Charlie Rose: The company now has \$2.7 billion under management. It has stakes in Facebook, FourSquare, Groupon, Skype and Twitter and others upon whose success marks yet another phase in the remarkable career of Marc Andreessen. He is a co-founder of Netscape, the first commercial Web browser that was sold to AOL in 1998 for \$4.2 billion. He then created a cloud computing company called Loud Cloud. It was sold to Hewlett-Packard in 2007 for \$1.6 billion. As well as taking an active role at Andreessen Horowitz he sits on the board at eBay, Hewlett-Packard and Facebook. "Wired Magazine" recently called him "The Man Who Makes the Future". He is in New York this week for the Forbes Philanthropy Summit. I am pleased to have Marc Andreessen back at this table. Welcome.

00:41

Marc Andreessen: Great. Thank you.

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Charlie Rose: So what is the "Forbes Philanthropy Summit?" Everybody I know is there.

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Marc Andreessen: Yes, it's really interesting, it's a lot of the icons of philanthropy and it's also a lot of the new thinkers.

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Charlie Rose: Yes.

00:53

Marc Andreessen: So I was on the same stage as Marc Benioff who's a, you know a huge innovator of (inaudible). My lovely wife Laura is speaking today as well on new models of social ventures.

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Charlie Rose: She teaches philanthropy.

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Marc Andreessen: Philanthropy -- she teaches philanthropy at Stanford. So it's kind of bringing together of a lot of the icons and a lot of the new thinkers in the field.

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Charlie Rose: To do what?

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Marc Andreessen: To think about all the ways that philanthropy can be applied. I mean you're entering this -- you know sort of brave new world with technology interconnecting everything and with all the - the issues that we have worldwide, there are all the new purchase that can be -- that can be applied.

01:24

Charlie Rose: So what are some of the new ideas?

Marc Andreessen: Well, the one that -- you know the one that -- that one we work on a lot you know in the valley is sort of applying the lessons of venture capital to -- to philanthropy. And so this idea of sort of social venture programs for social venture firms --

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Charlie Rose: Right, right.

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Marc Andreessen: You know is a very powerful idea and there's a huge movement in Silicon Valley for a lot of the best and brightest to get involved in these kinds of efforts.

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Charlie Rose: Just to point it --

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Marc Andreessen: And -- and young, by the way.

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Charlie Rose: Yes. Social entrepreneurship means you'll use the principles of entrepreneurship for social good?

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Marc Andreessen: Right that's right.

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Charlie Rose: That's what it means?

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Marc Andreessen: Yes.

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Charlie Rose: Yes. And so you're all talking about that.

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Marc Andreessen: Yes.

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Charlie Rose: And are you also looking for philanthropy to have business models in order to be more effective?

Marc Andreessen: Yes. So a lot of what's happening now is trying to quantify the impact. So trying to basically treat philanthropy more like a business, realizing it is very different than a business. I mean that there is not actually a profit at the end of the day but actually trying to really understand the mechanics and the models and the metrics on trying to take a lot of management techniques. So Laura for example teaches MBAs at Stanford Management School on how to apply (inaudible) to try to bring more of that business thinking into the philanthropy world.

02:22

Charlie Rose: Are we going to really find out because now there's so much more money being made and being amassed by individuals who are prepared to sort of give back so that we will see at long last the potential. We've seen it with Andrew Carnegie. We've seen it with the Rockefeller Foundation. We've seen it with Gates and Buffett but --

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Marc Andreessen: Yes I think so. And then we're also going to see there's a lot of -- we'll see the -- the average age is starting -- moving to be quite a bit younger.

02:42

Charlie Rose: Yes.

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Marc Andreessen: In Silicon Valley now a lot of people are getting involved in philanthropy at a much younger age.

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Charlie Rose: Why, why is that?

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Marc Andreessen: I don't know it's -- it's probably a cultural transition. It's a feeling that I mean, you know some people still have the model of they make money and then 50 years from now or whenever they'll you know they'll do something. But a lot of people I think want to have a positive impact on the world. The other thing you see is more and more companies have some kind of philanthropic agenda. They will have a philanthropy arm, they'll have a foundation associated with them. Google, you know, salesforce.com leaders; a lot of companies were working with the founders want to that.

03:13

Charlie Rose: Have you changed your idea about all this?

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Marc Andreessen: Oh of course.

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Charlie Rose: From what to what?

Marc Andreessen: From marrying Laura, of course.

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Charlie Rose: Well yes of course.

03:24

Marc Andreessen: Yes.

03:26

Charlie Rose: She could influence anybody.

03:28

Marc Andreessen: Yes. That's right. She -- you know she really helped, I mean, she's an expert. She's an expert in the field so she's been teaching it now for 12 years.

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Charlie Rose: And her father is the larger benefactor at Stanford University, by the way.

03:44

Marc Andreessen: Exactly exactly. A huge philanthropist in Silicon Valley; so I was already also involved with philanthropy. I was very involved for example at Stanford Hospital but then she and I have really kind of buckled down and she's helped me kind of understand how this stuff works. Now she's taken over our relationship. She's much tougher on the places we donate. She grills the hospital -- she grills the hospital staff on -- every year she grills the hospital staff on the results of the metrics and the goals for the next year. And so she takes a very hands-on approach --

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Charlie Rose: What's a metric that might be applied to philanthropic giving?

04:18

Marc Andreessen: Oh yes, I was trying to measure outcomes, I was trying to measure actually the number of people affected to see if it's anything medical trying to actually understand what you know everything. So we do a lot with emergency services at Stanford so what -- what was the change in outcomes in terms of how many patients we're able to be treated or what was the average weight time. What were the -- you know.

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Charlie Rose: Yes, are you as interested in this as she is?

04:38

Marc Andreessen: Oh yes, I am. I'm spending most of my time on the business side because of my day job. But we talk about it all the time and I get into it.

Charlie Rose: What you really are, is interested in the impact of philanthropy on -- on human beings?

04:49

Marc Andreessen: Yes.

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Charlie Rose: As you are on sort of understanding the future?

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Marc Andreessen: Look, to me it's flip sides of the same coin so to me the whole point of capitalism is to unleash human potential and then money is the marker that you use to quantify the success and then that creates resources, financial resources that can then be put back into -- back into society. Again, for the same mission to boost human potential and then it cycles back through because the people you're helping can then create businesses, can create wealth and then the cycle continues. So it's the positive feedback cycle in human society. And so it's the whole thing is interesting.

05:08

Charlie Rose: Have you made as much money -- have you maximized your money-making potential or have you compromised it because you wanted to make certain, you know, pleasures. You know?

05:14

Marc Andreessen: Probably the trade that I make is I really value independence and freedom of movement. So for example I've never been a CEO. I've never had the discipline to actually sit down and run a company myself. If I chose to apply myself to that and spend 20 years doing that; I mean, I don't know if I would be good at it or not but if I was good at it I could probably do better than I have. But I really optimize being able to be involved in new ideas.

05:28

Charlie Rose: Because -- because you like your lifestyle and you like the opportunity to be freer and explore ideas?

05:32

Marc Andreessen: Yes, yes. And to -- and to learn about new fields and learn about new areas; that's one of the reasons venture capital has been, you know, we're three years into it now and we've been -- it's been very interesting in part because the job is to go find the new ideas.

05:41

Charlie Rose: Right.

05:43

Marc Andreessen: Whereas when you're running a business no matter how good you are, no matter how good your business is --

Charlie Rose: You go in search of them or they come in search of you?

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Marc Andreessen: Both, actually both. We see about 1,500 qualified entrepreneurs a year out of a total pool of maybe 4,000 in the U.S. and so a lot of that is in behind the wheels so we spend a lot of time trying to understand.

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Charlie Rose: You announced it right here at this table.

06:00

Marc Andreessen: That's right.

06:01

Charlie Rose: Do you remember that?

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Marc Andreessen: Three years ago.

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Charlie Rose: Yes. And so how has it grown in three years?

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Marc Andreessen: Well, it's way beyond our expectations. So it's very much faster than we thought. I -- I think it turns out that, you know, a lot of entrepreneurs were ready for a kind of a new voice in the field and a new person --

06:14

Charlie Rose: In venture capital?

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Marc Andreessen: In venture capital.

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Charlie Rose: Yes.

06:19

Marc Andreessen: There's a lot of great venture capitalists who are in -- in the industry. There's significant generational turnover happening is the other thing, so we kind of inserted ourselves at an interesting time.

Charlie Rose: Yes. Google and Facebook has been very good to them, hasn't it.

06:31

Marc Andreessen: Yes. That's all secure. Yes, that's right. That's right.

06:37

Charlie Rose: And how many Google and Facebooks are there, though? But I mean, you look around it seems increasing more whether it's all the things -- whether it's Groupon or whether it's you know all the kinds of things that come out of that. Whether it's -- whether it's Zynga, whether it's all the things that are part of the social media model?

06:51

Marc Andreessen: Yes.

06:53

Charlie Rose: You know, there are more opportunity than you've ever seen.

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Marc Andreessen: I think so. Well, the other thing we're seeing is I have this theory called "Software eats the world", which basically is that --

07:05

Charlie Rose: Software eats the world?

07:07

Marc Andreessen: Software eats the world.

07:08

Charlie Rose: Yes.

07:10

Marc Andreessen: We have a slide with the globe and a fork and a little bite taken out of it to illustrate this.

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Charlie Rose: Yes.

07:16

Marc Andreessen: So basically the idea is that the Internet is now very widely proliferated. Computers -increasing computers in everybody's pocket with Smartphones and so there's more and more sectors of
the economy and more and more businesses of industries where Silicon Valley style companies can have
a big impact. And so we're seeing companies go after everything from commercial construction industry
to, you know, analytics for farmers, and analyzing dirt soil chemistry, to real estate.

Charlie Rose: Right, right.

07:34

Marc Andreessen: To financial services, education is -- is more and more education base -- start off digital education.

07:36

Charlie Rose: Right.

07:38

Marc Andreessen: And so we're seeing this sort of Silicon Valley model being applied to more industries than ever before which I think should -- it should turn out to be that there will be a lot more successes coming out.

07:43

Charlie Rose: Has digital education not lived up to its expectation but may now be getting to get traction?

07:46

Marc Andreessen: Yes well that's our -- that's our theory. Is now maybe the time, because up until now you just had a basic problem where people were not -- people are literally not connected.

07:52

Charlie Rose: Right.

07:53

Marc Andreessen: And so the difference between being in a world where you're still trying to get PCs in people's hands and you're still trying to get people online for the first time versus a world where you know increasingly everybody has a Smartphone or tablet, everybody is on broadband, those are just two different worlds. It's like the world in which people couldn't read and then all of a sudden a world in which people can read. And so there's a lot of new techniques and technologies that can be used for online course delivery, online textbook delivery, online tutoring. The whole range, you know vocational training, language training and so forth. That can all be done, you know, with high definition video. It can be with the interactive assessment to figure out how well students are doing. So there's a huge fraction -

08:21

Charlie Rose: Does anything Sal Khan does interest you or you just know everything?

08:24

Marc Andreessen: Oh no, I think he's a great -- he's a great, I mean there's -- there's a variety of models. He's a fantastic -- you know he's building the sort of bottoms up model.

Charlie Rose: Yes.

08:32

Marc Andreessen: But it's a great example I wish I have had -- I wish, I had the Khan Academy when I was a kid.

08:35

Charlie Rose: Yes.

08:36

Marc Andreessen: Because if you don't understand something in the class --

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Charlie Rose: You just go to Sal.

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Marc Andreessen: You go to him and he just explains it to you. I mean, you know, sort of -- my old friend, Bob Pittman always had this theory. So the Internet is the magic box.

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Charlie Rose: Yes.

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Marc Andreessen: And I said, you know, what do you mean by that. And he's like, well you just -- you tell it what you need and it just gives it to you.

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Charlie Rose: True or false. Google, Facebook will maintain their dominance because they have a software head start.

08:56

Marc Andreessen: I think it's a little bit different than that. I don't think it's so much the head start I think it's the -- the core idea that we have, the core theory that we have is the fundamental output of a technology company is innovation and that's very different than a lot of businesses, right. The fundamental output of a car company is cars, right.

09:10

Charlie Rose: Right.

09:12

Marc Andreessen: The fundamental output of a bank is loans. The fundamental output of a tech company is innovation. So the value of what you've actually built so far in our shipping today is a small

percentage of the value of what you're going to ship in the future if you're good at innovation. And so the challenge tech companies have is they can never rest on their laurels with today's product. They always have to be thinking in terms of the next five years of what comes next. And if they're good at running internally in R&D machine that produces innovation, they tend to do quite well over time. It's when things go wrong internally and they stop innovating which happens a lot that then the -- the wheels at some point are going to come off.

09:45

Charlie Rose: Is that what happened at Microsoft?

09:47

Marc Andreessen: I -- you know think it's too early to tell. Microsoft --

09:51

Charlie Rose: It's too early to tell? When you reminded me when you sat down at the table in a conversation about my great friend Bill Gates that since -- since the war that took place between Netscape and Microsoft that their market price hasn't changed.

10:05

Marc Andreessen: Yes that's true.

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Charlie Rose: The stock price.

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Marc Andreessen: On the other hand, here is the other thing I didn't mention. That's also true of the S&P 500 broadly. It's also true of most of the big tech franchises.

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Charlie Rose: Yes.

10:17

Marc Andreessen: There's actually a different point I would bring here; less Microsoft specific more just in general over the last 15 years technology evaluations really haven't budged like at all.

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Charlie Rose: Really?

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Marc Andreessen: And so and there's two --

10:27

Charlie Rose: And the PE ratios haven't changed?

Marc Andreessen: The PE ratios have come down dramatically.

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Charlie Rose: Oh that's right, they are down.

10:32

Marc Andreessen: Well, the most amazing story in the market right now is Cisco, which is just an extraordinary company, right? One of the bellwethers of technology -- Cisco's PE ratio if you take out cash in the bank is four.

10:40

Charlie Rose: That's unbelievable.

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Marc Andreessen: So they're trading in a Warren Buffett --

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Charlie Rose: Now why is that?

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Marc Andreessen: So -- number one, many investors have many questions about these companies and that's always you know, it goes back to innovation of what we're talking about.

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Charlie Rose: Whether they can sustain the performance?

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Marc Andreessen: Whether they can sustain the performance. So for example a lot of investors have questions. Microsoft, will Windows Phone -- you know will they be big in phones, will this Microsoft Surface tablet work and how will they do in competing with Google and so on and so forth. But the other thing is I -- I really believe, I just think people are in a really bad mood and particularly they're in a really bad mood about technology. And I think we're still --

11:07

Charlie Rose: Bad mood?

11:08

Marc Andreessen: Bad mood. I think we're still living through psychological scarring that took place in the dot-com crash. So for technology --

11:14

Charlie Rose: Really? This is 2001.

Marc Andreessen: Yes absolutely. So from the time of the great, from the crash of '29 to the relighting of the stock market is something you wanted to invest in was 25 years, right? It was basically to the mid-50s.

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Charlie Rose: Yes, right, right.

11:25

Marc Andreessen: Right. And so, one of the things that you learned from the Great Depression is equity investors who got hit by the Great Depression never believed in stocks ever again. They just did -- and it took a new generation of investors who hadn't gone through the crash to get excited about equities. And Warren Buffett of course was -- was one of those and so he started. These days what we see in Valley is the people who lived through the crash, they're -- they're -- in many ways they're defined by it. They remember -- they remember how horrible it was.

11:44

Charlie Rose: Yes.

11:46

Marc Andreessen: And it's hard for people to get out of this thing that like it basically -- somehow we got cheated or you know we got lied to there's lot -- the press suffers in this --

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Charlie Rose: Yes but I mean, you could argue that they had over overcome it because of what happens in valuations can't you in terms of -- look -- I mean, look at -- look at the Facebook

12:05

Ipo: So Google's PE ratio as cash -- 11.

12:07

Charlie Rose: Yes, ok. But how about Google stock price --

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Marc Andreessen: So Apple -- Apple is like --

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Charlie Rose: Ok so but Google stock price has gone on and up but you're saying their earning is gone up.

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Marc Andreessen: Their earnings have gone up faster.

Charlie Rose: So the relationship has gone really between the two has gone down as the earnings have gone up.

12:20

Marc Andreessen: Yes that's right, there's disconnect; same thing with Microsoft, same thing with Cisco. Apple is the big one. For the last five years Apple has delivered annual earnings growth of like 70 percent, which is just unprecedented for a company that size. The PE ratio --

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Charlie Rose: Yes. Making it the largest market cap company in the world.

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Marc Andreessen: The largest cap company on the other hand their PE over that time period has collapsed. And so their PE x cash is like eight right now.

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Charlie Rose: Yes but there's got to be a bigger reason than the idea that people don't trust tech companies.

12:43

Marc Andreessen: I think people are incredible --

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Charlie Rose: Since 2001 they've got memories of the scars they suffered.

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Marc Andreessen: I think people are incredibly bitter and cynical. I think they are very, very upset about the crash. And here is why -- here is why I say this because now we're starting to see people enter tech, we're starting to see entrepreneurs, executive, press and investors who enter tech who didn't go through the 2000 crash, right. And so Mark -- Mark Zuckerberg, of course, is representative of that and now we're seeing -- you know now, you know today's 22-year-old was in junior high or elementary school during the dot-com bubble and they are just -- they just have a completely different mindset. They are completely unaffected. It's very striking how different. They don't even know what happened. It's just like a historical they might as well be reading about the civil war. Or something that is just irrelevant.

13:24

Charlie Rose: It didn't seem to affect you.

13:26

Marc Andreessen: You know emotional ups and downs. You know you go through to the roller coaster.

Charlie Rose: No, tell me what the downs were?

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Marc Andreessen: Well I don't -- you know the downs, I mean, I -- I've come to -- I don't know I've come to expect this. You know, I'm a big believer they'll never as brilliant as you say they are and you're never stupid as they say you are. It's always like somewhere in the middle.

13:40

Charlie Rose: Yes.

13:42

Marc Andreessen: But no, I mean, look, it's literally one year you're being told that you are like.

13:45

Charlie Rose: You were.

13:46

Marc Andreessen: Covers like that, the next year you're being told that you're --

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Charlie Rose: Hello Netscape, I mean, what you did at Netscape was phenomenal.

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Marc Andreessen: Yes but you know there is --

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Charlie Rose: What's Netscape today by the way?

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Marc Andreessen: That doesn't prevent -- it doesn't prevent the other -- it doesn't prevent the other side of the story. So I just love being in th industry so I don't think we have a problem with it and I plan to be in the same issue for the rest of my life so --

14:06

Charlie Rose: So it had no scars to you?

14:08

Marc Andreessen: I try hard to have it not. I try hard to not have any sort of lingering effects because I think it compromises your ability to see clearly for what's actually happening now.

Charlie Rose: Yes we're not (inaudible) the investor class.

14:17

Marc Andreessen: Yes with the investor class but also the entrepreneur class. The -- the people who come up --

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Charlie Rose: How about the venture capital class? Did it have any impact on John Dorr for example --

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Marc Andreessen: I wouldn't say -- I wouldn't you know John specifically I don't think so --

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Charlie Rose: Ok but you have to.

14:32

Marc Andreessen: A lot of venture capitalists -- so for example, I'll give you an example. A lot of venture capitalists road off of what's was called consumer Internet. So basically dot-com. So it's consumer Internet, so Internet companies that sell something to consumers. Content companies, media, or social media or whatever. A lot of VCs between by 2002 and 2006 or 2007 just simply would not touch those companies and of course that's when Facebook started and Twitter was started and LinkedIn was started.

14:51

Charlie Rose: Yes. But -- but are you and Facebook and Twitter hasn't gone public. You are -- are you saying that, in fact, these companies are undervalued? Their PE ratio is -- is too low and if in fact, they had an appropriate PE ratio their evaluation would be even more stratospheric?

15:02

Marc Andreessen: So --

15:05

Charlie Rose: It sounds like it.

15:07

Marc Andreessen: You want to be careful when you second -- I want to be careful when I second guess the market, right. Because the -- the sort of -- (inaudible)

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Charlie Rose: Well you've spent this last ten minutes telling me that the reason that the PE ratios are so low is because of an aftermath of the 2001 --

Marc Andreessen: Yes.

15:20

Charlie Rose: -- bubble.

15:22

Marc Andreessen: So one of two things is true. Either I'm right about that in which case there will be a recovery. And then in recovery the PE ratios will expand more towards in the normal ways.

15:29

Charlie Rose: So go buy Google and Apple all you can get.

15:30

Marc Andreessen: In that case these things are all trading -- these are all huge bargains and they are just the huge bargains of all time.

15:34

Charlie Rose: Yes.

15:36

Marc Andreessen: And the whole affect on this and we'll say it's just like the mid-70s for stocks and like you just -- you've got to be on stops.

15:41

Charlie Rose: You're not suggesting if I do that but you're suggesting it's a possible idea?

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Marc Andreessen: That's possible -- that's a possible -- that's a possible scenario that we're in. And there's an -- there's an easier explanation for that to be the case. The other possibility is the market is correct and is looking at big established tech franchisers and they're all about to completely disintegrate right?

15:56

Charlie Rose: What's the likelihood of that?

15:58

Marc Andreessen: Which by the way for my venture -- with my venture capital hat on actually that will be fine because my -- the companies we're funding now we'll try to pick up the slack. I don't know I mean, I -- I think, you know, you just take companies, any of these companies they are - - they are incredibly strong. The company is very powerful in the market, great management teams, you know they actually tend to -- you know there's a lot of innovation coming out of most of these companies. Even the companies that are not doing well right now I mean they're punching hard, they are there trying to make things happen. So --

Charlie Rose: You know I think if you've gotten older you've gotten less candid.

16:24

Marc Andreessen: No. We call it -- we call it more polished.

16:27

Charlie Rose: I can remember you saying the most outrageous things when I first met you. I mean it was like anything you said I would say you've got to get an Andreessen take on this. So having said that, having put you up on that pedestal what -- what did Microsoft lose? What have they not had as Google and other companies have gained traction and phenomenal success? Missing the search, missing this and that?

16:42

Marc Andreessen: You kno there's a whole bunch -- there's a whole bunch of things, I mean, I think the government, I think in retrospect I think even people at Microsoft would say the government prosecution actually had a big impact. I was a --

16:51

Charlie Rose: It what way?

16:53

Marc Andreessen: I was an -- I was an intern at IBM in 1990 and you know the U.S. Justice Department went after IBM 30 years earlier?

16:58

Charlie Rose: Yes not only that the state took them nine to ten years before they settled the suit.

17:02

Marc Andreessen: Yes that's right. And so I was there like two decades after that all ended and the effects were profound. I mean, there were lawyers in every meeting --

17:10

Charlie Rose: Yes.

17:12

Marc Andreessen: -- there were all these rules. There was this pall -- that was a big part of why I think IBM got in trouble is this pall that was cast. So I think you just -- you can't underestimate the impact of having your government really come at you like that. And there's all kinds of rules and things that come with that.

Charlie Rose: So you think -- in other words when the government came at them, you think that they lost something?

17:28

Marc Andreessen: I don't -- I think that didn't -- I think that didn't help. I think they had a generational change happen inside the company. The technology landscape has been changing.

17:36

Charlie Rose: Yes.

17:38

Marc Andreessen: But -- but like I said, like I started out saying, it actually is too early to tell. These battles play out over a long period of time.

17:44

Charlie Rose: Do you think you're less hungry too once you get famously rich?

17:48

Marc Andreessen: You know, you could say that. But on the other hand -- an some people have retired. There's quite a few people from that era who've retire and are literally on the beach or unavailable.

17:56

Charlie Rose: Or doing other things.

17:58

Marc Andreessen: Or doing other things, right. That's right.

18:01

Charlie Rose: People like Nathan and others.

18:02

Marc Andreessen: But look, you know look, you know, they are -- they are -- they are, you know, hell bent to come after, you know Windows Phone 8 -- they just announced Windows phone 8.

18:08

Charlie Rose: Right. The Surface?

18:11

Marc Andreessen: They Surface? They're going in hardware business. They're building tablets. They are going hard -- you know they are doing very aggressive. They bought Skype and they bought Yammer this week which is a great new enterprise web services company.

Charlie Rose: What does Yammer do?

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Marc Andreessen: Yammer is basically a social networking for inside companies. It's a Microsoft --

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Charlie Rose: So each company can create its own social network.

18:29

Marc Andreessen: Yes exactly and tie together all the employees and then tie in the customers --

18:33

Charlie Rose: Yammer helps you do that, and it provides the software and allows you to do that?

18:35

Marc Andreessen: Yes, it's really brilliant. David Sacks who is one of th top guys from PayPal, he's part of the PayPal mafia. And he built this company --

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Charlie Rose: Well the PayPal mafia is something, isn't it?

18:41

Marc Andreessen: They are amazing, yes.

18:42

Charlie Rose: I mean, they really are from (inaudible) and just go on and on and on.

18:44

Marc Andreessen: Yes that's right, that's right.

18:46

Charlie Rose: What was in the water at PayPal?

18:47

Marc Andreessen: You know it was Peter and Elon Musk. Elon Musk --

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Charlie Rose: Right, right.

18:51

Marc Andreessen: And Elon Musk was his partner. The two of them and they were just basically --

Charlie Rose: They were going to the moon.

18:56

Marc Andreessen: Exactly -- and very successfully. And so they had -- they just shipped this new electric

sedan.

18:59

Charlie Rose: Oh yes. Oh I know do you have one of those?

19:04

Marc Andreessen: Not yet, not yet.

19:05

Charlie Rose: Not yet means, maybe soon?

19:07

Marc Andreessen: I'm holding out. I'm holding out.

19:09

Charlie Rose: Are you, why?

19:11

Marc Andreessen: I don't know. I'll see what comes to market.

19:13

Charlie Rose: Yes.

19:15

Marc Andreessen: Yes. So -- there was a just big net effect where they brought in a tremendous group of talented people. People like Reid Hoffman an Chad Hurley who started YouTube and Steve Chen and like all of these guys.

19:23

Charlie Rose: Right, right. Yes I know it's an amazing alumni.

19:26

Marc Andreessen: Yes exactly. So these are very smart people. So they're now all over the Valley and they are doing all kinds of things. When you know -- whenever they can -- you know it's basically like you know IQ test 101 for venture capitalist is PayPal mafia member comes in you know you say yes like it's not a --

19:38

Charlie Rose: Oh is it really?

Marc Andreessen: Yes.

19:41

Charlie Rose: In other words it didn't take a lot of brain --

19:43

Marc Andreessen: It's a short investment.

19:44

Charlie Rose: If somebody from PayPal, who used to be part of the mafia or that is an alumni ---

19:47

Marc Andreessen: Yes.

19:49

Charlie Rose: They come and say here's my ID and you say don't tell me here. How much do you need?

19:53

Marc Andreessen: Yes exactly. Here's the blank check.

19:56

Charlie Rose: Is that what you do?

19:57

Marc Andreessen: I mean you know --

20:01

Charlie Rose: It's a sort of like that.

20:02

Marc Andreessen: You don't quite do that but I mean, there's a strong bias.

20:05

Charlie Rose: Yes.

20:06

Marc Andreessen: And others, you know the Google mafia and then you know over time there will be a Facebook mafia.

20:11

Charlie Rose: And whatever happened to Sheryl Sandberg?

Marc Andreessen: I understand she's doing well.

20:14

Charlie Rose: She's doing quite well.

20:16

Marc Andreessen: Yes since she left Google.

20:17

Charlie Rose: Explain to me that what you think the genius of Mark Zuckerberg is.

20:20

Marc Andreessen: Oh he's -- so I would say he's a -- the genius who's comprehensive. He's encyclopedically what you want in a founder and CEO.

20:26

Charlie Rose: He's encyclopedic, meaning he knows everything?

20:28

Marc Andreessen: He's -- he has taught himself to be good at everything. He didn't start out that way but he has become that way. He applied himself to learning how to be a CEO. He's put far more work into being a great CEO than I think people realize. And I think he's a much better CEO than people realize. I think he's one of the best CEOs in the world at age 28 by the way.

20:41

Charlie Rose: Wait a minute. He's one of the best CEOs in the world?

20:44

Marc Andreessen: Best CEOs in the world. Yes. And so --

20:51

Charlie Rose: You're not just comparing with other 28-year-old, you're just saying basically for a guy who runs a company with a huge market cap.

20:56

Marc Andreessen: Yes, yes. He's at the top? 4,000 employees and \$4 billion revenue last year.

21:02

Charlie Rose: So what is it he does and knows that makes it that so?

Marc Andreessen: Well like I say is it's basically across the board. For one is he's built an amazing team right. So -- and by the way and he built that the hard way, right. Because there -- there was a fair amount of turn in the ranks at Facebook.

21:14

Charlie Rose: Yes.

21:15

Marc Andreessen: Until he stabilized on his team and now he's got probably one of the -- I think maybe the top -- one of the top two or three teams in the Valley. Just kind of across the board engineering, marketing and --

21:19

Charlie Rose: And I mean, and the right COO.

21:20

Marc Andreessen: And the right COO in Sheryl right exactly.

21:21

Charlie Rose: From Google?

21:22

Marc Andreessen: Yes, exactly. So he's done that, he's you know, he's a tremendous visionary. He completely understands what he wants to do at Facebook.

21:26

Charlie Rose: What does he want to do?

21:27

Marc Andreessen: He wants to connect the world. He wants to make the world more open and connected.

21:29

Charlie Rose: Well, he'll have a billion soon.

21:30

Marc Andreessen: Yes, exactly, right. That's right.

21:32

Charlie Rose: Right? But that's not enough. I mean, just so he connects th world. What is he going to do with the world connected? That's the question.

Marc Andreessen: Well he's -- he's going to do a lot --

21:38

Charlie Rose: Right?

21:39

Marc Andreessen: That's one of the questions. He's going to do a lot but also lots of other people are going to do a lot on top of that. So Facebook is an -- is an enabling engine for a lot of other businesses, for a lot of nonprofits, for a lot of you know political movements. On and on and so it's --

21:48

Charlie Rose: Is he going to essentially have the field to himself or will Bing be a player? O'

21:50

Brien: You know there's -- look, there are lots and lots of people who would love to be Facebooked and so there's going to you know -- he's -- there will be -- there will be thousands of startups that will -- that will come out in the next 10 years.

21:55

Charlie Rose: We'll see a lot of that that might exist.

21:56

Marc Andreessen: Yes.

21:58

Charlie Rose: Yes.

21:59

Marc Andreessen: Well they generally don't come pitch to me because I'm on the Facebook board. So I don't see it but they're out there. And then -- and then -- and then you have big companies, I mean, there's a number of big companies that are -- I think would you know would like to have a -- a more important position in that market so you know certainly Google is competing hard.

22:15

Charlie Rose: Who else?

22:17

Marc Andreessen: You know, Twitter. Twitter is doing extremely well. Microsoft hasn't yet -- we'll see what they do. Apple now has a partnership but also has had their own efforts.

22:25

Charlie Rose: Twitter will remain private?

Marc Andreessen: You know -- that I don't know.

22:29

Charlie Rose: You're not on that board, are you?

22:31

Marc Andreessen: They don't talk to me. Facebook.

22:35

Charlie Rose: Oh, yes. Right, right. Because there's a question as to who might want to buy them - it's been rumored everybody.

22:42

Marc Andreessen: I mean if they were to be for sale I think they would be very attractive, too. I mean I think it's a very powerful phenomenon but, you know, it's totally in their hands whether or not they want to sell.

22:53

Charlie Rose: What's its potential?

22:54

Marc Andreessen: Oh, Twitter's potential -- Twitter's potential I think is to be basically -- think of it as -- I call it the global messaging background so it's basically the place where anybody can put out a message and anybody else can read it.

23:04

Charlie Rose: I know people think it has more future impact than Facebook.

23:08

Marc Andreessen: Well, I would certainly never support that view.

23:12

Charlie Rose: Oh, stop it.

23:14

Marc Andreessen: It's a big deal. It's huge -- it is a broadcast medium. It's more of a medium in which anybody can become a broadcaster. And the other thing -- and Facebook is also directly tied into the Smartphone revolution -- right -- which is a really big deal. All these companies that today are useful you know, to do what (inaudible) Smartphone then, you know, in five to ten years the addressable market, it's going to be five billion people worldwide with Smartphones and so these companies have a lot of room to grow.

Charlie Rose: I would suggest a topic that you and I have discussed about and eloquently on your part when Steve Jobs died. Characterize him again for us. What made him Steve Jobs?

23:49

Marc Andreessen: Well, it was a whole bunch of things. You know, obviously vision, obviously product genius. And we talk a lot in the valley about founder CEOs and the role of founder CEOs. And Apple is one of the few companies where we've been able run the experiment kind of through the full lifecycle - we've run the experiment of the company with the founder -- without the founder and then again with the founder. And we kind of see how it went. So he's the great example of the founder CEO of the visionary who's able to run the company. You know, I think one of the really underappreciated parts and I think he thought he was underappreciated on this is as apple. He said that the thing he was proudest of building in --

24:20

Charlie Rose: He told Walter Isaacson.

24:22

Marc Andreessen: Right. Exactly. It wasn't a device.

24:28

Charlie Rose: I wasn't the iPhone or iPad or anything else. It was creating a great company.

24:32

Marc Andreessen: A great company, which goes back to what we started talking about which is Apple delivers innovation. Today it's an iPhone, tomorrow it's an iPad but it's innovation. I mean it's going to keep changing and they're going to keep coming out with new products. And you know, Apple --

24:46

Charlie Rose: -- without Steve at the helm?

24:48

Marc Andreessen: Apple has been under Steve one of the best companies in the history of the world at being an innovation machine.

24:53

Charlie Rose: Why do you think that was? Was it because this was a guy who understood that if you create the best product and do everything with a maniacal look at detail and you have some sense of taste and style and demanding that the engineering be as good as it can be --

25:03

Marc Andreessen: Yes. But it also runs deeper than that. It was also very deep technology. I actually think the press sometimes focuses sometimes too much on the design part, which is important but underneath that --

Charlie Rose: That's why I didn't do that. I said design and engineering.

25:16

Marc Andreessen: Exactly. Behind Apple is very deep technology. These are very sophisticated. They're very good at building very sophisticated technology of actually both hardware and software.

25:23

Charlie Rose: I've never known a question -- I asked this to Bill Gates yesterday. Why is it that -- you were into all these technologies at the same time Steve was or earlier -- Tablet, Touch. Come on, he was.

25:33

Marc Andreessen: Yes, I mean the difference obviously Bill stepped down from Microsoft, you know, right around, in the same era when Steve stepped back up at Apple. So you know, we can't -- this is my point. It's very hard -- the problem with history, right, you can't run the experiment over again. (inaudible) So you can't run the experiment over again where Bill Gates stayed at Microsoft and would have been there for the last 12 years. We don't know how much things would have been different. It could have been better. It could have been worse. We'll never know. What we do know with Apple is Apple without Steve was not the same as Apple with Steve. Now, Steve has --

25:58

Charlie Rose: Wait, wait, wait -- we know it's not the same?

26:00

Marc Andreessen: Apple without -- in the interim period between when Steve got fired and when he came back --

26:04

Charlie Rose: Oh, yes, yes. Right, we know that.

26:07

Marc Andreessen: We do know that that's not the same. So now Apple today there's a tremendous challenge which is to keep going but what they have is the benefit of this amazing organization and this is the other part of what Steve did. It was attracting all these incredible people.

26:15

Charlie Rose: Right. Johnny Oz and people like that.

26:18

Marc Andreessen: All these guys -- got all these guys and so --

26:22

Charlie Rose: And they stayed there, too. Something ought to be said about that.

Marc Andreessen: Well, the bench is -- number one, the bench incredibly deep. There will actually be, I think, some turnover but the bench is very deep. Look, if you're at Apple you're doing the best work of your career. You're doing the best work you're probably ever going to do. There's something to be said. You know, the point was that -- previously he's underappreciated as a CEO. Same way as Mark Zuckerberg, magnet for brilliant people because they're going to do the best work they're ever going to do in their lives in this environment.

26:47

Charlie Rose: Is Larry Paige a good CEO?

26:48

Marc Andreessen: I think so. I think so. I mean, you know --

26:53

Charlie Rose: Is he as good a CEO as --

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Marc Andreessen: Newer in the job -- early indications are very positive.

26:57

Charlie Rose: Founder, CEO --

26:59

Marc Andreessen: Yes. Founder, CEO.

27:00

Charlie Rose: -- the kind of guy you like.

27:02

Marc Andreessen: Yes, exactly.

27:03

Charlie Rose: Founder, CEO.

27:04

Marc Andreessen: He put a very sharp focus in that company on product.

27:07

Charlie Rose: You see that.

Marc Andreessen: Exactly. He's actually I think if anything consciously modeling his management approach after Steve which is a tricky thing to do in our industry. So yes, he's organized the company. He took -- he's taken a very laser sharp product focus on all the different product lines. He spends -- you know, as far as I can tell 100 percent of his time in the company working with the engineers of the products. And he's got very talented --

27:27

Charlie Rose: Why do you think he wanted to be CEO again?

27:28

Marc Andreessen: I think he saw -- I mean my read is that he saw a bigger opportunity for Google and that he thought that he was right person to make that happen. I think it's the same with Steve --

27:37

Charlie Rose: He thought he could do the job in a way that he wanted to see it done.

27:40

Marc Andreessen: Yes and have a much bigger long-term impact.

27:42

Charlie Rose: Yes.

27:43

Marc Andreessen: But the really great founder CEOs they know that if they just have enough time they're able to -- there's no constraint on how big or how important of a company they can build and how big of an impact they can have --

27:50

Charlie Rose: It begins with Tom Watson and Hewlett-Packard?

27:52

Marc Andreessen: Exactly. Right. And innovation. Innovation being the output as opposed to (inaudible) the product.

27:59

Charlie Rose: Explain that to me. I mean is innovation a culture? It's a mindset? It's what?

28:04

Marc Andreessen: It's a whole bunch of things. So, a lot of it is talent. So being able to get the best and brightest to come and work with you and build new products.

28:10

Charlie Rose: Right. Right. Right.

Marc Andreessen: And then a lot of it is psychologically being able to eat your own young, right? To be able to -- basically be able to compete with yourself. This is the idea basically -- right -- when a technology company gets out-innovated it's not usually because it couldn't have built the thing that out-innovated it, it's because it didn't want to because it didn't want to kill what it already had in the market. And so, you know --

28:31

Charlie Rose: It didn't want to be cannibalistic?

28:32

Marc Andreessen: It didn't want to be cannibalistic. It didn't want to be cannibalistic towards itself. And what happens is this companies become big businesses and they're public and they've got shareholders and they end up with, in a lot of cases, very high-caliber professional CEOs who have to deliver big earnings numbers to Wall Street --

28:45

Charlie Rose: Is that what happened to Microsoft, you think?

28:48

Marc Andreessen: You know, I don't know. That I don't know. That I don't know.

28:52

Charlie Rose: Why do you play it so careful when it comes to Microsoft?

28:55

Marc Andreessen: I think Microsoft -- they're a very important company. They're a fantastic company.

29:00

Charlie Rose: You don't want to offend them do you?

29:01

Marc Andreessen: They're doing a lot of --

29:03

Charlie Rose: You do not want to offend anybody. What happened to you when you get to middle age? You.

29:09

Marc Andreessen: I have too many conflicts. I have way too many conflicts.

29:12

Charlie Rose: That's true.

Marc Andreessen: Yes. So, like I said too early to tell.

29:17

Charlie Rose: Too early to tell?

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Marc Andreessen: Too early to tell.

29:20

Charlie Rose: What will time tell us?

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Marc Andreessen: These things play out over -- Microsoft has a whole bunch of products entering the market right now.

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Charlie Rose: That may be able to --

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Marc Andreessen: Yes. And they're --

29:29

Charlie Rose: But don't you see it early on in a product. I mean does a product simply -- you enter it in the market and ten years later you say oh, it's going to be good. Don't you know?

29:34

Marc Andreessen: You know, the iPhone got -- pardon my French -- got criticized heavily. I was going to use a more colorful term.

29:37

Charlie Rose: By you or by --

29:38

Marc Andreessen: No. By all kinds of people in the industry. I mean all kinds of people said that there was no way that that was -- I mean the idea of building a new cell phone -- like they're just crazy. A lot of people thought it was crazy. The first iPod got terrible reviews, people said this is ridiculous.

29:47

Charlie Rose: Terrible reviews by serious people?

Marc Andreessen: Yes, by technologists -- by people inside the technology industry people basically saying oh, look, an overpriced underpowered MP3 player -- like who cares. Like, why would I ever buy this? By the way, don't you know Apple is in the process of going out of business? So there's a lot of in the moment. There's a lot of heat. There's a lot of energy.

29:58

Charlie Rose: But how long did it take before you realized that was a stupid judgment?

30:02

Marc Andreessen: Well, it takes --

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Charlie Rose: Did it take a year?

30:06

Marc Andreessen: I mean -- I always like my iPod. It's a good thing I made that judgment.

30:09

Charlie Rose: But did it take a year or did -- These don't take ten years later you realize that a product --

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Marc Andreessen: Two, three, four years -- no, 10 years is a lot.

30:18

Charlie Rose: You could tell --

30:20

Marc Andreessen: But look, Windows Phone 7 is a counter argument. Windows Phone 7 has gotten great reviews. The reviewers like it a lot. The users who do use it like it a lot. The challenge they've got is that Android and iPhone are just ahead but Microsoft is a company that's had a lot of staying power.

30:33

Charlie Rose: And Android is ahead of the iPhone.

30:34

Marc Andreessen: That depends on how you look at it. There's good news and bad news. Android is, I think. selling more in units but iPhone is more profitable.

30:41

Charlie Rose: Mobile devices, Smartphones what will they become?

30:44

Marc Andreessen: So the key thing is they're not phones. We've given them the wrong name.

Charlie Rose: Exactly.

30:49

Marc Andreessen: They evolved out of phones but they're not real -- phone is a (inaudible) and it's one percent of what they do at this point. The way I think about it from my background is it's a supercomputer in your pocket. So if you remember like in "Jurassic Park" it will be a big Cray sort of computer or whatever and it cost \$25 million. Like they've now -- those companies have now shrunk that thing down to the size of something -- like literally that thing, it's that powerful. So it's a magic box in your pocket. It can do anything. It can run any game. It can run any application. It can get you anything you want, any piece of information. It can do streaming video. It can let you broadcast to the world -- everything. And so that is number one. And then number two everybody is going to have one. And I think that's the bi thing that we are still --

31:21

Charlie Rose: Seven million on the planet? Seven billion, I mean.

31:24

Marc Andreessen: Yes. Well, so there's 5.5 billion mobile phones on the planet right now.

31:28

Charlie Rose: But because many people have two or three --

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Marc Andreessen: Well, I don't -- yes, there's some of that but there's a very large -- like there's I don't know, China mobile alone. China has I think 600 million subscribers. Just one company has 600 million subscribers.

31:39

Charlie Rose: The population in China is 1.3 billion.

31:41

Marc Andreessen: Yes, exactly. So these are large numbers of people, right. A lot of people now have mobile phones who don't necessarily have running water, right? So it's a big -- It's a big deal. My theory is that those -- all of those phones will be upgraded to Smartphones in the next five to ten years. In fact I think in a couple of years you're not going to be able to buy a phone that's not a Smartphone. And so then you put a computer in everybody's pocket. Then you have five, ten, 20 times the number of people online as has ever been connected before. We've never lived in a world that's connected like that.

Charlie Rose: Is there a great theory of everything? You know, in physics they're looking for a theory of everything. Everybody's always trying to make -- how does everything fit together. Is there some great theory of everything in terms of how -- where the digital revolution is going?

32:17

Marc Andreessen: So I think it's -- I mean my theory is it's unlocking of human potential. It's -- digital technology does a whole bunch of things. It strips away inefficiencies. It makes it, you know, very hard for businesses that aren't actually building value to exist. For example, price transparency, right?

32:29

Charlie Rose: Right.

32:31

Marc Andreessen: Buying a car is radically different from not having Internet to having the Internet because you get total price transparency.

32:35

Charlie Rose: What does price transparency mean in this case? You can find out --

32:39

Marc Andreessen: You can go online and in three minutes you can find out what the wholesale price for a car is.

32:42

Charlie Rose: Right.

32:44

Marc Andreessen: So that when you go into the dealer you know exactly what --

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Charlie Rose: Because you look --

32:48

Marc Andreessen: Yes.

32:50

Charlie Rose: I know what your price is.

32:52

Marc Andreessen: You give me this plus 5 percent or I'm going to go buy this down the street.

32:56

Charlie Rose: Because there's somebody --

Marc Andreessen: You know, when I was a kid that didn't exist. You go to buy a car it's a black box process.

33:01

Charlie Rose: Is that how you buy cars? You go in and say --

33:05

Marc Andreessen: Yes. I mean you just -- you want to take advantage of -- you know, almost all the cars that are purchased these days are purchased with people having researched them online.

33:12

Charlie Rose: And they go into all kinds of stores today and they have the price there and they walk in and say --

33:15

Marc Andreessen: Right. You can price check on the spot. That's exactly right. Right. So you've got this --you can literally scan the bar code on the product and you can instantly pull up here, you know, here are all the competitive prices and by the way, if he's charging you too much then you can just go and buy it online. So it's really like -- retail like it pushes -- it really pushes the challenge. So retailers used to have a perfectly good business just because that's where you got stuff. Now that there's this other place to get stuff with complete transparency of pricing. All of a sudden, you really have to justify the fact --

33:45

Charlie Rose: It will be interesting to see how -- What the digital revolution does to Wal-Mart, for example. I mean this is obviously a very successful business model. You know, it's growing internationally and it's growing -- recently it's growing domestically for different reasons which was a problem area for it in North America and how they handle it and what they do with it.

33:58

Marc Andreessen: I would argue they've been a beneficiary of it for the last 30 years in the sense of, you know, Wal-Mart -- when I think about Wal-Mart, the same way I think about FedEx, by the way is Wal-Mart basically is a computer network that just happens to have stores and products at the end of the network.

34:11

Charlie Rose: Right.

34:13

Marc Andreessen: But the thing that makes them so good is logistics and pricing and they run incredibly sophisticated technology operations.

Charlie Rose: That's what makes them great in the beginning.

34:20

Marc Andreessen: Exactly.

34:22

Charlie Rose: In other words when you bought a product and lift it out and inventory made a calculation as to what happened in that store and all that other stuff instantly.

34:26

Marc Andreessen: Right. And that let them beat a lot of the other retailers at the time. I mean it wasn't just that the stores are bigger, it's that they were smarter in how they did it.

34:35

Charlie Rose: Yes.

34:37

Marc Andreessen: Wal-Mart has actually been making a whole series of Silicon Valley acquisitions. They've been building a huge footprint in the valley.

34:42

Charlie Rose: Oh really?

34:44

Marc Andreessen: Yes, they added (inaudible) -- on the board. My friends on the board. So they're making a big investment -- Yes, that's right. So they're making a huge investment. And so there's this sort of Wal-Mart versus Amazon thing that's playing out.

34:58

Charlie Rose: Let me talk about something that's happening at Rockefeller. One of the things that they're asking themselves is how can the digital revolution be used to change the life of the poorest among us in the world. Any ideas on that?

35:07

Marc Andreessen: This is what I mean about the evolution of human potential. You have to get very --you have to use specifics very fast but the real fundamentals of education, the real fundamentals. I'll give you an example. We talked about price transparency. One of the great kind of unwritten stories of the era is the number of subsistence farmers in various Third World countries that have never known the price of their product so you basically -- you grow the grain, you take it to market and whatever the guy offers you is what you get. Now one of the big things that happens all throughout the developing world is they go online, they go on the phone and they find out what the price of the product is for the first time.

Charlie Rose: Yes.

35:37

Marc Andreessen: So basic economic improvements. Access to education, access to opportunities for their kids -- I think the wave in the developing world or in the developed world at the Khan Academy, the number of parents that are going to realize that their kids can get a leg up on education by using these technologies, that wave is going to hit hard in the next five or ten years. This is going to be very exciting.

35:52

Charlie Rose: I mean I really do think -- this had been a very interesting conversation. I think that this kind of conversation has to take place and people understand we're on the cusp of something truly and profound that can change the life of so many people that were untouched by the prosperity in the world.

36:06

Marc Andreessen: Yes. Yes. And that's why I keep coming back to --

36:11

Charlie Rose: Small farmers can find out about climate and seeds and everything else and find that access to them and get credit.

36:18

Marc Andreessen: Yes. We've never lived in a world where people are connected the way they are today and where everybody is going to be connected the way that they are. We just never lived in that world and so it's going to be very exciting.

36:31

Charlie Rose: Great to have you here.

36:34

Marc Andreessen: Thank you.