the sales executive sees an opportunity to educate you (and dollar signs). This can easily occur if you are trying to shop the same RFP to multiple firms.

- **You pay for flexibility.** The more flexibility you ask for, the more it will cost. This could include flexibility in the length of your arrangement; a month-to-month contract will cost more than an annual contract, which will cost more than a three-year contract. Or, in the type of metric and utilization rate; pay-per-use costs more per unit than named user, for example. You will also pay more if you want an arrangement that is outside of the standard offering, either functionality wise or service wise.

- **Don't expect 80–90% discounts.** That is one thing that does happen in the on-premise world but that doesn't happen in the cloud. In the on-premise world, it's the license that is heavily discounted. In the cloud world, there are volume discounts, and there are discounts for different levels of term commitments. An
annual contract is the baseline, with contracts for multiple years typically resulting in a discounted rate. Increasingly, there are discounts for enterprise agreements, but none of these will add up to the kind of level of discount you've seen with on-premises software.

- **Enterprise deals will continue.** More often, you should expect providers of enterprise-scale 3rd Platform solutions to try to sell you an enterprise deal. The mechanics of these agreements are pretty similar as in the past. There is the lure of larger discounts and the opportunity to build a closer relationship with the provider as a preferred customer, in exchange for volume commitments. These deals can be quite attractive and advantageous to customers in the right situations. Just be careful — once you go into these types of arrangements, it's really hard to scale down.

There will be more transparency in pricing, which will be a refreshing change. The challenge is that many enterprises don't buy in exactly the same way that the technology providers "package" their standard software offerings. For cost savings: Look beyond capital equipment savings to software license optimization and IT operational efficiencies.

**LEARN MORE**

**Related Research**

- "Mobile First" Business Models Challenge Traditional Application Vendors (IDC #lcUS24046913, March 2013)
- Hardware Companies Face Unique Challenges in Growing Software Revenue (IDC #240360, March 2013)
- Worldwide Software License Revenue 2012–2016 Forecast (IDC #237521, November 2012)
- IDC Predictions 2013: Competing on the 3rd Platform (IDC #238044, November 2012)
- Focused on Customer Experience? You Need to Look at Your Pricing (IDC #236403, August 2012)

**Synopsis**

This IDC study focuses on the rise of the 3rd Platform and the ways in which software business models will change as a result.

"The 3rd Platform is not just a technology revolution; it's also a customer revolution. As a result, expect the rise of new business models that align more closely with customers’ experiences," said Amy Konary, research vice president for Software Licensing, Provisioning, and Delivery. "These business models will generate opportunities, and challenges, for software customers."