

Todd Zenger, MBC Online, Developing Your Business Model

My name is Todd Zenger. I am a professor of entrepreneurship and strategy at the David Eccles School of Business in the Entrepreneurship and Strategy Department. One of my roles in the department is as academic director of the Masters of Business creation. This course is about developing your business model. My hope is that's the end result of this course that you will have developed or refined your business model. In order to do that, we're going to step through a sequence of lectures and exercises to help you in that process. My objective with this particular lecture is to really shape the way you think about your role as an entrepreneur and in particular to introduce an alternate way or perspective as it relates to that role in contrast, this perspective with some traditional approaches that have been developed for developing your business model. Then finally, at the conclusion of this lecture, really introduce this alternative approach and commit you or inspire you to develop and to articulate a theory of your firm that is an approach that will be the backdrop for this business model that you will develop. Let me begin by paying homage to you as entrepreneurs. Your task is to create value in a world that is vastly complex and uncertain and to navigate these complexities and uncertainties in a way that allows you to discover that value. The way I think about this, your initial task is really to identify a particularly valuable problem which if solved, will introduce new value and then find a way strategically to capture some of that value. But the challenge is that there are lots and lots of moving parts, lots of weights to pursue that solution. As you begin this process, you are quite uncertain about which of those approaches is the best way. The real exercise of entrepreneurship is to navigate this complexity and uncertainty in an efficient way. The real challenge that you faced is that most of space is empty. If you think about yourself as this explorer, most of the solutions that you propose or could propose are horrible solutions and will not create value. The question is, how do you navigate this enormous amount of complexity and uncertainty to compose a solution that is actually going to result in introducing new value. There are tools that have been developed to help you through this exercise and we will, throughout this course and program, talk about those tools. I want to talk a little bit about two very commonly used tools. Talk about some of their virtues, but also talk a little bit about their shortcomings and why we need something and why we're pushing for an alternative approach to guide you through this process of developing a business model. One of the most commonly used tools out there in business incubators and in entrepreneurship courses is an approach called lean startup, which begins in the right place. It too acknowledges that the world is extraordinarily uncertain and ambiguous and complex. In light of that really leads those disciples of this approach to adopt a solution which is experiment pivot in response to the feedback that you get from experimentation. But it's very much focused on the best way to entrepreneur is to just get out there and act, get customer feedback, update what you do on the basis of that customer feedback. I'm not going to tell you that that part of the exercise is the wrong one, but the challenge is that it doesn't really tell a complete story. In many ways, the lean startup approach begins with a very compelling architecture. One that in many ways resonates with my own way of thinking. That is that you begin with an idea, you develop a hypothesis, you develop an approach to testing that hypothesis. You run experiments, you receive feedback and response to that. You pivot or change your direction. Pivoting may take you back up to the top and you revise your idea, change your hypothesis and this process continues very much of a scientific feel to this process, which I think is exactly the right approach. However, when you dig into what's really taught and emphasized in this lean startup approach, it's very much a focus on this experimentation piece and pivoting and response to the feedback that you receive. Here's an excerpt from a classic book on lean startup. The central hypothesis of the lean startup methodology is that if startup companies invest their time into iteratively building

products or services to meet the needs of early customers, they can reduce the market risks and sidestep the need for large amounts of initial project funding and expensive product launches and failures. In other words, the real essence of this approach is experiment and get customer feedback, all of which makes infinite amounts of sense. However, what is dramatically under emphasized in this approach is this phase of hypothesis development. In fact, the language that they use as assertive reference hypothesis as equal to a guess. A hypothesis is just a fancy word for guess is the way Blank and Dorf, who are the authors of this approach, describe what a hypothesis is. I think the challenge here is that's really not how scientists approach the process. They don't think about the hypothesis phase. It's let's just guess at something, throw something out, and then proceed quickly to experimentation, get customer feedback, and revise our hypothesis accordingly. The challenge with overemphasizing experimentation and under emphasizing hypothesis development is it really encourages you to approach and pursue incremental types of innovation and entrepreneurship that is tackling relatively mundane types of problems with limited capacity for value creation. One of the central concepts in the lean startup approach is this idea of minimum viable products. This is the overlap of products that are easily composed or services that are easily composed and those that are viable, that is, that they would be successful if introduced into the market and you want to choose those that are relatively inexpensive that you could throw out and get feedback on. The approach is develop the simplest version of the product that you can think of, that's your MVP. Listen to what the market tells you as you put that out into the market. You gather that feedback, you make adjustments based on that feedback and then pivot in response and you rinse and repeat this process in an iterative manner. One of the challenges of this minimum viable product approach in the lean startup is that it encourages you to search for value where you can find feedback. Much like the story of the drunk who is searching for his keys late at night, can't find them anywhere. A police officer steps up and sees him and asks him what he's doing and he says he's searching for his keys. The officer asks him, well, where did you drop your keys? Well, somewhere over there, and he points a little bit distantly. The officer then ask, why are you searching here? He says, well, this is where the light is. This is where I could actually see if the keys were there. I think one of the challenges of this lean startup approach is that if you're fully reliant on complete customer feedback or even any customer feedback in terms of directing your actions and where you search and how you find value, then the only place you can search for value is places where you can receive that quick feedback from customers. Contrast that with this statement from Steve Jobs, who says it isn't the customer's job to know what they want or Henry Ford's comment that if I'd ask customers what they wanted, they would have told me a faster horse. The products and services that you are trying to compose, the problems that you are trying to solve require enormous amounts of investment to compose. The idea that you could throw together some rather lousy version of that product, throw it out and get useful customer feedback is not obvious. In fact, Apple's approach is completely contrary to this. They don't go out and solicit customer feedback until they have not a minimum viable product, but really the completed product. Instead, they're using an alternative approach that we'll step through here in a minute. They are getting customer feedback or they're getting feedback, but they're not trying to get feedback on the completed product. Instead, they are composing a theory about their value and they're identifying subproblems that they want to solve and trying to solve those subproblems, getting feedback on the solutions to those subproblems. We'll talk more about that approach here in a moment. Just to summarize, I think the problem with the lean startup approach and in many ways extends back to its origins, that it was adopted from the lean manufacturing approach that developed in operations. The approach here was to foster continuous

improvement of a well-established production system. The approach is lots of experimentations, take feedback, update the system. That this approach really underemphasizes this early phase, which is, what's the hypothesis? What's the theory that drives that hypothesis? Instead, really overweights experimentation, or at least it takes up experimentation before that first critical phase of hypothesis development has been done thoroughly and well. Second tool I just want to say a few things about is the business model canvas. Again, like lean startup, it has its place. It can be extraordinarily valuable. But I want to just talk a little bit about its limitations. Again, this is widely used. This business model canvas is an exercise in which you fill out different elements that might comprise your business model. Who are the partners that you need to work with? What are the key activities? What are the key resources? What's your value proposition? What are the customer relationships? What customer segments do we want to be in? It's really an exhaustive cataloging of different choices that you need and want to make. The problem is that, just filling this out doesn't provide you the underlying theory that generates the hypothesis that you're going to go out and test and experiment around. What we're going to try to develop and help you with, is how you come up with that theory that would guide your approach to filling out a model like this, the business model canvas. Just walking through these nine business model elements that are on this Canvas doesn't really provide you with a clear map to guide your efforts as an entrepreneur. It helps you catalog useful things, and to think about useful things. But our exercise and our approach in this course is going to be to provide you initially and you're really going to do the providing. But to help you think deeply about what's the theory behind this business model that you're going to develop. Our hope is that we will provide you with a path by which you can fill out this business model in a much more thoughtful and informed way. One that will lead you to a unique strategy, unique point of view, and one that will lead to, in the end, this unique value that you can introduce into the world and capture some important piece. What is the alternative? We've spent some time talking about the limitations as well as strengths of the lean startup and the business model canvas. What I want to convince you of is that actually what you need to do is take seriously this approach that's laid out in the lean startup, but do it in a way that's much more balanced than they suggest. My objective in the remainder of this lecture is to convince you to think of your role as analogous to a scientist. That you are trying to navigate this complex, uncertain world and to discover a path to value that, in some sense, no one else has discovered. That exercise begins first with the same type of exercise that a scientist would engage in, which is coming up with a theory, a belief about what they think is a path to value creation. Then in a very thoughtful way, composing experiments that will help them decide if that's a good course of action. Help them discover solutions to subproblems that need to be solved in order to introduce that bond. The tool that we're going to use in this course to help you develop your business model is called the value lab. You'll have an opportunity to dive in and dig into the details of this as we step forward into other lectures. I just want to talk through a high-level version of this today. In this lecture, this tool will push you to develop a theory of value and to think about your initial task and initial job as an entrepreneur is to come up with that theory. From that theory, we'll emanate the hypothesis or hypotheses that might feed into a lean startup experimentation machine. But before we get there, I want to push you to really think very, very deeply about this theory of value. That theory of value is going to be closely connected to this idea of a problem and your problem formulation. We'll step through that as we talk more deeply about the value lab in future lectures. Theories to a scientist are really where the process begins. It's through the development of the theory that scientists are able to see things that others can't see and the Einstein's capacity to and the world's capacity to imagine and think about black holes or Newton's capacity to have us envision that light is filled with multiple colors

as opposed to just clarity or whiteness began with a theory, leads to an experiment that then reveals the accuracy of that theory as he develops this experiment with a prism to demonstrate to the world that light is filled with multiple colors. Theories are what guide the process of experimentation, guide the development of tools to generate the feedback that will lead to valuable insights and new knowledge. The premise here is that there are vast opportunities for value creation that are sitting out there unseen. They're unseen because the world lacks the theory that's necessary to see them. I love this quote from Einstein who says, "Whether you can observe a thing or not depends on the theory that you use, it's in academic circles, it's a theory that allows us to see things." This is true of entrepreneurship as well. Famously, Steve Jobs is able to walk into Xerox Research Center and observe this remarkable graphical user interface that Xerox was working on. He sees this immediately as a solution to a larger problem that he is thinking about in a particular subproblem he needs to solve. But it's a unique theory that he has in his head that allows him to see value. That's really your job as an entrepreneur is to develop a theory that allows you to see the world in a different way and not all of the world, but the world of the problem that you are particularly trying to solve. In that sense, a theory becomes this flashlight that allows you to focus on particular solutions, opportunities, experiments that you can run that will introduce new value. In this sense, just as a powerful academic theory reveals better scientific experiments and really accelerates knowledge creation, a powerful entrepreneurial theory illuminates better experiments that you can run as an entrepreneur and leads you, and accelerates your process of value creation. Rather than having to sit back and get feedback and pivot in a near-infinite series of loops, you're able to direct and develop experiments that are going to be much more impactful and accelerate your path to value creation. Ultimately accelerate your path to developing a compelling business model. How is it that theories help us see? Well, I'm not going to step through this example in detail. But what a theory does is it provides a causal architecture. If we build these things, if we structure our business model in this particular way, we think it will lead to value creation, it will solve a particular problem. We think we can position ourselves to capture some segment of that value. It provides a causal logic through which to see hidden value that others don't see. It also provides a vehicle through which you can direct and interpret experiments and data, including running experiments that unlike a minimum viable product which requires you to compose the entire venture or the entire product and throw it out to the market in order to receive feedback with a causal architecture in your head which says, look, if we solve this problem and that problem and this problem, then we will solve this bigger problem. Well, now I can run experiments and I can go out and search for solutions to these subproblems and in the process, have much more directed low-cost experiments that allow me to interpret the data I receive from these experiments in a much more efficient and thoughtful way. One of the responses that you might have to this would be, "Look, this all sounds really, really academic. Is there any evidence that what you're telling us is actually a better way to go about entrepreneuring?" One of my co-authors and colleagues, Alfonso Gambardella and a team of other scholars actually have run a randomized controlled trial. What they did was they took a bunch of entrepreneurs like yourselves and they divided them into two groups. One group got traditional entrepreneurship training, Lean Startup, Business Model Canvas, other related tools, and another group got all of those things plus a heavy dose of start with a theory and layout this causal architecture before you step into these other tools. What they found was that the group that received and was really pushed to do this thinking first, theory first, then step into experimentation had significantly better entrepreneurial outcomes. They also found that they were much more likely to shut down or pivot their ventures than their companion group that was only given the Lean Startup and other kinds of entrepreneurial tools. Of course, this is a

positive outcome. If you shut down a venture that's a bad idea sooner and pivot to something else, this is substantially saving resources. It's not just that it produces better outcomes, but it also pushes you to move on to something else more quickly as a result of this thinking first. Why might that be the case? Well, if you don't have a compelling theory about this path to value creation and you get experimental feedback, your ability to interpret that feedback is much, much more limited. You can always say, well, we didn't quite have everything perfected. If instead you have this well mapped causal structure that says this has to be true in order for this venture to work and you receive feedback that suggests that assumption is wrong, well you're ready to abandon it even though you haven't pursued the entire venture. The advantage of this causal structure is it gives you much, much clearer direction as well as the capacity to interpret the feedback that you receive. The tool that we're going to use to help you develop this theory that we think is essential, is called the Value Lab. The structure of this approach is that we're going to push you through a process to develop that theory and then push you to think about the actions that result from this theory that you've composed. In order to develop that theory, we're going to have you start by thinking about what unique beliefs you have relative to those that others have in the industry. What are the common beliefs that others have in the industry? What are the orthodox beliefs about this industry, it's technology, consumer tastes? What does everybody else think is going to happen to this industry? What do other people assume about a variety of different factors? Then to push you to think about, okay, what do you believe that others don't? Can you imagine beliefs that are contrary to these common industry beliefs? How might we differently think about the future of this particular industry? Then push you to try to express that unique belief as a core problem. If we can solve this core problem, our belief is that it will introduce extraordinary new value. Steve Jobs believes that if he can make computers easy, easy to use, that this will result in massive sales of this product. It will become a consumer good as opposed to something that's purchased by only managers or scientists. It can become a consumer product. That was a belief he had that gets expressed into a core problem. Then you think about key subproblems that need to be solved. Then you try to translate that logic into an if-then expression. If we solve these subproblems, then the following will happen. Through this Value Lab architecture, I'm going to try to push you into expressing a causal logic that says, our belief is that if we do these things, then the following problem will be solved, this outcome will result, and that this becomes then the basis from which you can take up action and move into the Lean Startup principles that we've talked about. You can start running experiments, you can go start shopping for solutions to your subproblems, but this becomes really the backdrop against which you then start taking actions. As you experiment and in some sense prove your theory to be accurate, this also becomes the basis around which you build out your business model as we'll talk about going forward. Let me just say a bit more about common and contrarian beliefs and give you a couple of quick illustration. In the computing space, certainly the common belief was well-expressed by Ken Olsen, who was the CEO of DEC, which is a computer company you probably have never heard of, but was one of the larger companies decades ago. His perspective and belief was there's no reason any individual has to have a computer in his home. He had a completely different vision than the unique perspective that both Bill Gates and Steve Jobs had, which were that, no, this was going to become a ubiquitous household product. Then the next step in the Value Lab would be for Steve Jobs to say, okay, if that's my belief, what's the problem that has to get solved in order to have that belief come to fruition. In discount retailing, the common belief for decades was that discount retailing was something that could only play out in large urban or suburban locations. Of course, Sam Walton famously comes along and says, no, I actually don't believe that to be true. I think discount retailing can be highly successful in small towns. That's a great belief, but the

genius was coming up with a problem framing that allowed him to make that happen. In solving that particular problem, he enables the infusion of discount retailing into small towns. He then takes up discount retailing in urban and suburban locations as well, but it was really built on solving that problem of how do you make discount retailing efficient in small towns. Or in hotels, the common belief was the way you compete in hotels is through consistent quality and through branding. Of course, Airbnb comes along with a very contrarian perspective of, look, we think people can rent their homes to strangers and that this will be a substitute for hotels. It's a great contrarian belief, but the genius was of course, in then identifying the problem that needed to be solved and the subproblems that needed to be solved; really a theory about how you make that belief come to pass. That's what we'll step through as we proceed through the Value Lab. I hope you'll take time to read carefully the article that accompanies the Value Lab. It steps through several examples, including this example of Airbnb in detail, and we'll talk about this more as we proceed through other lectures. My hope through this introductory lecture is that you've taken away a couple of things. One is that your role is to be a scientist, to think in a deeper way than your competitors, to think in a deeper way than others that are already in this space that you're contemplating entering, and you're going to come at it with a different problem framing and with better and clearer thinking that you're then going to use that theory that you have developed to run experiments and to search for value and to build your business model. I hope you come away from this lecture with a deeper understanding of both what's useful about Lean Startup and Business Model Canvas; two of these commonly used tools today. We will talk about these as we go forward. It's not that experimentation isn't useful. In fact, it's central to the path to value creation. I'm just going to push you heavily to think as a scientist, which is to start with a theory and then jump into experimentation. We'll use the Business Model Canvas as well to think about how we build the business model that results from this theory that you develop. Again, finally, my hope is that you are inspired to think as a scientist and to really begin with this process of first articulating a theory that is unique to this venture that you are trying to compose. Thank you.