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Reborn in the cloud

Adobe executives discuss the company's move from selling shrink-wrapped products to offering web-based software and services.

Kara Sprague

Over the past five years, Adobe Systems has remade itself as a cloud company. It no longer offers its publishing and design tools in the form of physical, shrink-wrapped products to be deployed at customers' sites under a perpetual license—where customers pay once and can use the software indefinitely. Rather, customers subscribe to Creative Cloud, the company's online suite of publishing and design tools, and receive frequent software upgrades as well as a range of new online-only and mobile services.

In large part because of Adobe's transition to the cloud, the company has seen its fortunes turn. Its stock price has more than tripled, overall revenue growth has climbed from the single digits five years ago to the double digits today, and recurring revenue has climbed from 19 percent in 2011 to 70 percent of total revenue today. The number of subscribing customers is more than four million and rising.

But making this wholesale shift hasn't been easy for a software company born and bred in the desktop-application era. In an interview with McKinsey's Kara Sprague, the company's chief financial officer, Mark Garrett, and its vice president of business operations and strategy, Dan Cohen, describe how the leadership team got this new digital business model off the ground and the lessons they've learned along the way.

McKinsey: *What precipitated Adobe's move to the cloud?*

Mark Garrett: There were a number of reasons, both financial and strategic. For one, even though customers had higher creative demands, our creative business wasn't really growing. The number of units we shipped under the old perpetual-licensing model was about three million units a year, and it remained flat for a long time. We were driving revenue growth by raising our

Takeaways

Adobe used to drive revenue growth by raising its average selling price, which ultimately wasn't sustainable; and its perpetual-licensing model was hindering its delivery of new innovations and capabilities to customers. So it reinvented itself as a cloud company.

Moving to the cloud was a major transformation. It affected how the company engineered its products, operations, and its go-to-market and business models, not to mention its culture.

The result: Adobe's stock price has tripled, its revenue growth has climbed into the double digits, and the company is better able to help its customers address today's content-creation challenges.

average selling price—either through straight price increases or through moving people up the product ladder. That wasn't a sustainable approach.

The perpetual-licensing model was also limiting us from delivering new innovations and capabilities to our customers. Historically, we had delivered product updates only every 18 or 24 months, but our customers' content-creation requirements were changing much faster than that, with advances in devices, browsers, mobile apps, and screen sizes.

Inside the company, we had this fundamental belief that there were broader market opportunities for us. Where content was being created and managed, when it was being consumed, and where it was going to be monetized—all of that was changing. We also believed that data were going to become more important. We already had a strong presence in content creation, and we saw an opportunity to broaden our presence in these areas.

The recession was also a factor. During the downturn in 2008 and 2009, our revenue and stock price suffered more than that of most software companies, because other companies had high recurring revenue. Our recurring revenue for the prior fiscal year was about 5 percent annually. We had virtually no financial buffer.

Dan Cohen: When we looked at how other software companies were faring during the recession, we saw that companies with high recurring revenue had smaller declines in their growth rates and valuations. We had a very big drop in both—our revenue dropped about 20 percent, and our valuation fell even more. We had extremely high customer-satisfaction rates for our products, but when we drilled down into the numbers, we saw that people were saying things like, "I'm happy with what I have, I don't see the need to ever buy another one again." Clearly, we needed to figure out how we could get people to want to buy from us more regularly, and, related to that, how we could innovate better and faster for our customers. We saw that the new software companies that were reaching scale were those operating under a cloud model.

McKinsey: *What was the first step toward moving to the cloud?*

Mark Garrett: There were a lot of discussions among Adobe's management, finance, and strategy teams and among business-unit leaders. We spent many hours talking about risk. A lot of people didn't buy into the idea at the beginning. We knew that our revenues, earnings, and stock price were almost certain to drop during the transition. And we knew it was going to be a long, hard road. It really takes guts to make this sort of change—and that was what we had to come to terms with. Just how risky is it? Can we really pull it off? What happens if the stock goes down? What will customers, employees, investors, and board members think? We spent hours knee-deep in Excel spreadsheets modeling this out. We literally covered the boardroom with pricing and unit models, predictions for how quickly perpetual licenses would fall off, and how quickly online subscriptions would ramp up. This helped us get more comfortable with the idea of making

Dan Cohen

Vital statistics
Married, with 3 children
Lives in Los Altos, CA

Education
Holds an MBA from Stanford, an MS in engineering (operations research) from the University of California, Berkeley, and a bachelor's degree in economics and math from the Robert D. Clark Honors College at the University of Oregon

Career highlights
Adobe Systems
(2007–present)
Vice president of corporate strategy

Intel Corporation
(2005–07)
Head of strategic planning, Ultra Mobility Group

(2002–05)
Head of product management and product marketing, Mobile Platform Group

(1999–2002)
Head of "Intel Inside" branding program

Fast facts
Serves as a member of the board of MVLA Scholars

Sits on the advisory board of the Robert D. Clark Honors College at the University of Oregon

the change—here's how much time it will take, here's what it will look like at the end. Through this discussion, which took about a year, we saw that we could manage through it, and that we, our customers, and our shareholders would come out on the other side much better off.

Dan Cohen: At the time of these discussions, we were experimenting with subscription models overseas and in the United States. We offered, side by side, similar products under both a subscription model and our traditional perpetual-licensing model, and we observed what the uptake was. Our research showed that we were bringing in a lot of new users under the subscription model, which addressed one of the problems we had been facing—growing the base. Meanwhile, many existing users told us they would not have upgraded without the subscription offering. Our own data, along with the market trends that we saw toward recurring-revenue models and cloud computing, made us confident that this move would modernize our business and set us up for a new phase of growth.

McKinsey: *Once the decision was made, what was the rollout plan?*

Dan Cohen: In November 2011, we announced our intentions to Wall Street—it was a full day of briefings, with financial analysts focused on communicating the strategy, ramifications, and financial expectations. One aspect of the strategy was that we were being more aggressive in shifting our Creative Suite (CS) business to the Creative Cloud. Another aspect was that we were doubling down on our cloud-based digital-marketing business. We decided to shift $200 million in operating expenses toward these high-growth opportunities. After we announced our plans, the stock price dropped by 6 percent, which actually was less than we had anticipated. It fully recovered within three months. We launched Creative Cloud and Creative Suite 6 (CS6), under the traditional perpetual-licensing model, in May 2012. So there was a period in which we were doing things in parallel. But after about a year, we felt ready to step on the accelerator and move everything to the cloud.

Mark Garrett

Vital statistics
Married, with 2 children
Lives in Monte Sereno, CA

Education
Holds an MBA from Marist College and bachelor's degrees in accounting and marketing from Boston University

Career highlights

Adobe Systems
(2007–present)
Executive vice president and chief financial officer

EMC Corporation
(2004–07)
Senior vice president and chief financial officer of EMC Software Group

Documentum
(2002–03)
Executive vice president and chief financial officer

Fast facts
Serves on the board of directors of Informatica Corporation, Model N, the Adobe Foundation, and the Children's Discovery Museum of San Jose

Is a member of the invitation-only *Wall Street Journal* CFO Network and CNBC's Global CFO Council

Has been quoted and featured in top-tier business publications including *Bloomberg Businessweek*, *Wall Street Journal*, *Barron's*, *Reuters*, *CFO Journal*, and *Investor Business Daily*

In May 2013, we said we would no longer add new capabilities to the CS line, although we would continue to sell and support CS6.

Mark Garrett: We had prepared Wall Street for a significant drop in revenue and earnings in 2012. We also shared new metrics to help analysts measure the health of the business as we went through this transition. We shifted their focus toward the building blocks of the Creative Cloud business—subscriptions, annualized recurring revenues (ARR), average revenue per user, and revenue that was contracted and either deferred or in backlog (off-balance sheet). We gave them "markers"—for instance, we said we were going to reach 4 million subscribers in 2015 and build up ARR. As the switchover progressed, toward the end of 2013, investors became intrigued and started asking about longer-term objectives. So we projected the compound annual growth rate and earnings per share out three years and shared those metrics. This was new for us; previously we had only given guidance one year out. The point is, we were transparent. We overcommunicated. When we did that, and when Wall Street saw the traction we were getting with the initial release, the stock started to move. We're now halfway through delivering against the three-year projections we shared with the analysts.

McKinsey: *What changes were involved in your product-development and engineering functions?*

Dan Cohen: In every part of the business, we had to dig in and ask, "How do we need to do this differently?" Moving to the cloud affected how we engineered the products, our operations, and our go-to-market and business models. From an engineering standpoint, for instance, in the past, we would think about adding new features to the next version of a product, and we would take 18 to 24 months between major launches of new products. Nowadays, two years is an eternity. We're in an agile development model, where a scrum team delivers service updates that are revised, tested, and released. We created mobile apps that could access libraries of Creative Cloud content developed with our desktop apps, and we built a development framework so that Creative Cloud members could harness the work of third-party mobile-app developers. We also acquired Behance, a social network for creative professionals where members can share their work and get feedback on it, and we established online talent and content marketplaces. We wanted to extend our existing products in new ways, which meant we needed to hire people with different skills and extend the skill set in our teams.

Mark Garrett: We needed to invest in cloud-based technology components that would allow users to download our products in a seamless way, because customers still need to run a lot of the Creative Cloud applications on their desktops. We also needed to develop protocols by which users could download and administer the apps and understand what updates they had coming to them, how to authenticate content, and what they had rights to. We built most of these capabilities in-house, and we acquired some mobile technologies. We use our own servers, co-located data centers and servers, and we work with platform-as-a-service providers.

Dan Cohen: Under the cloud model, the value proposition is about delivering high-quality service, not just new features, so uptime, availability, disaster recovery, and security have become critical. Now we have a modular service-oriented architecture to incorporate new billing and e-commerce capabilities. Our cloud infrastructure has been stress tested, and we've built in disaster recovery and redundancy to ensure service uptime as we scale to millions of users. Our website is no longer just the place where you get product and company information. It *is* the product. It is the start of a dynamic customer experience. As a result, there are now closer interactions among the functional groups that contribute to that experience, groups that used to be separate—product management, engineering, marketing, and IT.

McKinsey: *How did the shift to the cloud affect your go-to-market function?*

Dan Cohen: Under the subscription model, people are essentially deciding every month whether to renew or to move on; it's not the old world, where we could sell something and reach out again in two years' time with the next version of the product.

Mark Garrett: I think this was one of the most challenging aspects of the cloud transition, changing how we brought products to market. We had to bring people out of their comfort zones with regard to selling subscription-based Creative Cloud. We had to educate and compensate the channel and our sales force differently; the latter required different timing for revenue recognition. Additionally, our accounting organization had to change. The team has moved from managing up-front revenue recognition and a few large contracts to billing more than four million individuals every single month in addition to enterprise customers. Previously we shipped three million units a year. It's a hugely different process, requiring many more new metrics.

McKinsey: *What sort of cultural issues did you encounter as you were making these functional changes?*

Mark Garrett: At first, the reaction from some people in, say, IT or in the back office was that we were crazy. We had to contend with some of that cultural antibody—especially given that we were a company that had been doing things the same way for almost three decades. We instituted open dialogue with employees—here's what we're going through, here's what it might look like—and we encouraged debate. Not everyone stayed, but those who did were committed to the cloud model.

McKinsey: *At what point did you know your Creative offerings would be 100 percent cloud based?*

Mark Garrett: There wasn't any one point where we just flipped the switch and everything changed; it happened over time. During the period that we were actively selling both perpetual and cloud versions, our finance team did an analysis and found it would cost us twice as much to offer perpetual and subscription products side by side. That was not sustainable. Development on the subscription-based product was generating new features and functionality about every month or every quarter. It no longer made sense to hold back all those innovations only to bundle them into the packaged product a year later. Honestly, if we could do it over again, knowing how successful this would all be, we would have changed everything right up front.

McKinsey: *What has the impact of the change been so far?*

Mark Garrett: We think the customer is getting a better experience. Because we are operating in the cloud, we have a better read on their needs—we know who signed up for Creative Cloud, which apps they have downloaded, and which features they are using. We are using predictive analytics and our own marketing tools to listen to our customers and strengthen our relationships with them.

Dan Cohen: We are offering a broader and better value proposition to our customers. We're adding new features and services on multiple devices and making frequent updates to our creative products, which help customers better address today's content-creation challenges. We're attracting new customers for our mobile products and building up our marketplace for content. Additionally, our entry-level price point is attracting customers we were not engaging with in the past. None of this would have been possible under the old model. Our brand value has gone up, and our ability to attract top talent has grown along with it.

Mark Garrett: The company has a more predictable revenue stream. We have a bigger business that can address a larger market opportunity, because we can bring tens of millions of users to this platform and develop additional services for them over time. The stock price and recurring revenue have surged over the past five years, and there is still a lot of upside left. And from a cultural standpoint, we have incorporated more internal reviews to gauge how satisfied employees are, and more performance and business metrics to determine how well we're executing in the cloud model.

McKinsey: *Now that you are on the back end of the transformation, what advice would you give to others contemplating a similar move?*

Dan Cohen: For any company moving to a subscription model, you need to deliver ongoing value to the customer and also create new sources of value that didn't exist with the old model. You can't just sell the same offering in a different way. Companies that simply stick to what has made them successful in the past leave themselves open to disruption. You have to take a fresh look at your products—and be willing to "burn the boats," so to speak. Imagine that you have a clean slate, and you are launching the company fresh today. What would the offering be? What do you need to do to get there?

Mark Garrett: You have to be incredibly transparent about what you're doing and the value you're offering. We learned an important lesson in this area early on, when we got serious pushback to our cloud plan from our photography customers, who felt the offering did not work for them. It was important for us to hear and address the community feedback. We found a way to stick with our strategy and satisfy our customers by releasing a bundle with Photoshop and Lightroom—separate from the full Creative Cloud suite—at an affordable subscription price. And the community responded favorably. I also think the operational challenges were a lot harder than we realized going in. For instance, at some point it became clear that, under the cloud model, the stock was trading not on revenue and earnings but on subscriptions, bookings, and ARR—numbers that have no disclosure requirements or bearing on a company's financials. The audit committee needed to build in controls and governance around these figures. Now, we're moving the conversation back to revenue and earnings per share, which are better measures of our long-term growth.

Dan Cohen: Executives in every industry need to read the tea leaves and look at changes that are happening in their own or adjacent industries. Don't wait until someone is disrupting your business to start moving to the cloud or, for that matter, making any kind of necessary transformation. It will already be too late. You can see from our experience that this is a years-long effort, and it can be hard to catch up to others that have gotten the jump. It can feel risky to make this type of move, but once you recognize that the market will go in the new direction with or without you, there's really no other choice.

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