Stanford eCorner

Solving Problems Makes a Great Business (Entire Talk)

Chi-Hua Chien, *Goodwater Capital*; Dan Rosensweig, *Chegg*

October 07, 2010

Video URL: http://ecorner.stanford.edu/videos/2507/Solving-Problems-Makes-a-Great-Business-Entire-Talk

In conversation with KPCB's Chi-Hua Chien, Dan Rosensweig, CEO of textbook rental company Chegg, speaks about his professional history within Yahoo!, ZDNet, and Guitar Hero, and shares insights on business in the dot-com trenches. Rosensweig offers his perspective on the evolution of the online media and advertising industries. Additionally, Rosensweig encourages entrepreneurs-to-be to "bet on the inevitable" as they explore their passions and the growing future of online services.

Transcript

Chi-Hua Chien from Kleiner Perkins Caufield &Byers. He joined them in 2007. At Kleiner, Chi-Hua focuses on investments in the iFund in their mobile applications, consumer Internet and the digital media infrastructure. As a Board Director or observer, he works closely with the teams at Booyah, Chegg, Lockerz, Reputation Defender and Working Equity. And prior to joining Kleiner, Chi-Hua worked with Accel Partners as a Venture Advisor and Associate focusing on software as a service, consumer Internet and online advertising. He originated their investments in Facebook and AdECN, while also working on investments in AdMob, BitTorrent, fbFund, Glam, Trulia and YuMe Networks. Previously, he was the Director of Marketing at Coremetrics, where he led the marketing and inside sales. And he also served as the company's interim CFO through two rounds of venture funding. Chi-Hua's prior roles include corporate development at Google, business development at eCoverage and investment banking with Morgan Stanley's Technology Group. But more importantly for all of you at Stanford here, he's the world's best overachiever with four degrees from Stanford.

That's the minimum feature set to join Kleiner Perkins, I guess. But with that, I'll let Chi-Hua introduce Dan. And so, Chi-Hua, it's all yours. Thanks, Steve. It's a real privilege to be here today. I fell in love with startups from an ETLC here in the mid to late '90s. And also, it's a real privilege to be here interviewing my friend Dan Rosensweig, an entrepreneurial leader. Please don't read my resume compared to yours. An entrepreneurial leader who I've admired for a long time and somebody who I can work with as an investor in Chegg. So, since Dan is far more famous than I am, I'll do a quick bio because you guys probably already know him.

An incredible career in traditional and digital media, by the age of 31, Dan was the publisher of PC Magazine, one of the most important magazines in the era where they actually printed stuff. By 36, he had spawned ZDNet out of Ziff Davis and taken it public on the NASDAQ. By 40, he was the COO of the most powerful Internet company on the planet, Yahoo!. And he found time to run Guitar Hero and do private equity investing in-between. And now he's running Chegg, a company that has saved college students how much money? A quarter of a billion dollars. Two hundred and fifty million dollars and made education affordable to college students. Except if I asked how many of you rented your textbooks this semester versus bought them. Anybody here rent them? You're all too wealthy. Thank you. Folks over there, They work with my hands.

Those are my people. So, Dan, let's start with a retrospective on the Internet, where we've been and where we might be headed. The Web browser first came out in 1995. The summer before I came to Stanford, I remember coding up a website and competing with my friends to see who could get the most hits. And then the residential computer coordinator broke into my room and shut down my computer because it brought down the Internet on West campus when I wrote a hit counter. When did you first see the Internet and when did you know that it was going to transform media? Let me start by first of all thanking you all for inviting me. I'm ecstatic to be here and if anything that I've done or said is valuable to you, I'm excited about that. And if anybody of you are looking for jobs or hiring, my HR coordinator told me to say that. But honestly I'm a born-and-bred New Yorker. I moved to California in 2002 when I was 40 years old, at the start of my current midlife crisis.

And I've really fallen in love with Silicon Valley and fallen in love with the kinds of people that come here. I've fallen in love with the people that back it and the kinds of kids that go to school here because I grew up in an environment where you sort of follow the rules, very hierarchial. You work X number of years. You work a long time at the company. I spent 18 years at Ziff Davis. You guys will have on average six jobs in that 18 years. But I went to high school, I went to college, got married, had kids, had the same job, just kept working up because that's the only way to work up in the hierarchy whereas you come up and it's complete meritocracy, which is anybody from anywhere in the world with a great idea, if they can sell that idea to somebody like Chi-Hua, you have a chance to go for it. And that is an unbelievable experience and something that I think people who live out here and maybe have your generation take for granted because when I was starting and talking about what you're talking about, there was really no such thing as a public company and technology. There was really no such thing as equity. All the venture capitalists they invested in the semiconductor companies, in the PC companies, not even that many PC companies.

I don't think companies like Dell, Gateway, the companies at that time, they never had seed money as an example. And so, I grew up in the computer magazine business. And as Chi-Hua said, when I ran PC Magazine, at that point PC Magazine was the largest computer magazine on the planet. It reached a grand total of a million people every two weeks. So, we were the voice of, the coverage of, the king maker of what went on in the computer industry. I got the job in 1994, which was probably about the worst time on the planet to do it. We had just sold to a private equity company. The Ziff was sold to a private equity company. And I didn't even know what one was. And since I now know this is being filmed, I won't describe the experience except to say that they came in and they said, "Look, here's the deal.

Management can buy into this deal. And I'm not changing any terms because I own the company. Thank you." And they walked out. So, of course I didn't have very much money because there was no such thing as equity. And I borrowed $175,000 to be able to buy the equity and the company. And thank God a company like SoftBank came along and bought the company, Ziff Davis, from Forstmann Little 12 months later. It was the first time I understood the difference between making a salary and accumulating wealth because literally in a year, I had earned enough money to be able to pay for my kids to go to college. And that was really what I thought the objective was. But it was right around that time that we discovered the Internet. So, I worked for a company called Ziff Davis.

We had a really tremendous leadership team. The leadership team, we were beginning to realize that there really wasn't much going on in software development anymore. There was no more going on in hardware development. And so, we were thinking what the hell are we going to do with these computer magazines if the coolest thing to cover annually was what was the next printer coming out because Microsoft had sort of dominated the software scene. A lot of these companies went out of business. And this guy from Japan, a guy named Masayoshi Son of SoftBank, came along and bought Ziff Davis. And he wanted to launch 1000 magazines. And then, my old boss said, "Well, wait a minute. There's this really cool company in California that we've discovered. It's called Yahoo! And you should meet these guys." When we were owned by Forstmann Little, Yahoo! wanted a $10-million investment.

And Forstmann Little said, "Look, the last company I owned before I bought you guys was a candle making company. So, it's hard enough for me to figure out what you cover, let alone this thing called the Internet. Why would I ever put any of our money in something called 'Yahoo!'?" And so, this was around 1994, 1995. And then, when we got flipped to SoftBank, the same pitch was made. Eric made this pitch to Masa. He went out and visited Jerry and David, as you know, who are phenomenal alumni of this amazing institution. And Masa said, "I'm not going to give you $10 million. I'm going to give you $100 million." Jerry and David said, "We don't need $100 million. We don't want to be that deluded." And Masa said, "You could always use the money, just tenfold your evaluation." So, after he invested $100 million, since he now owned us, he came back. He said, "You need to make me my money on this thing." And that was the year I learned about the Internet.

So, we met Jerry and David and we launched a magazine called Yahoo! Internet Life. And it was sort of antithetical at that time to launch a print magazine about the Internet. But back then, no one had ever heard of the Internet. There was no Internet. And so, people needed to understand what was the Internet, what were websites. We take for granted that and we'll talk a little bit about that later, the generation you grew up in versus what came before. So, we learned about that. And I met with Jerry and David and a guy named Jeff Mallett. And they came to New York and they were these sort of young punks at that time because we thought we were cool because we were a magazine publishing company. They came in and they sat down.

And I thought I did a brilliant negotiation for 1 billion impressions on Yahoo! to promote Yahoo! Internet Life magazine. Six months later, they came into the office. And it turned out that I was now the punk. Yahoo! just exploded. And so, I fell in love with the Internet ever since that day. And it was very clear to me that print had reached the end of its life cycle in 1996, 1997, because we were a computer magazines. So, the first people to go on the Internet were computer geeks. So, you could already begin to see our circulation decline. You could see ZDNet, which is the website that ultimately spun out of Ziff Davis, grow to be at that point the eighth largest website in the world behind Yahoo! and eBay and companies like that. It became very evident to me that the world was about to see a change that I don't think anybody in my generation had ever experienced before.

So, fast forward to 2002, the bubble pops. The Internet is dead. Everyone thinks "game over". I'm broke. You're broke. And they come calling again and they recruit you to go run Yahoo! Yes. What was that like? Well, as a born-and-bred New Yorker, I had no interest in moving out to California and Jerry Yang knew that. It turned out because of that relationship, the executives from Ziff Davis were on Yahoo!'s board. Masa was on Yahoo!'s board. And then Jerry reciprocated.

He sat on the joint board of ZDNet and Ziff Davis and we became very good friends. And he became a younger but more valuable mentor to me because he really did understand what was going on and we were just learning it at the time. And you all grew up with the Internet, right? You've never known a day without the Internet. You've never known a day without broadband. You've never known what it feels like without your iPhones. You've never known a day without YouTube. Your generation, this is what you take for granted. My generation back then, I was at the beginning when email came. And it was something called MCI Mail. And I remember I signed up for it.

And I got 14 messages in one day. And I'm like, "Shit, how am I going to keep up with this?" That 14 messages got a fax machine and voicemail all at the same time. I'm like, "Oh my God, working sucks!" So, that was at the beginning of all this stuff. I had no interest in moving to California. And I met Terry Semel, who I absolutely fell in love with at the time and changed my life as did Jerry. And they came calling. Basically the pitch was, "Do you want to be an 80-year-old Jewish guy sitting at your house in Scarsdale saying 'what if'? Or do you want to be a 40-year-old guy sitting in California running Yahoo! with me and saying, 'Here's how we could change the world'?" I actually debated that for a while because I don't mind being a grandfather sitting on the front porch. But the attraction was everybody had given up on the Internet. At that point, ZDNet and CNET had merged. I was the president of CNET working with a great guy and a great friend, Shelby Bonnie, who is just one of the great unsung, unknown entrepreneurs.

He's now got a company called Whiskey Media, which is doing great. And this was the largest technology site in the world and it was very exciting. But the market had collapsed. The stock had dropped. We had to lay off 800 people. Dropped from 100 bucks to? Four and a half bucks. Four and a half bucks. Yeah, that's why I went broke. Yeah. Yeah, that sucked.

"Sell stocks early" is one of the lessons that I will impart with you today. It's like when growing up in my generation, the big thing was, "Could you get 100,000 miles first in a year?" And then you realize, "What an idiot I am! Who the hell wants to travel that much?" And so, the early Internet people was like, "I'll never sell a share." And 99% of the companies went to zero. So, think about that. But the reality was investors gave up. VCs gave up and lots of the early employees gave up. But there were some things that were just happening and it just seemed so logical, which was the user base never gave up. At that point in time, Yahoo! had 200 million users. There was only 300 million Americans. Broadband hadn't really even begun to start, right? And you knew it was inevitable. We just didn't know when it was going to come or what format it was going to take.

And thank goodness, AT&Tcame along and had $14.95 a month broadband. And suddenly, the thing went from nobody having broadband to everybody having broadband. The email users kept climbing. The number of people using the site, the amount of time. And so, my belief was the business model will inevitably follow where the users are spending their time. And so, fewer people were watching television. Fewer people were listening to the radio. Significantly, fewer people were reading magazines. I predicted way back then pretty much the end of the newspaper because so many people use the newspaper for things that you were not using the Internet for, like going to a movie. My generation would wait for the paper to come out and you'd look up time and location.

Now, it lives on your phone. It would never dawn on you to go to a newspaper, to buy it, but that's what we all did on Thursdays and Fridays. And so, you could just predict all of the things that were going to happen. And so, my view was if the users hadn't given up, that's the hardest thing to get. How do you get people to utilize what you're using? We could figure out a business model. And so, Jerry called my wife. And my wife said, "If he gets excited, we'll come out to California." We moved out here and the rest is history. So, I was there from 2002 to 2006. We moved from 200 million users to half a billion. We moved from 700 million of revenue to 4.5 billion.

And we moved from market capital of 8 billion to close to 30 billion at the time. And so, I consider myself one of the most fortunate people on the planet. Always bet on the inevitable. And the inevitable was the Internet was going to dominate all forms of communication, all forms of media; I just couldn't predict how. But once you know that, you go all in. So, a little company called Google came along. Yeah. And they competed with you guys in search. By most accounts, Google won. Why?

Does this tape get edited? Well, I'd like to say they won the search business on the PC.

It's yet to see who wins the search business in the mobile environment. And I think they and others are coming in grips with the fact that every time there's a form change, every time there's a device change, things change. And good companies are successful in those environments. And great companies actually accelerate their growth in those environments. So, what Google did to Yahoo! it's now feeling from Apple and Facebook. And every 10 years it seems like these great companies hit a bump in the road. So, about that time Yahoo! in 10 years, Google has now hit 10 years. What happened was we were many things to many people. And they were one great thing to everybody. And sometimes it's just what you believed and it's how the question gets framed.

So, when I came to Yahoo!, people were not interested in investing in search because there was no way to make money. Right. And then along came GoTo which became Overture, which ultimately we acquired. And Google didn't care about making money. They cared about improving people's ability to search. And they were originally going to be enterprise, you know this, enterprise search. And Yahoo! is actually using their search engine. And then, something happened. Somebody created a business model around search. And then, to get around patents, Google improved on Overture's business model.

The logic that we had was you bid the most, you come up first. So, the logic was it was sort of self-policing, why would you bid the most to come up first if you wanted the most relevant? And Google figured something out that said, "It's not who bids the most, it's how you generate the greatest amount of value off each click." So, it's a combination of location and price and click-through. And that enabled them to make more money on every click than we did, which allowed them to invest a lot more money in increased modernization engines and then buy distribution. They could buy distribution at half the cost that we could or a third of the cost that we could. And so, here we were as a public company trying to balance multiple businesses, and they were focused on one. And they were making more money in every click. And they were able to run the table successfully in search. And it was fascinating, which is we were the number 2 search engine in Europe with a grand total of 11% market share. So, a lot of the business side around the engineering of modernization really hurt us. The flip side is Yahoo! is still doing incredibly well.

It has got half a billion, 600 million users or something like that. It's one of the three or four sites that everybody uses. It does phenomenally well in brand advertising. It has got all the largest media sites. But the money was being made in performance-based search ads. And the yield was ridiculous. In the algorithms that they were able to write, and we were able to write frankly, understanding the network effects of these businesses, it's really a fascinating business model. And if anybody ever asked the question of me that I always ask, which is why the hell they have to learn math, because everything you do in engineering and technology it turns out all math. So, I need to go back to school. So, you mentioned buying Overture.

And I looked upon Wikipedia, in your tenure... Which is an absolute source of truth. As edited by the people. Like the Facebook movie. In your tenure at Yahoo! you bought 28 companies including Inktomi, Overture, Flickr, Dialpad, Delicious, totaling over $3 billion. So, a lot of the students out here think you're starting companies. What do you look for when you're looking to make an acquisition of a company? Well, it depends on the stage of the company you're at. So, at Chegg today we've already acquired a company from Stanford, in fact. And Philip is right here and his team of CourseRank. Can you guys use CourseRank? It was founded by entrepreneurs right from your school who are now single and millionaires, which I'm neither.

So, it depends on the stage company you're at. So, when we were at Yahoo!, we had determined that we could iterate but not invent because once you're a large company, you have operating metrics. Once you're a public company, there are numbers that you need to make. And almost everybody you hire is about executing on what you need to do right then and there. And one of the big difficulties, the dilemma that they talk about, is the fact that it's very difficult to invent. So, if you look at what Yahoo! did, if you look at what Google is now, look at how many companies Google has acquired over the last couple of years, because you don't have the DNA in the company. Things change in technology. So, what we were looking for were things where we thought the fire hose of Yahoo! could be a kingmaker. So, if we could put our audience against something, we could make it big and we could run the table. And most of the acquisitions we made were extremely successful as a result of that.

Sometimes we were buying things for a team. And sometimes we were buying things for technology. How many of you use Flickr? So, at the time that we bought Flickr, it had something like 600,000 users and it has 40 or 50 million, maybe more than that. I think it left at 40 million. We knew that it was never going to be a business. But we knew that it was going to be an unbelievably valued utility for people, where we could attract audience, bring them back and benefit our core business model at very low costs. And so, we were willing to buy it. And the thing has been incredibly successful for Yahoo! So, our business was advertising. People always ask is Yahoo! a media company, is Yahoo! a technology company. We're an advertising company.

We made our money off advertising. And so, we needed to attract eyeballs and get the highest value we could for each eyeball. And so, we were looking for things that could fill in those gaps and create a reason for people to start their day and end their day with Yahoo! So, there's a pretty big one that got away. Yes. You're the only person who ever got Mark Zuckerberg to sign a letter to sell you his company for $1 billion. How did you do that and what happened? Clearly not as successful as you just made it sound. He signed a letter he didn't actually end up doing. Mark will tell you this, which is he was a reluctant seller from day 1. And every great entrepreneur that I have ever met at one point in time feels like, "Wow! Maybe I can't do it." So, if you think about the history of Silicon Valley, like eBay almost sold several times to Yahoo! Yahoo! almost sold for $2 million to AOL. AOL almost sold several times including to Ziff Davis back in the day when we were there.

Intuit almost sold to Microsoft. You can just go through this day in and day out. And so, there's a moment in time where you say to yourself, "I think I can, I think I can, I think I can." A billion dollars sounds like a lot of money. I was very fortunate to meet Mark. And we had a very strange sort of connection, which is a number of his earlier employees were people that used to work for me and I remain friends with and actually helped sign on to go over there. And then, both Mark and I were born in the same hometown several years apart. And if you don't think that six degrees of separation, is where the guy who made the Facebook movie, Aaron Sorkin and I graduated high school together. Ask yourself which of those three is the loser in that crowd. So, I get Chi-Hua and I love them. So, I spent a year getting to know Mark and getting to understand the business and working with him as frequently as he was willing to talk about his vision and his dream.

And I got ridiculously inspired, to be frank with you. And it became more and more obvious to me that what Facebook was going to be wasn't what it was. So, I think I met Mark with over 4 million users or something like that. We kept modeling the company as if it was going to be 18 million users, which is pretty much 100% of college kids. And Mark just kept saying, "It's not for college kids. It's just where it started." And so, what became evident to me was the most successful companies in the Internet really are services. Email is a service. Search is a service, Travelocity, Expedia. Just keep thinking about it. Chegg is a service.

eBay is a service. Amazon is a service. Apple is a service, right? It's services. And so, he had viewed Facebook not as a media company or not as any of those historical definitions but more as a utility that everybody could use. And that everybody at some point would want to be connected to somebody else. Now, did he know how he was going to do all that? No. But he was very clear. And so, I kept thinking, there are 6.5 billion people in the world, 300 million Americans. So, the world's a very big place, much bigger than United States. China was going to become the biggest Internet country in the world.

They have more Internet users than we have citizens. So, you can see all this happening. Fifty percent of all new users were connecting through mobile devices. And by the time my tenure was going to be done at Yahoo!, over half the world was going to be connected to the Internet. And so, it just sort of felt right. And so, I think because I was as excited about his vision, the stuff that he knew and the stuff that he didn't know, as he was, I think he felt I needed to ask him that he could have confidence at somebody who was just going to let him run with his dream. He was reluctant from day 1 and I think when we gave him the opportunity to not do the deal, I think he just cheered. I think he was feeling pressure from his board. And at the end of the day, he turned out to be right. I think it would have been transformative for us at Yahoo! I think we don't know the road not taken.

So, we don't know if we would have messed it up or it would have become even bigger. You'll never know. But I feel very fortunate to have built that relationship. And watching him build his dream, now that I'm not at Yahoo!, is more exciting to see him build it there. But we'll never know. So, now you're running... But what he wants me to tell you is when he said to me, "Dan, if you were me, would you buy the company?" And I was honest with him, which is, "I'm completely subjective. I want the company. I think it's transformative for Yahoo!" And he said, "What would you do?" And I said, "Well, what I would do if I were you, if I were 20 years old or 21 and someone offered me a billion dollars, I'd call my mom and say, 'Mom, somebody offered me a billion dollars. Should I take it?'" I don't know if he ever did it.

But that was my best suggestion to him. And the rest is history. And Facebook is one of the greatest things that we've ever seen. Truly. But you were the guy who kept telling him not to. I told him not to sell it. It turned out to be a good decision. So, you sucked. I was on the other side of that deal. So, now you're running another college-based business.

You were not the founder of the company. But you're now the CEO. I remember the first time I met Chegg, I was just so compelled by the founders because I remember walking at a Stanford bookstore at the beginning of every quarter and walking out, having spent more than half of my allowance for the quarter and just feeling like it was totally unjust. Obviously, you solved a big problem for college students so they don't have to feel that way anymore. What is compelling to you and unique about Chegg? On a professional basis and based on my family background and based on the things I am passionate about, there are 18 million kids that go to school on a higher education in this country. Fourteen million out of that 18 million are in some sort of financial aid. In the United States, education is treated as if it's a charity, which is public education is paid for. And we know what happens with charities, they don't sustain themselves. And so, you're watching now, the country is broke. The states are broke.

The localities are broke, every school. I have a 17- and a 15-year-old so I'm going through the process. My daughter is a senior this year. We're looking at colleges. And it becomes really evident, the cost of college. Twenty-five to thirty percent of the cost of college are the textbooks alone. My mom is a schoolteacher, 39 years a public schoolteacher. Aunts and uncles were principals. We grew up, my mom and my brother and I in a very small apartment in Dobbs Ferry, where I said Mark and I were both born. And it seems like this country has no ability to compete because we're such a small percentage of the world's population if we cannot educate people.

And so, that alone just pissed me off. The opportunity to save hardworking kids and hardworking families a lot of money, all kidding aside, I realized we're at Stanford and I understand the cost of tuition. But I do know they subsidize families who earn less than $100,000. I'm sure there are people here on financial aid of some sort or you know people, your friends are on financial aid. But if somebody could save you $200 to $400 a quarter or a semester, is that a lot of money to you? It is to my kids. It is to most people that I know. I mean, you can't take for granted saving that amount of money for a kid. So, what Chegg did was they hit a ping point. Most great entrepreneurial companies that have been created in my opinion, and this is something I did not really understand, until a couple of years ago and living out here, that there is somebody solving a problem for themselves that turned out to be just a problem that a lot more people have. And so, these guys, particularly Aayush, who is still at the company, the name Chegg came from the fact that it's in order to afford college, you need money.

In order to get money, you need a job. It's like a chicken-and-egg situation. So, this is a guy that came over from India in 2001 to get his MBA at Iowa state. And he was doing everything he could to make money to be able to pay for his education. Hence, a company like Chegg is born. And he retooled the model and the rest is history, at least at the moment. We're still writing our future and our history. But the opportunity to build a company that has a real value proposition, the challenge of the digital transition that is coming and is going to come, the opportunity to change the face of education and perhaps save you guys time, save you money and help you get smarter, to be able to create environments in which you can get access to content that actually help you learn or the way you choose to learn, is a very exciting opportunity. Some of my passions are obviously my family and music, which is why I went to Guitar Hero. But education has always been one.

My wife and I are going through this process and my daughter is. It sucks. It's very difficult. It's very painful. It's very expensive. You feel like the weight of the world is on your shoulders. And if we can make the lives of students easier and the lives of their families easier and more affordable, I just feel like it's a great opportunity. And it's one of those rare opportunities where doing good happens to be a great business. We'll rent this year an excess of 3-plus million books. And this is a company that didn't exist three years ago.

So, it shows you that we've hit a pain point. So, it sounds like Chegg is very mission-driven. How do you build that culture in a company that's growing so quickly around that mission and get everybody signed up for it? Well, the first thing you do is you establish a vision for the company. You establish a mission. You write your company values. Those things people take for granted. You see, when I came to college, I needed a job. My mom was getting divorced for the second time and we were going to have to sell the house. And I was going to have to get a job like everybody else. And I went into a company and what you think is, "Who had the job before me? What did they do? And how can I do the job 10% better?" And you move out here and the questions are very different.

The questions are, "What needs to be done and what's the smartest way to do it?" I mean, when you reframe the question you asked me, "What did you not know then that you know now?" To me, everything isn't so much the answer. It's how you frame the question. It's what problem are you solving for, how would you define success. Is that success big enough to matter? What are the assets you have? What are the assets you don't have? And can you get them and if you can, what's the likelihood you're going to achieve that success? It's not a business model. It's are you thinking big enough? And so, we've written our values where the first value is "Think big" because just the textbook market alone is a $12-billion market. So, I'm proud of where we've gotten to. But we're a gnat out of the $12 billion. So, you get people understanding a common vision, the definition of success, what their roles are, what you're going to reward at the company. And then, you hire people who buy into that and are willing to be part of a team instead of Randy Moss having to leave a team every three years or Terrell Owens having to leave a team every three years. These are individual performers who are the hardest people to fire because they're great individual performers but lousy characters, right? You try to avoid as many of those as you can.

You don't get sucked into the drug of somebody who can get you a short-term decision. And you build a team and then you reward it and you communicate and overcommunicate. And these guys are all Cheggsters here. And they'll tell you we meet as a team, as a company, once a month. We go through the priorities. We define whether or not we did them well. We communicate them well. We laminate them. We put them on everybody's desk. And our employees hold the management responsible rather than management holding the employees responsible because if we didn't focus the resources on what we said we were going to do, it's our fault, not their fault.

And you get people fired up about it. And we have a company, if you walk in, the energy is extremely high. We have people from all over the world. We have tons of young people because we don't want people who have too much experience to think that there's one way to do anything. And then, once you define success, people then know how to make a good or bad decision. And you can give them the freedom to go make a decision. And another thing that I learned, which I didn't learn when I was a younger executive and manager, is it's better for the CEO to describe success than to prescribe how to get that success because I can do things the way I do things. We do things very different. So, if I say to you, "Here's the mountain you need to climb and here's exactly the steps you need to take," but they're unnatural for you, you're not going to be successful. And that's one of the hardest things as an executive to do, get really talented people in the company, work with them to define success and give them the freedom to do it their way.

They're best suited to do it. And that's an invaluable lesson for me. Earlier this year, Steve Jobs introduced this little thing called the iPad. And it's currently $499. But if you watch the history of the iPod, it's going to get to $99. You're disrupting an industry which is print textbooks. But there's another disruption coming behind you. What do you think about the future of education? Just to be clear, we're not disrupting a print industry. We're disrupting a price point that seems unreasonable and would never hold if textbooks weren't required reading. This is one of the few markets where they are required reading.

You can't get competition. We've introduced competition. We are taking the financial risks on your behalf. We are buying the books we are calculating that we can turn them enough times and liquidate them at the right price and that you guys will send them back in the right condition. We are taking that risk. So, what we are beating up is an unfair, we believe should be unsustainable business model that is not in favor of the student. If print was around forever, I'd be thrilled. Then, I wouldn't have this strategic issue to deal with. So, I just sort of wanted to make that clear. But one of the things you also learn in life is bet on the inevitable.

The reason I came to Yahoo! is I bet on the inevitable. I bet on the Internet. I couldn't be sure Yahoo! was going to be it. But I knew for sure somebody was going to dominate the Internet for a period of time. So, we're betting on the inevitable, that ultimately students will increasingly want digital assets that help them make their college lives easier. And we acquired CourseRank because if you go through the spectrum of going through the college board website, how many of you remember this, and you sign up for your SATs and ACTs and all of the stuff that people at Stanford needed to sign up for that God even didn't know existed, and then after that you get your grades back. You do your test prep. Then, you get your grades back. You start to figure out what schools you might want to go to and whether those grades are good for those schools. And then, after that, after you get into your school, you look at the financial aid sites.

The number 1 college site that people look at is the financial aid sites. What does that tell you about the state of the country? But after that, after you get admitted, what's the first thing you need to do? You need to plan your classes. So, along comes these smart entrepreneurs who have calculated that there's 7200 classes here at Stanford or something like that. And there are how many different ways to graduate, to get your degree in CS? I still don't remember how many times you have asked this, 6.75 incentive. OK, you could talk that way when I didn't own you. It's some crazy number that requires a calculator and extra toes and fingers. But here's a kid who comes over from Poland and says, "It's too hard. I want to know the following things." Just simple stuff, he was solving a problem for himself and his friends, which is, "How many classes do I needed to take? What's the cheapest way for me to get my degree in my major? Which professors are good? Which ones grade hard? Which ones grade easier? I wanted to read ratings on professors and I want to rate the professors. And then, on top of that, I want to know all my friends that are taking the class because maybe I don't want to go into a class with somebody who's supersmart. Maybe I just want to go into a class with somebody who isn't.

Or I don't like this person, I don't want to be in that class. Or maybe I want to know somebody going to class who I know will have tutors that could help me." And so, they built CourseRank which most of you use. And so, for us the first thing we want to do is start to offer services that add value to you that cost you nothing, that help our core business. So, once we know who you are and what professors you're taking, what classes you're taking and what your grades are, we can begin to help you understand what your required reading would be. And then, on top of that, we can take the data of what else you've gotten and say, "This is suggested reading. So, here's what people who took this course also got. And by the way, on average they got an A. Wouldn't you be interested in knowing that course material that they used?" So, the philosophy in this strategy is just keep building really valuable services along with you, students for students, if you will, network effect businesses. So, CourseRank when we were happy enough to come together, is on 30 campuses. Now, it's available on close to 200 campuses.

And we'll soon be available on over 1000 campuses. And so, imagine a scenario where we know students all over the country who take in classes, who have rated their professors, who have told us if a material is good. And then, what if we were able to provide things like class notes and tutors and answers to questions? How valuable would stuff like that be for you? And what if we can make it available in every device? And so, we plan to try to do all of that on behalf of the student. And that will drive our core business, whether it be print or whether it be digital. So, we'll be able to help you by being valuable to you 300 days a year, not just two. Great. So, I want to save some time for questions but do a quick, lightning round on a couple of quick topics, so few-sentence answers. A lot of the interesting presidents, CEO, people in Silicon Valley, LinkedIn, Groupon, the president of Microsoft Online, all worked for you at Yahoo! What makes a great leader? Receding hairline? I think some of them still have their hair. I think what makes a great leader, and I'm particularly proud of the fact that, as you know, they're partners at Accel, and as you said, CEO of LinkedIn and the president of Groupon and people running lots and lots of these companies and many of the people at Facebook that I've had the pleasure of working with over the years. And the consistent thing is their value system, which is they want to think big.

They are optimistic. They recognized that everything is not perfect but it's their job to solve it, not to whine about it. For that, they surround themselves with people who are as smart if not smarter. I mean, when I walked into Yahoo! for the first time, it was probably the first time in my career where everybody in the room was substantially smarter than I was about almost everything. And that's a frightening thing. And so, when you come out here and you meet really smart people like you, you realize that if you're in the technology industry and you're in an industry that's designed to change the world, you got to be willing to trust that people are going to figure it out over time. And so, these leaders, what do they have in common? They execute. They understand the value of technology. They recognize that at some point they do need to build the business out of it. They hire really talented people.

They give those people the freedom to execute. They course correct. They accept responsibility for their mistakes. I mean, for every success you see, the number of mistakes made are the ones that you don't see unless you're in the company. It's unbelievable. I mean, a 300-batting average in baseball is higher than the batting average of the quality decisions. And what they really do is they gather together a group of really talented people like what we're doing at Chegg. The CEO doesn't have to be the smartest person in the room. That was something that I didn't understand. They just need to know who's the smartest person on that subject.

The CEO doesn't have to act like the most important person in the room. Everybody knows the CEO has to play their role, which is at the end of the discussion, use their judgment to make the best decision and sell it through the organization, right? And so, all of these people possess a lot of those things, plus they're honest and they're transparent and they like to win. They're competitive people. It's hard to live in Silicon Valley and not be competitive. It's hard to go to Stanford and not be competitive. But to win is not you have to lose. To win is did they set goals big enough to achieve them? And along the way, some people will get caught in the way. That makes sense? Yup. So, one last question before we take questions from the audience. A topic probably in the minds of a lot of people here; how does a recent grad get a great job? Who's looking for work? Nobody? Well, I got to go here.

Nobody needs financial aid and they don't need jobs. So, how do you get a great job? First of all and probably the hardest thing to do is to recognize that you're not really going to know what a great job is. So, the advice that I would give you that I wish somebody had given me is the way you get a great job is you don't think of it as a job. Follow your passions. If you're excited about something, whatever you're doing is going to feel like a great job. So, don't be afraid to follow your passions. Work for people or around people that you believe in and you trust, like what I had with Bill Ziff, who we always thought as the mayor of Ziff Davis. We knew that if there were ever a big problem, he'd figure out how to solve it. So, follow your passion. Work for people you trust.

Give everything you have to that. Define success. Never look back, meaning the road not taken is something you're never going to know. So, make the road you're on successful. And as soon as you realize you can't be happy, go talk to the boss. Make your case in private. And if you can't change their minds, go to something else because you don't want to be a cancer in an organization. It may turn out that you're wrong and they're right. Or it may turn out neither of you is wrong nor right. It just may not be the right environment for you.

But you don't hang around in a place you can't find a way to be happy. But get up every day and recognize that you know what? You're in one of the greatest places on the planet. You're going to have opportunities that almost no one else in the world gets. Embrace it. Enjoy it. Do it with passion. And if it fails, do it again. Great. Thanks, Dan. Thanks, guys.

And so, for Dan and Chi-Hua, I'm going to give you in the audience or in the spirit of entrepreneurship class, MS&E178, so as you can see, about a quarter of the attendees are in the class that wraps around this one. And good news for my class, for those of you who are smart enough to be in 178, Chi-Hua and Dan will be joining us next door, immediately after the end of this session. So, if my class could hold their questions so we could get the rest of the audience who will be registering next quarter for the 178 class. I will just pick some questions. I will repeat the questions. And given my age and the number of neurons left, you have to make it short so I could remember it. So, think about a question you'd like to ask parsed in a complete sentence. So, questions, hands up. Who wants to ask questions? Come on. Yes? So, what course would you recommend that we take...

in the high-tech sector, when we have electives? Or as you said before that you realized math is important early on? What course would you recommend that we take? Great. So, let me repeat the question. What courses, beside MS&E178 and the entire STVP program at Stanford in the engineering school, that you would have to attend to fly here from anywhere in the country and register for besides those classes? You actually were a graduate of this program. Seriously, what do you think worked and what do you wish now truly that you would have taken? Students that you see as entrepreneurs. Yes. So, the two best courses that I took here were E145, which is the introductory entrepreneurship class, and then the Mayfield Fellows

Program, where I was a Mayfield Fellow in 1999. The reason they're great is because they offer you a broad perspective on all the challenges that you're going to face over the course of an entrepreneurial career. And then, from there you can pick a jumping-off point in which you dive in and you learn more. But I think it's really important to establish that baseline first, understand what it is that you're most interested and passionate about and what you're good at, and then go and do further course work in each of those areas. But were there any technical problem that you took, right? So, I was in an imaginary engineer, which they now call management science, is that right? It used to be called industrial engineering.

But we called it imaginary engineering because we used to imagine that we were engineers. But as an IE actually is a fantastic curriculum because you take two levels of introductory course work in each of the engineering areas, electrical engineering, computer science, materials science, chem E. There was also a class called E60, I don't know what it is now, that was sort of more finance-oriented. But that collection of classes or that collection of course work also gives you enough of an overview to then go deeper into the specific areas. I just want to state for the record two things. One, the names of your classes are harder than the classes that I took. And, two, I don't think I've ever asked anybody what class they've ever taken or what grade they ever got. The questions I asked are what are you excited about? What are you passionate about? What do you want from your life? Because if we can match what you want from your life with something at the company, you're going to work your ass off. And whatever you didn't learn here, you're going to learn there. The reason you do stuff you're passionate about or stuff you're not passionate about is you're never going to put in the time or the energy to understand it.

You're just never going to be good at it. So, take the classes that excite you. Maybe this is something you shouldn't say at an institution like this, but I don't think it matters what class you took in terms of your ability to get a job. I think it matters your ability to articulate what you're great at and what you can add to a company. That will be thing that gets you a job. OK. Next question? You said that some of the best companies are companies that see themselves as some kind of a service. But a lot of the companies like Apple and Google they are not being insistent. I think what I'm trying to ask is how do you recognize what people need or look for when you have these services in existence? So, the question if I understood it was for the outside audience, you mentioned that the great companies are services. But how do you recognize what's a service, what's a need? How do you know that? The best advice that I got was from the founder of RIM, BlackBerry.

So, when I was leaving Yahoo!, he called me up and he wished me well because we had done a lot of great things together. I was very early in the mobile space because it became obvious to me that there were going to be more mobile devices. There were like a billion PCs and four billion cell phones ready so it became very obvious to me. So, we were very early on working this way before the iPhone and any of that stuff. And BlackBerry was the first smartphone. And I said, "So, what do you think I should do?" And he said, "Well, I don't know. You should probably take some time off," which I think was a great advice. But I said to him, "Tell me what is it that you guys wish you were building that you think you wished somebody was building for the BlackBerry that nobody has built?" So, we started to talk about that. And then, he said, "You know what, Dan? Let me give you this advice." He said, "The challenge when you work at a big company like Yahoo! is you keep thinking about things that 10 million users are going to use or 100 million users have to use right away." And he said, "When we created BlackBerry, we were trying to solve a problem that we had, which is we wanted to be able to get our email everywhere we were without having to boot up a laptop or even carry a laptop. And it took us five years to get 900,000 users.

And then it took us five months to get the next 900,000 users." So, rather than say, what do I think the next huge idea is, do the things that you think you would really benefit from, that you're really passionate about. And then, they grow into these giant things. Don't try to think, "I wonder what the next big thing is that I can make money on?" It's much harder to do that, it seems. Jerry and David didn't think, "What I wanted to do was build one of the biggest media companies on the Internet." Nobody knew the word "Internet" or "media company" on the Internet at that time. I don't think Google thought initially that they were going to build the world's biggest advertising company. So, you never know where these things are. You have to be open to where they can go. But I start with what problem are you solving for. And if you solve it, what's the definition of success and is that big enough to matter. And that's the way I would think about it.

And from the perspective of a venture investor, that's exactly what we look at, too. Does the entrepreneur have a passion to solve that problem for themselves or someone that they really care about? Because when somebody walks in with a slide deck and says, "I've looked at all these markets and this one was the biggest so I picked it," they rarely are going to have a passion to make it through the ups and downs of a startup, of which there are many. OK. Question in the back? This question is for Dan. I guess you... but obviously the textbooks that are sold in the United States are sold at a cheaper price internationally. And so, there's a surge on that. So, I'm curious to know why you took the approach because there is great value in keeping the textbooks. So, I'm curious to know why you took that approach and that view... companies do not incorporate those.

And so, if I could understand the question in a short, old person's version, it was, "Why did you decide to crack the business model the way you did versus the lot being in the legislation, et cetera?" That's the short version, the bit.ly version. Before Dan answers that, I only have one comment as a more recent grad. You think you actually want to keep all your textbooks. But after trucking them all around for 10 years, which I did, I never opened those boxes. That's why Chegg is such a good idea. And again, I still have my college textbooks that I didn't even open from when I was in college. [Laughter] They still got the wrapper. Maybe you could still sell the spines. Anyway, if my daughter is watching, I'm just kidding. So, I'm going to answer your question honestly, I hope that's OK, which is, first of all as a good Samaritan as I'd like to be, introducing legislation doesn't make a business for me.

It may lower the prices for you. And truthfully, we are working on trying to get legislation passed. And there was a legislation passed a year ago that makes it a lot easier for businesses like ours to offer services like that. So, that's a very difficult road to hoe. There's lots of special interest groups. You would assume people would get up every morning and do what's in the best interest of the country and for the greater good. And then you realize that you were in America and that's not the way it works. So, that would take forever and maybe not even be successful. And we can't make a business out of it. Now, the fact of the matter is, we don't expect to get 100% of the market.

So, there are books that we know that people would rather own than rent. The vast majority of students don't want to own their books. I mean, when I say the vast majority, 90% don't want to own 90% of anything they've ever bought because they don't need it beyond it. People in the sciences or math or medical or law or business, they want to keep some of these things and they should. We didn't use to make that available through Chegg; we do now. So, now there are certain books that if you want to own it, you can. We're likely to sell it to you used because we want to keep the prices down. So, you are actually able to keep your book. And the cost of keeping it will probably be cheaper through us than if you were to buy it used someplace else. Thank you.

OK. All the way in the back. You guys are disrupting in this space. Have you talked to some of the establishments in your industry like follow some of the school bookstores? Yes. It's not a question. Do you want to know how those conversations went? So, the question was is it possible that you've actually talked to some of the existing book vendors and suppliers? Yes. We meet with the publishers regularly and have built a really great relationship with the publishers because the vision that we sort of articulated earlier is one where the publishers actually buy into, where there's a lot more material that they create that you don't even know exist that could actually help you do better. And so, we are becoming a direct-to-consumer marketing environment on behalf of a lot of the publishers. And so, they've embraced us. The bookstores, so there's the distributors that also have bookstores like Barnes &Noble and like Follett, we have been in discussions with all of them.

And we'll be in regular discussions with all of them. The rental model is really difficult to execute on. I mean, if you have any understanding of the investment that we've had to make in the algorithms and the technology and understanding the demand curve and when a book is going to fall out of favor and the warehousing, it's really a complex business more than it sounds. Now, we try to make that invisible to students because it's not your problem; it's ours. And so, we are working with a number of them. NBS is a big wholesaler. We actually have a site called textbooks.com. We offer Chegg rental branded through textbooks.com in partnership with them. We've had several meetings with Follett about whether or not, because Follett handles your bookstore right here at Stanford. Most of you don't know it because it has to be called Stanford Bookstore.

So, we're in constant discussions with them. But the reality is there's 8000 college campuses. Follett is on 900 of them. And most of them are not on the top 1000 schools that represent 11.3 million of the students that go to school. So, we track diligently everywhere that we have competitors, everywhere those competitors have launched a rental program. We track our penetration into each one of those schools and to see whether or not the penetration is higher in noncompetitive schools. And so, we feel very comfortable that we can execute on our business model as we're doing it today. But every opportunity we see to work with them, we'd like to. OK. We have time for one last best question.

Who has the best question here? The best question here, we're really going to grade you here. Is this the best question? I grade on pass fail. You all pass. Do you think the new Congress grant encourages colleges and universities to encourage rental bookstore programs in their own colleges? Would that be a hindrance to Chegg because, for example, if Stanford a bookstore opens a rental thing? Which it did. Sorry, the question can't be longer than the answer. [Laughter] So, can you summarize the question? I could summarize it for you, which is the United States government has offered $10-million grants to bookstores to be able to set up their own rental programs, to be able to lower the price of books to students. And I applaud anything the government does that helps students save money, I really do. And if it's competitive to Chegg, so be it. Having said that, the intricacies I think are what the government missed. And actually it's very fortunate because after this, having the CTO of the United States, a great guy, a really smart guy who cares about everything you care about including legislation, he visits Silicon Valley regularly.

And we're meeting with him tonight for dinner. They're part of all this. Unfortunately, I think that money is going to be poorly spent. And the reason is because one of the difficulties of the local bookstore doing it without somebody like Chegg is they rent you a book then they get the book back. But if their professor doesn't reassign it, they're stuck with the book and half the revenue they used to get. They can't return the book. And so, my feeling is I'd rather have seen that money go to something else to lower the cost of education and something like that, not because I work at Chegg, just because I don't think it's a sustainable effort. And our growth has been spectacular independent of all that. So, we've been very fortunate. Thank you for the question.