Todd Zenger, MBC Online, Evaluating Your Theory and Business Model

This lecture is on evaluating or pressure testing your theory and business model. To this point, you should have developed that theory. We've talked about how you can go about testing that theory. We've talked about building a business model that's consistent with that theory. We want to talk in this lecture a little bit about how you might go back and just evaluate the quality of that theory and with perhaps an idea toward editing that theory to improve its capacity to yield value not only in the short run but in the long run. The attributes of a valuable theory, I think consist of the following, one is that that theory is unique and we've talked about that in other lectures. This is a theory that solves some novel problem, or presents a novel solution to a common problem. That theory is simple and elegant. The more succinctly you can express that theory, the more clarity that you can use in expressing that theory, the more convincing you are going to be in onboarding other resource providers, in particular those that might provide you with capital to pursue that theory. Getting a very simple elegant theory that doesn't require lots of magical steps to, to create that value is vitally important and we'll talk about that more later. A valuable theory is falsifiable. That is, it actually expresses clearly enough your beliefs and hypothesis thus such that you could receive data and feedback and conclude, you know what, this is a bad theory, we need to pivot and change. If it's a particularly vague theory that's not very falsifiable, you really don't know when it's time to shut down the idea or pivot to another one or modify it. It tells you what you need to test. It tells you when you might need to pivot. It tells you, ideally, as we'll talk about and have talked about it, it reveals value that others are not able to see. Then finally, a good theory is generative in the sense that it not only reveals perhaps today's problem that you are particularly focused on, but it might actually yield a pathway and reveal a pathway towards solving a whole sequence or set of problems, rather than simply the one that you're focused on here at the outset. Let's talk a little bit about each of those. Uniqueness, how unique is your theory? Would industry experts disagree with your fundamental belief? Does your business model target a novel problem more as we've talked about generate a unique solution to some commonly understood problem? Does your business model lead to a solution hard for competitors to replicate? That is, once you build out this business model is it going to be difficult for others that see the value that you are pursuing and composing? Is it going to be difficult for them to step in and simply replicate without perhaps with some advantage, the business model that you're building out? Does your business model address how to solve each of the critical subproblems? We've talked extensively about the importance of thinking about those subproblems. Does this business model that you've carved out and put together provide solutions to those critical subproblems? Does your business model allow you to access or see value in assets and opportunities that others cannot? Does your business model build a resource or capability that's going to be difficult for your competitors to replicate? All of these features and these questions are just pressure test. As you pursue this, is this truly unique and is it going to deliver something that is sustainably unique? It's not just enough to be unique, but it's ideally the case that you will be unique for a long period of time, such that it's difficult for competitors to imitate what you're doing. Secondly, a valuable theory is, as we've talked about simple and elegant, can you succinctly articulate your theory? If you can articulate a theory very clearly and succinctly, it's much more likely to be compelling to stakeholders from whom you are going to seek critical resources to pursue your theory and build out your business model. Convincing co-founders or employees or investors or customers that this is going to work, that you're going to be able to deliver this solution, and that you're going to be able to do it in a compelling and elegant way. One way to think about that is how many non-obvious things have to be true for your theory to be true. Is the sequence of things that has to be true so long and miraculous that

it's going to be difficult to convince others that this theory is going to work? Better theories derive from fewer postulates or hypotheses. Third, valuable theories are falsifiable and they provide clarity of direction. Does your theory provide you with that clear direction? Does it provide you with an ability to see things that others can't see? Does it tell you how to interpret data and experiments that get run? We just ran this experiment or we just talked to this set of customers. This was the feedback we got. We went out and looked and talked to these particular providers of technology or something that we particularly need, and it doesn't look like we're going to be able to solve it that way. How do I interpret that in the context of my theory? Do I need to pivot what I'm doing? Can I search somewhere else? How do I evaluate data through the lens of this theory? It should tell you something about where to search for corroborative or falsifying evidence as it relates to your theory, where to find valuable assets that others don't recognize and where to search for solutions. A famous philosopher of science, Popper has said, every good theory is a prohibition. It forbids certain things from happening. The more that it's a theory forbids, the better it is. In the sense that if your theory is really clear about what can't be true for your theory to be true. Then it allows you to go out and search for solutions to subproblems, to run experiments, and reach some conclusion. This is not going to work, or this is actually is going to work because we've got this logical sequence of subproblems that we now have found solutions to. We're therefore really confident that we're going to be able to solve this core problem. As we've talked about, it should tell you when a pivot is necessary and it should tell you precisely what types of choices are consistent and inconsistent with a theory. If that theory is particularly clear, it's going to tell you that's business that we shouldn't chase or this business is business that we should chase because it's extremely consistent with the theory that we have developed. Let me talk for a minute about this idea of a clear theory and the power that it provides. We've talked in prior lectures about Apple's theory being this theory of the fact that consumers are willing to pay a premium for ease of use and reliability and elegance in consumer electronic products, and that Apple is building a business model, that it will deliver this through a heavy investment in design, a very closed system and significant vertical integration so that it owns lots of what it's producing in the services that it's providing, including even the retail experience and very, very tight design control. Let me give you one anecdote. With the clarity of that theory, it allows Apple to see value that others don't see. This is a personal anecdote. This is very early in Apple's history. Steve Jobs has assembled this theory in part in reaction, or at least it's become clarified in his mind, I think in reaction to IBM's move into the PC industry. He's looking for a way to make personal computers much easier to use and more reliable. He famously goes and visits the Palo Alto Research Center, which is in Silicon Valley. He has this theory in his head about trying to solve these problems. He has shown this remarkable piece of equipment that Xerox was working on at the time, which had this little box that was tethered to the computer that you would move around on the surface of the desktop. As you move this little box, it would move this little arrow across the screen and it would allow you to point to little symbols or icons on the screen and you would tap on it and it would open up a box or a window on the computer monitor. This is something that he is seeing in about, I think about 1980 or 1981, about the time the PC has been introduced. Maybe it's 82 around this time period, and he sees immediately this is a solution to one of the subproblems are a solution to really maybe even the core problem that he sees. As it turns out, I was an undergraduate living in Palo Alto at the time and had a friend that worked at Palo Alto Research Center. At about the same time I went and toured this park facility and saw not sure I got the full tour that he got, but saw that same system and that remarkable technology, and I too thought it was really cool. But I had no theory in my head, it wasn't a solving a problem that I had or was thinking about. He of course takes it and creates enormous amounts of value,

and I just look at it and think this is something cool. That's what a theory does. It provides you with an ability to see value in technology and solutions and opportunities that simply others are not able to see. Let me say a little bit more about this apple theory and what a good theory provides in terms of clarity of direction and choices that you subsequently make and really do that by contrasting it with Google's theory, and I'm going to shamelessly steal from a set of slides that someone who knows goes by the name of Alan on the Internet has generated, and he has contrasted the Apple theory with the Google theory. He says when the first iPhone came out and report or complaint about how it was too hard to type on a touchscreen, Steve Jobs replied, your thumbs will learn in some ways that captures beautifully the essence of the Apple theory and their approach, which is they have an idea of an integrated solution they're going to provide to customers and getting feedback about this is really hard to work with. They have already vetted this thought about this. They've got their own internal users that have been using this. They're introducing something that customers don't yet even know they want. As opposed to Google's approach, which is very much focused on, let's throw out a bunch of Beta technology. Let's see what the customers want and respond quickly to the feedback that we receive. Apple often knows the users better than the users know themselves. They do this by lengthy and careful research and focusing on providing good and consistent UX and evergreens solutions. They have a hierarchical structure with fewer lead designers and control the quality of the final product, as we've talked about, Google, on the other hand, tends to get validation from its users. They often open-source their work when possible, and appreciate contribution and feedback from their communities. This helps them create a diverse product portfolio. They're scattered into all kinds of spaces, and much of this technology doesn't really necessarily integrate, certainly not in the way it does for Apple. He goes on and talks through the set of choices that are very different, that follow from these two very different theories of value creation. Google, in terms of decision-making, the approach's create what users think they want and Apples is create what they think users want. Once is responsive to the customer, the other is weird to think we know more than the customer. We're going to show them something that they've never seen before. Google's approach to R&D is really a focus on development over core research, and apples much more focused on research over development. That is maybe a little bit of an overstatement, but this is this author's interpretation in terms of view of consistency or Google's focused on visual consistency, having things look similar across the platforms, whereas Apple is focused on consistency of the user experience. Google in terms of product pre-announcement, Google is constantly doing press releases and teasers, and Apple does none of that. It has semiannual events, tries to keep things secret and advance of those, and it's very locked down in its approach. Google is constantly redesigning and pursuing new trends. Apple is much more about evergreen, long-lasting design. These designed features last for decades and sees slow evolution, but it's keeping the same form factors and products and adding to them and enhancing them. Google's approach to privacy is this off? There's interpretation is simulated privacy, whereas Apple is much more tightly controlled. What this author characterizes as true privacy terms of the user base gag, Google is very expansive, trying to reach out and pull in everyone into their user base. Apple is much more create an ecosystem. We want to have a set of customers that's purchasing multiple Apple products, and integrating all that they do within that singular ecosystem in terms of leadership Google is flat in its structure with distributed power, Apple is much more hierarchical, tight control, and you can see why this is important given this effort to tightly control this ecosystem much more centralized and its approach to managing terms of the ecosystem, as we've talked about, Google's much more open-source, Apple is prior Terry. In terms of their go-to-market strategy, google is about spotlights and promotion, and Apple is about retaining its existing structure and building it out, and

enhancing it. Again, one might quibble with the interpretations of this particular author, but it highlights, I think in a really powerful way, how a theory guides a whole set of actions in a compelling way and shapes the trajectory of growth for corporations. Let me give you one other example of the power of a well-framed theory to see what other companies and other actors can't see and why this is so critical for you as an entrepreneur to have that clear theory, and this is entrepreneurship in an old industry, and you won't think of this as entrepreneurship, but in its day, this was a very, very entrepreneurial act that this company took. The company isn't middle steel, which today is one of the very largest steel companies in the world. But in its day it was really an upstart steel company that had started in India, and they developed a very contrarian belief at the time, a couple of decades ago, the view was that steel industry is old and declining. There is an old standard technology that was being used, there was a new technology that had come along. These are mini mill technology, but for the most part, it was an old stodgy industry. The other thing that was going on in the industry at the time was that steel in many countries was a nationalized business, and it was particularly nationalized in the developing world and in Eastern Bloc countries. The sense was that stepping in and buying, say an old nationalized steel mill in the third world or a developing world country, was a really scary thing to do. Most of the older steel businesses across the globe wanted no part of that globalization and so everyone was steering clear of these assets. If they were growing at all they were moving into this new technology which was mini mills. Well this company Mittal developed a very contrarian theory. They said steel is going to become a global industry. It's not going to remain a national industry with every country having their own steel mill or sets of mills, that these steel operations in the developing world and particularly in Eastern Bloc countries were a goldmine. They were being marketed and sold at a fraction of their true value. The fact that these things were in scary locations where people from the United States and elsewhere might not want to move at the time, afforded them enormous bargains. If they could develop human capital, people that would be willing to move into these countries and turnaround these steel mills, it would create an enormous amount of value. They also had developed one of their initial sites, a technology called DRI, which took old steel technology and gave it a refresher, and improved the cost structure of these steel mills. They took this theory and went out on a shopping spree and bought up all steel mills across the globe under value prices simply because they were using a very unique theory, a contrarian theory to go out and purchase those assets. That's what a theory does. It allows you to see value that others are not able to see. The final attribute I think of great theories is that they are generative in the sense that they help you solve not only the current problem that you're focused on but also open up opportunities for you to solve a sequence of problems down the road. Think about the Apple theory was originally of course developed to enter the personal computing space or to enhance its position in the personal computing space, and ultimately they took that same theory and really applied it to a bunch of other businesses that while today's seem very related, at the time seemed actually somewhat unrelated to that particular space. Think about Uber moving from taxis into Uber Eats and other types of businesses that really could draw from the same business model that they have developed. You want to think about what's next for your business. Do you have a growth path because that's going to be critical for your ability to attract investors that they see not just a short-term capacity to create value but in fact a long-term capacity to create value. Good theories identify and solve a problem, great theories identify and solve bundles of problems and I think the very best theories help you identify and solve entire domains of problems or at least a trajectory or sequence of problems over time. Think of a company like GoPro, brilliantly scoped out a problem to solve that problem very brilliantly. Actually IPO did fairly well the outset but they ran out of gas because they never really figured

out what to do with the business after they'd solved that particular problem. They tried drones, but the business model didn't really help them that much to differentiate themselves from a bunch of other competitors in that space, and so it wasn't a theory that provided this ongoing growth path for that company. A great example of a company that composed a brilliant entrepreneurial theory that has fueled their growth for the better part of 80 years is the Walt Disney Corporation a theory that Walt composed early in its history, in which animated films were the core of their business. These theatrical films which were then we're all animated fueled a variety of value in the peripheral businesses. Created a music business, and the television business, and a merchandise licensing business. In each of those businesses gave them advantage relative to their competitors. It was theory in which they could take this fabricated fantasy world that they create in these animated films and replicate in these other businesses, and in doing so create enormous amounts of value and they have of course taken this theory and continued to build it out and respond in ways consistent with that theory is they've moved into a variety of new businesses. They've also been very creative in more recent years in finding new fuel for that core or the business as they bought Pixar, and then of course, later purchased Lucas Films and Marvel, and provided new characters that they could feed into this remarkable system. It's a theory of value that continues to reveal new problems to solve. We can solve the cruise ship problem. We can solve the hotel problem. Finding novel ways to create value for the customers in those spaces by leveraging the central resource. In words the Disney theory is to sustain value-creating growth by developing an unrivaled capability in these family-friendly animated and live action films and then assembling other entertainment assets. Moving into these entertainment businesses that both directly support and draw value from the characters and images that are generated in these film assets. Key takeaways. A great theory is unique, it should be clearly articulated and succinctly articulated. We're going to push you to be able to clearly and succinctly articulate your theories of value. Do you have a clear understanding then, armed with that theory of what information would falsify your theory. What experiments you need to run? Where you need to go out and seek solutions to subproblems, and do you know how to interpret that once you undertake that experiment, or undertake that search? What does it say about the truthfulness and validity of your theory or your need to pivot? Can you efficiently articulate how to test that theory? Does your theory pinpoint valuable opportunities or assets? Does it help you see value that others cannot see? Can you articulate where that is and how to find it? Then finally this issue of the generative nature of your theory. Does your theory point to an ongoing path of value creation? Does it help you build an ongoing business that will continue to show new sources of value creation? Thank you. That concludes this lecture on how to pressure test your theory of value.