JOE HADZIMA: OK, Good evening. Everybody nice and warm from the snow? Thank you for coming to Nuts and Bolts of New Ventures and Business Plans on a snowy night in Cambridge. My name is Joe Hadzima. And this is the first of six evenings we're going to have for the course.

The course name is Nuts and Bolts of New Ventures and Business Plans. First of all, it's not really about the business plan itself. Think of it as we're going to talk about how to plan and execute a new venture.

And don't think of a business plan as a fixed document in this course. Really, it's a dynamic process we're going through. It may be a document. It may be a few slides. But at the end of the day, what it ends up being is a shared vision between you and your team as to where we are, where we're going, and how we plan to get there. So that's the goal of all this.

And I should also say, because I know some people in the audience are not doing traditional business ventures, we're going to use the business terms a lot, but this could equally apply to social-developmental entrepreneurship, to nonprofits even to governmental ventures. It's a way of thinking about how to organize new ideas and get them going.

Now a little bit about the course. This is the 25th year-- it's hard for me to believe it's been 25 years-- for the course. And the founding of the course has an entrepreneurial lesson in it. So here's the backstory.

I was teaching some things here on legal stuff. And some students came up and said-- I think we had one entrepreneurship course at Sloan at the time and they had taken that-- and they said it's a great course, but it's not telling us anything practical. So could you do a course during IAP to tell us how to do something practical, how to start a company?

So this was back 25 years ago before the internet. And the IAP courses were in a fixed, printed catalog that you would get. Shows you how far we've come.

So I said, well, I'll think about doing a course and let me get back to you. Well, I got tied-up with some other things. And then they came to me and said, we put it in the catalog and we dare you not to show up. Interesting.

So I thought about it for a while and I thought, well, I should be angry, but I think I have a customer. I think these people want something. So the first attribute was I had a customer. I'll right, I'll play this game for a bit.

Problem is I only had two weeks to organize it. So that wasn't enough time to really do anything formal. So I said-- I think it was four nights-- all right, we'll do two hours, three hours, we'll do eight topics and I'll go and find some people who know about those. And how am I going to make it easy at the last minute to get these people? I said just come into class and whatever the field is that you're in speak maybe 10 minutes on the five things I wish somebody had told me about whatever you're talking about before I got started. Then we'll do questions and answers.

And I said, I've got to make it entertaining. So I called up people and said, do you know somebody who can do this talk? And if you do, you have to have seen the person talk, they have to be entertaining, you have to vouch for them. And so we did this in a period of two weeks. And probably half the speakers that showed up for that first session I had never met before. So I'm thinking this is going to be a disaster.

It turned out to be a great success. And I think the lessons for this, in an entrepreneurial way were I had a customer for a product, they wanted something, I was able to clearly define the task-- because I didn't have time to do anything more; if I had done it myself, it probably would have taken longer and not been as good-- I got great people, and I was able to communicate to them what the task was, and then I got out of their way and they did a great job. So there's an entrepreneurial lesson in how to start a company. Make sure you have customers, get great people. The whole business planning, new venture-type thing is really trying to find what the task is and then to be able to communicate, and execute on it. So the course really is an entrepreneur venture.

That's how we started. And later Joost basically figured out how we could get credit for it. And it's just blossomed ever since. So that's the background.

In the 25 years we've seen all sorts of things. We've seen bubbles-- the internet bubble. I stood here thinking I just read in the paper that Hotmail, back in 1997 or so, had started up and been sold in 18 months for $450 million, basically giving away email. And I'm thinking how am I going to explain to people this isn't the way it usually works in periods of time. More recently, Instagram. So there are some things that happen at points in time that defy direct logic. And if you can catch those waves, that becomes a good thing to do.

We've also seen busts after the internet collapsed, after the financial markets collapsed. Actually, that is one of the best times to start a company. And many of the really enduring companies have been started during down times. And the reason is resources aren't available-- financing dries up-- you've got to be really focused, you have to actually deliver something of value. And there's a lot of history about companies to get started during down times.

But through all of that, ups and downs, it all boils down to really two basic thoughts, and we're going to touch on it over and over again in the course. And that is whether it's a business, whether it's a nonprofit, whether it's a governmental project, the first thing you've got to do is create value. So if you're not creating value, You can't really do anything. And then having created value, the question is how do you capture some or all of that value to make what you're doing sustainable. And sustainable in the concept of the traditional companies is profit and in the context of developmental stuff it can be we can do it again, rinse and repeat.

So when we look at creating value, we're going to be asking questions about who do we create value for, how much value do we create, and how do we create it. And then when we talk about capturing value, the traditional way has been for customers somebody who will pay you for your goods, the product you do, or your services. And the trick, as we'll see, in financial projections and the business model parts that'll come in the next few days, is that whole process something where you can make enough money that you can continue it. So traditional capture of value is through customers. There are other ways to capture value in the area of the advertising or monetization that we'll talk about also.

And you think about things like where third parties provide that payment. So think of the US health care system where historically the patient, the person who the value is delivered to-- as in you're going to get treated-- isn't really paying directly the cost of that. So sometimes figuring out how that works can be the challenging part.

So at the end of the day, to make all this happy, we're going to need people-- that's the number one thing you're going to need for a venture-- resources of some sort-- either cash or partnerships-- skills-- some of them you'll learn in this class, some of them you'll learn on the job-- and then that one that's the hardest one to figure out, but if you can get it it's the best, and that's called luck. I'll always, go with some luck.

So our goal for the course is basically to make sure you get infected with the entrepreneurial thinking virus. And it really is a virus that can be infectious. The good news is it's not known to be fatal. It's highly contagious. It is a lifelong affliction, so you'll have to get used to it. But at the end of the day, I think if you catch it you'll be in best shape.

This is what we're going to be doing tonight. We're going to tell you a little bit about who you are, we're going to introduce the teaching team, we'll introduce the case study and business plan basics tonight, and then we'll take a small break, and then we'll get on with Steve Pearse, who's come all the way from Florida today to talk to us. He's thinking maybe that wasn't such a good idea.

So who is in the class? Some of you signed up-- many of you signed up-- at the website. We had 160 signed up. And the organizations that you're from are-- and I'll just read them alphabetically-- Boston University, Broad Institute, Columbia University, the Department of Defense, Harvard College, Harvard Kennedy School, and Harvard Business School, Mass General Hospital, University of Massachusetts, University of Macedonia, University of Michigan, Toronto, Wellesley College, several private companies that I won't say your names to protect you, and of course MIT.

Now the areas that you said you were interested in are all over the place. We have consumer devices, foreign language learning, financial technology, social enterprise related to health care, educational technology, medical devices. One of the reasons I'm going through this is that we hope that in the period of this course you'll actually form some teams. So if you find some of these topics interesting, or if you're some of these people, then at least I'm shouting you out a bit. We have nuclear energy-- for those of you into that-- specialty biotech chemicals, a sleep product, oncology drug delivery, biotechnology, 3D printing, eyeglasses in West Africa, independent film industry, lab testing process and equipment, big data, data privacy, B2B information technology, energy technology, aerospace, crowd-funding, and e-commerce. So hopefully you'll find a kindred spirit in those.

Now what about the background of the people? We have some people this is the first course they've ever taken in entrepreneurship. We've had people that have taken a bunch of other entrepreneurial courses at MIT or at other universities. In fact, we have a couple of people who have taken Nuts and Bolts before. They did pass before, but they're back for more. Several start-ups, somebody who has always been in government, and a couple people in 15 plus years in large organizations. And some members of the venture mentoring service are actually in the audience. So we have undergraduates, grad students, post-docs, visiting faculty, and staff.

So it's a pretty diverse audience and we've got a lot to cover. So a little advice to the people that are first timers. I would say soak it all in. And as you go forward, try to think about the kind of things we talk about when you approach entrepreneurial things for the first time. More experienced people, now use this to refine your thinking. I've been in this course for, as I said, 25 years. And every single year I come up with some refinement of my thinking listening not only the speakers but to the questions that come.

So I hope you enjoy the course. We do have to calibrate before we get going, though. It is MIT, so we have our first formula. And it is H equals R divided by E. So I've got an audience with a whole bunch of different people and we're trying to solve this equation. And we're trying to maximize H. So for those of you that can't see, H equals R divided by E. Anybody want to take a guess what these symbols are? Yeah, the snow has got to you.

I'll give you a hint. H is happiness. OK, let's see. Yeah.

AUDIENCE: Reality over Expectations.

JOE HADZIMA: Oh, he jumped right to it. Reality over expectations. Last year somebody said revenue divided by expenses, which is equally good I guess.

[LAUGHTER]

So this is a generalizable formula. And for those of you who have even slight idea of math, if I lower your expectations to zero, I can make you infinitely happy. But I think I'm never going to be able to do that.

But the point is this works both for teaching here and for everything you do. If you over-deliver on what you promise, you'll have people happy-- your investors will be happy, your customers. So happiness is reality divided by expectation, with the fact that you can never quite get expectations to zero. So lower your expectations-- I want you to all be happy as we move through the course.

So who are we? We have Joe Hadzima, Joost, Gino, Yonald Chery, and some highly paid volunteer speakers I'll introduce.

A little bit about my background. Senior lecturer at Sloan. Was a partner in a law firm in Boston for many years. Was one of the founding judges of what's now the 100K competition. Former global chairman of the MIT Enterprise Forum. Managing director at Main Street Partners, where we do technology commercialization. And co-founder and president of IPVision that does intellectual property analysis.

I should say this is the first course at MIT that we're aware of that brought both sides of campus together, the engineering, science, architecture side of campus to the Sloan side. You would think they're miles away. Until this class, they really weren't together.

There have been a lot of companies launched out of this class. Some have gone public. And it's been quite a history over time.

Then I'd like to introduce our case study next. This is Virtual Ink, if you can't read that logo up there. This is a case you have in the materials. Is a computer peripheral company. And let me see if I can make this work. I'll give you a little bit of an introduction here. Is that appearing up there?

[AUDIO PLAYBACK]

[MUSIC PLAYING]

-For the times when you don't need a projector and writing on the whiteboard is the best teaching tool, there's the MimioCapture ink recording system. Enabled by MimioStudio Software, the MimioCapture system actually sees and records everything you write on the board in real time and multiple colors. It can even convert handwriting into editable text. The system creates digital files that you can send to your students so now they can focus on the lesson rather than on taking notes. And you'll save time by using the digital files in other classes. The MimioCapture system works with you MimioTeach interactive system and comes complete with a magnetic charging tray, four rechargeable marker holders, and a digital eraser. The MimioCapture system, bringing your white board notes into the 21st century.

[END PLAYBACK]

JOE HADZIMA: OK. So that is an overview of what Virtual Ink eventually became. And in fact, today they have a whole bunch of other products. Yonald, our entrepreneur, who's going to come in at the end, was the founder of it. He's got a very interesting story.

The reason we use Virtual Ink, even though it's a little bit dated-- it was in the late 1990s-- is that it's an easy concept to understand, although there is some technology behind it, to be sure. It was entered in what was then the 50K competition. It's an interesting story of the times and the company. And most importantly, Yonald himself comes in and he tells you stuff that you're not going to find.

It's so easy to get people into a class like this who are successful. Oh, I came up with this idea in my dorm room, and I did this, we raised some money, went public, now I'm wealthy. Well, you don't really learn anything from that. You learn if it's lucky and everything works out. But Yonald comes in and he'll tell you a very interesting story of what he went through during the whole period.

Now we'll mention it from time to time during the course. You'll see reference to it in some of the materials as you prepare. The entire plan is in the course reader. Do not assume, however, that it's a model plan. Every year we get people handing in the executive summary and they follow exactly the Virtual Ink thing. And I don't want you to do that-- I want you to think on your own about it. But it's an interesting one. I tried to find another plan to work on and a lot of people won't give up their original plan or they never actually had one. So it's a unique situation we have.

Now we're going to go into business plan basics. This is a introduction I'm going to give about what's in a business plan, the kind of things you need to think about. And then over the course of the next five, six nights we'll be filling in each of the components of it. So think of this as a high-level overview.

And it's going to be a little bit like the MIT fire hose approach. For those of you who aren't MIT students, they say that going to MIT is like trying to drink water from a fire house-- it's just so much coming at you. And we're going to throw a lot at you over this period of time. Some of it's going to stick right away and some of it you won't get for a while. And the reason I know that is we get emails back constantly saying, oh, I just encountered this situation and I finally figured out what you were trying to explain to us. So we always want feedback. And as long as people find what we're doing useful, we're going to continue to do the course.

So topics in my overview is why write a plan, what should be in it, and then talk a little bit about the plan as a financing document. So does anyone know who this character is? This is Dwight Eisenhower, Supreme Commander allied forces Europe, D-day, became president of the United States.

Life magazine he's on the cover and he says plans are worthless. So I guess we're done with the course. This is a guy who planned and executed this massive invasion. And if you've read any of the history of it, it's just an amazing operation. So plans are worthless. But planning is everything.

So we'll talk about business plans and whether to write one specifically. So for example, the *Wall Street Journal* had a big article about does a start-up really need a business plan. And what they're talking about are written business plans. And there are academic studies showing that people would be better off just to go off and launch the company.

And I pretty much agree with that at one level. I've been around the country judging various business plan competitions or classes that have business plans. It's pretty clear that the people doing it have no intention of actually starting a company. It's just an academic exercise.

At MIT, that's not what we're doing. And what Joost and the people at the 100K did was say we're trying to build tomorrow's leading companies. This is about trying to actually get things going. So a business plan, or at least thinking about a business plan, is really what you need to do to launch a company.

So why actually write a real plan? Well, you have to, you think, because nobody's going to finance you without something written. You may need it to talk to strategic partners, to explain what you're doing to others, and to attract key people. But the real reason you need to write a plan or think about it is you need to understand your business. What is the scarcest resource that you as an entrepreneur have out there?

AUDIENCE: Money.

JOE HADZIMA: Money? We have plenty of money in the world.

AUDIENCE: Time.

JOE HADZIMA: Time. It's your time. The reason to think it through is you want to spend the next three to five years-- or whatever-- working on something. Is this the best idea you have?

For an entrepreneur, it's always, well, I need money. Well, the point is money tends to flow to where opportunity is. So if you can create value and opportunity, you can get money. It's harder in some parts of the country than others. But the real scarce thing is your time. So you really need to understand and think about the process of planning.

The famous expression people don't plan to fail, they just fail to plan. And in the course of this course, we're going to be asking you to think about who are your customers or users. Who cares about what I do? Will they buy or use what you're doing? What will they pay or how can you otherwise make money or get resources, capture value? How are you going to make and deliver it?

Think about something as simple as Netflix as a concept. Back when it wasn't streaming it was a DVD in a packet shipped to you. It's not an amazing concept; it's pretty straightforward. But their key was they could actually deliver on it effectively and efficiently. Or Amazon selling books online-- that's how they got started. What's so hard? Well, there's a lot that goes on in the background. And what are the resources, people, and technology you'll need?

And so whether it's a Web 2.0, or biotech, or social-developmental, I want to just reiterate that there are really two basic things. It's create value and then figure out a capture or harvest the value. That's the key thing we're trying to do.

So how many of you have seen the movie *The Social Network?* You may remember this scene. Let's see if this works, if I can do that.

So Eduardo says, it's time to monetize the site. And Mark says, what's that mean? And Eduardo says, it means it's time for the website to generate revenue. No, I know what that means, but I'm asking you how you want to do it. And he says advertising-- remember that famous advertising. And Mark's reaction is, no.

And Eduardo says, well, we've got 4,000 members-- this is Facebook, 4,000 members. And Mark says, because Facebook is cool. If we start installing pop-ups for Mountain Dew, it's not going to. And Eduardo says, well, I wasn't really thinking about Mountain Dew. But maybe at some point. I'm talking about the business, and the company, the site.

And Mark says, we don't even know what it is yet. We don't know what it is, we don't know what it can be, we don't know what it will be. We know that it's cool, it's a priceless asset. I'm not giving it up. Eduardo says, when will it be finished? And the famous answer is, it won't be finished. That's the point-- the way fashion is never finished.

So here they are, these guys that have created something that they think has value, and they're trying to figure out how to harvest the value. So I went and I looked at the 10-K for Facebook. 10-K is the annual report you file with the Securities and Exchange Commission when you're a public company.

And in the first part of it you have to say what your business is. And they say our mission is to make the world more open and connected. And so I'm looking to try to figure out what they say they're business is after that. And it was very curious.

They had three major headings in the 10-K. The first one was how we create value for users. The second one was how we create value for developers through the Facebook platform. And the third one was how do we create value for marketers. So here they are a public company with billions of users now and they're focused on how do they create value, and they're still struggling a bit with what their revenue model is on the other side.

So my point is the same things that you're going to think about starting a company-- how do you create value and how do you harvest value-- never goes away. It's constant through this. I thought I could go to the 10-K and find some really nice story about how they harvest value and they're still thinking about how to create value.

Now one way to think about what we're going to do here is to have a visualization. And I think of it as a pyramid. So at the top of the pyramid you can think of as your mission statement, similar to what Facebook said.

And underneath that, supporting that, is your elevator pitch-- do people know what elevator pitches are? We did that in the 100K. It used to be all of the venture capitalist offices were high buildings. So you'd have maybe 20 floors. The theory is you get into the elevator, the person turns you and say what do you do, and you have 20 floors to explain it in maybe 30 seconds. A lot of the VCs have moved to two story buildings, so you have to do this as you run up the stairs with them. So you've got to be even crisper today than before.

Underneath that might be the executive summary-- we'll go into that a little bit. Under that might be that the PowerPoint presentation. Under that could be the full plan, if you get to the point of writing one.

But underneath all of that are a set of foundations of individual topics. We'll go through some of these through the course. And the point is that it takes a lot of effort to distill everything down up to the tip of the pyramid. And what you're looking for is you can describe that top very clearly and have it supported all the way down through it.

The mission statement might be a sentence or a paragraph, the elevator pitch could be 30 seconds, the executive summary two to five pages, PowerPoint 10/20/30. Do you know the 10/20/30 rule? I put a link in on the website to the Guy Kawasaki clip about that. So PowerPoint-- I totally don't do this in this presentation-- he says 10 slides, 20 minutes, 30 point font, that's what you're aiming for. And then the full business plan could be anywhere from 25 to 30 pages, if you end up doing that.

The slides, by the way, for most of the presentations will be posted on the website afterwards. So that will help you out.

So now the question is, all right, I sort of get it, it's this image that I have to do and figure out. Question is who actually writes this. Is it the founder alone, the team, or even a professional hired writer consultant? Charlie Tillett-- who will be here on Thursday-- and I stood outside this room at an MIT Enterprise forum event during the break, and I asked Charlie who had entered the 10K competition back in the day. What are you doing this summer, Charlie? He says, well, I'm graduating from Sloan, I'm trying to think what to do.

I said, well, I'm working with some entrepreneurs. I've been working with them for a couple years and they really could use someone to help write a plan. They need to get some funding.

And Charlie was game. We hopped in his truck, drove up to a strip mall up in Tewksbury, I think it was, a room with 10 engineers. And ended up joining the company to write the plan and stayed with them through when they went public.

But at the end of the day, it was the entrepreneurs that needed to own the plan. These guys were great engineers, but they couldn't write a plan if you paid them a million dollars. They just couldn't articulate it well.

So that's one of the reasons we try to put teams together. Because if you have a great idea but you're missing some skills, you've got to figure out a way of getting people with skills together. And those entrepreneurs would never have gotten anywhere near where they are today if Charlie hadn't joined them. And Charlie wouldn't have been able to take a company public if he hadn't hooked up with the idea. So the point is whoever writes it, the team has to own the plan, by which I mean they really have to be able to defend it.

Sometimes the issue is, well what do they look like. Don't put it in a big binder. It doesn't really matter how you put it together. It should just look somewhat professional, but not overly slick.

You're an unknown character. If Bill Gates came up to me and threw a napkin on the table with some ideas on it, he'd have my attention. But if you do the same thing, you're not quite there yet. So it's the first step towards it. You've got to have something that says this is a serious team or person that are going to do some serious things.

Now the thing to remember is the plan is really a selling document at the end of the day. If you're going to be an entrepreneur, you better get comfortable with selling, because you're always selling. You're selling customers, you're selling financing people trying to convince them. By selling I mean you're trying to convince somebody that's what you want them to do is something they should do. Convincing people to do something is quite a skill and you should get good at it. You really should work at it. It's selling customers, financing sources, partners, recruiting people. So you're always selling as an entrepreneur at some level. You may not be the best, but you should really practice that.

So this plan, the first part it's a selling document. And whatever it is, it's not a hype document. At the end of the day, it's got to be defensible.

The elements of a full plan-- these are the topic areas, whether or not you put them in a written document or not, you need to start to think about. And during the course we'll touch on a number of these. There's executive summary in a traditional plan, something it says what's the opportunity you're looking at, what's the market you're going after, what are the economics of the business, all of these things we'll go into a little more detail.

For the technologists in the audience, note then there's no particular section here that says technology. And the reason is people by and large don't buy technology. Technology is something we use to accomplish things. And so the plan really isn't fundamentally about the technology, it's what the technology enables. And when Bob Jones comes in tomorrow, he'll talk a little bit more about that from a "what people actually buy" viewpoint.

Now a little bit more into the nuts and bolts here. Cover page-- you should have one in a plan. It should have some information that you can figure out who this plan is. How to reach people, confidentiality legend, and the securities law legend, we're going to cover that in detail on the night we do the legal stuff.

Here is the Virtual Ink cover page as an example. They've got some contact info there. It always frustrated me, when I actually got a written plan if I liked it, often I wouldn't be able to figure out how to contact the people. So put the address on it. And they at they put a little confidentiality legend on it-- it looks something like that, initially. And, as we'll see in the night when we do the legal stuff, when the lawyers get ahold of this, the legend changes a little bit.

[LAUGHTER]

So I'm not saying don't get the lawyers early on, but realize that you've got to manage them a little bit. But we'll go into that in more detail.

Now if you actually have a written document, it should have a table of contents so people can figure out what's in it. And it should have page numbers and all that sort of thing.

So my question to you is what do you think people read first in a business plan? What's the first thing you would read if someone gave you a plan?

AUDIENCE: Executive summary.

JOE HADZIMA: Executive summary, because, as you'll see here, that explains what's going on. What's the second thing people look at? Probably most important beyond when they figure out what the heck this is about. It's the people. Who are these people? So if you've got actual document and they're trying to figure it out, they're going to get a little frustrated if they can't figure out where the information is. So not to overdo it, but have a table of contents.

So if the first thing they read is an executive summary, what is it really? Well, it's the first thing investors read, as I said. Think of it as a resume for your full plan.

So the goal is to get the interview. When you have a resume, it goes out there, you want to get the interview so you can explain yourself and hopefully get the job. In the case of a business plan, the executive summary or the elevator pitch is really to get a chance to explain more fully what it is you're doing.

And then when they look at the executive summary, I like to think about what investors are looking for. And they're the three Ws. First one is why this. Why is what these people are proposing to do, why is it something I should be interested in? Why are they interested in it? Is it a big problem? It could be a big market opportunity or a big problem in the world.

Amy Smith, who was a MacArthur fellow, teaches over at the Edgerton Center, was in the 100K. And I remember quite distinctly when she got up to give her pitch at the judging competition.

She said something that went like this. She said 1.9 billion people in the world don't have access to clean water. Well, I didn't know that. In order to test whether water is clean, the traditional way of doing it is to incubate the water to see if anything bad is growing in it-- she said it a little more articulately than I did. And she said all the existing incubators are powered by electricity. If you look where the 1.9 billion people without clean water live and you look where the electricity is, they're not in the same place. Our invention is a way to test water without using electricity. Let me explain how you did it.

So from an initial viewpoint, well this is a big problem. So why this? Big problem. So that's the first thing-- why is what you're proposing something important? Why are you spending your time on it?

The second is why now. Why it is now the right time to do it?

I've been on the bleeding edge of technology for many years. I had somebody come up to me at an investment conference last year and he said, you're at MIT, and he said, well, tell me about this new 3D printing thing, it's really hot. And I said that's been around for 20 plus years. Now it's getting interesting for a variety of reasons, but I can show you '20 years ago. So sometimes right now is the right time. And I'll give you some examples down the road.

The third is why this team. Big problem, something important, there's a good reason why it's now-- why are these people right people to do it? Those are the things people are really trying to glean when they read your plan or hear your pitch.

To which I asked, if they get the first three, there's a fourth one they get, which is-- want to guess what the fourth one is? Why won't this work? So in a selling process when they get the potential customer pushes back and is starting to ask questions about will it work for this or work for that, you've sort of got them hooked. And Steve will probably talk to you about how to set the hook a little bit later tonight.

So the three whys-- why this, why now, why this team. That's what should come up. And the why won't this work, part of the task is to figure out how to lead people to the right conclusion on that. And I'll talk about it in a little moment on that.

So the executive summary, two to five pages max. It's got to be clear. It's like a resume. And the object is at the end of the day someone could really articulate what you're going to do. The elevator speech is to the executive summary-- the elevator speech might get you an invite to submit an executive summary, which might give you an invite to do the whole plan or a pitch.

It's going to try in two to five pages to say who you are, what are you doing, what is a market, how many dollars do you need, what resources, what is your sustainable advantage if you do this, why you're going to succeed. You've got to pull all of that together in a very short period of time. It's a difficult document to write. And you may end up writing it over and over again, because you've got to distill that whole thing down to it.

Let me give you an example of two executive summaries. And since the font is so small, I'll read it from here. The first one is called electronic components. And let me read it to you, if you can't see it on the screen.

Electronic Components Inc is a start-up company that will make a variety of electronic components beginning with a new type of aluminum base capacitor. The unique product, coupled with an excessive demand for capacitor devices, will provide us with an ample share of the capacitor market and numerous opportunities for expansion into related electronic components. Everybody on board? This is a real one.

The founders are dedicated and determined to make the venture a successful and profitable entity. That's good to know.

[LAUGHTER]

I thought they were just doing this for fun. Technical expertise is provided by James F Lynch, who's been involved in designing capacitors for 11 years. He attained a bachelor of science in electronic engineering from Massachusetts Institute of Technology. That alone is probably going to get him-- the experience and the fact that he's MIT-- will overcome all the other deficiencies here, which is I don't think most people would understand what it is he's proposing to do.

Do you know what they propose to do? What its excessive demand for capacitors? Why is there excessive demand? How big is the market? And if you read the rest of it, which I suggest you do when you get the slides, it reads a bit like a grant proposal. There is a good thing in here that says that they've actually put their own money in, so the guy is committed.

Now this is an example of something where, given the nature of the person involved, there's probably a lot of substance underneath. But it's not doing a very good service in trying to convey it. So that's a shame, because there's so many plans you read which don't have any substance behind them and yet they read a lot better. So we've got to figure out how to make things better.

Now the other one, by way of contrast, is People Express. Well, let me read it.

The eastern seaboard of the United States is ripe for the entry of a new, super-efficient, low cost air carrier to provide quick, reliable, intercity air transportation. Such an entity would bring to the Northeast the same benefits that have accrued to other areas of the United States. Chief among these are frequent jet commuter service between major cities, prices competitive with private automobiles, fulfillment of the congressional goals in enacting the Airline Deregulation Act. The new company will be able to achieve these goals for the following reasons-- aggressive innovative management that's been tested in the field; equipment and facilities designed specifically for low cost production of air transportation; manpower selected, trained, and motivated to be efficient and profit-oriented-- read between the lines, non-union, probably; and new systems to be applied to the entire business.

Now if you look at those two executive summaries, I think most people think that the People Express, which was the early version of what we now call JetBlue, is a lot clearer to understand what it is. You could pretty much see what they're doing. They're experienced guys, they thought about how to design it. And you could start having a discussion around this in a lot more detail than you would with the electronic components. So the trick is to end up having an executive summary looks more like the People Express than one that just wastes a lot of words and doesn't get to what they're supposed to be doing.

This is the Virtual Ink executive summary, which you'll see. And again, it's not exactly the model, but look at it. It was put this way into the 50K at the time. And you decide yourself whether you think it's a good executive summary as part of your assignment.

So let's move into the body of the plan. And when I say the plan, I mean in your planning process also. So the question is, what is the opportunity you're going after; what is the problem you're trying to solve? How big is it, what's the opportunity now, what's going to happen over time, and why is this the right time for the product or service?

This reminds me in the 100K-- when it was the 50K back one year we had a semifinal award saying here are the semifinal teams. And one team came up and said, I guess you guys didn't like our plan.

Now back in those days, we didn't actually know who the people were. That was part of it-- they were all no names, we just looked at the ideas. And I said, well, I don't actually know what yours was. And they said, well, we were the guys with the air traffic control system improvement.

And it was a fascinating plan. They had figured out how to make it more efficient. And I learned a lot of things about air traffic control systems.

And I said, the problem is none of us could see how that could be a business. You would have to change the entire air traffic control system it appeared in the United States. It looked like a great solution, but is it a business?

And they said, well, did you know that the Federal Aeronautics Administration-- FAA-- has put out a request for proposal for changing the air traffic control system in the United States? No. Why would I know that? They had assumed everyone knew that. That would have changed at the whole complexion. That meant at that time the convergence of a driver for the business was there and they didn't tell us that. So they didn't get another opportunity.

In the health care area for many years we'd see really interesting technologies that could improve outcomes for patients. And the question was, well, who was going to pay for it. And a couple years ago Medicare put in some rules that said that hospitals get penalized if patients get readmitted. That's opened up a huge opportunity for things like home monitoring or other kinds of things that before it'd be very hard to see how that was going to work. So there are a lot of new companies trying to figure out how they can do things to finally help patients for better outcomes. There wouldn't be a market for that five years ago-- it'd be a long, hard, uphill climb. So why is this the right time? As I said, I've been on the bleeding edge of some of the stuff.

The body of the plan, it should talk about the market, who's there. We'll go into more detail with Bob about talking about customers.

Investors have these different ways of thinking of things. And one of the questions that surprised me early on in my career was a VC that's said, OK, I get it, you've got a great idea. But let's say you do everything that you said and you win. Who loses and what are they going to do about it?

And we hadn't thought about that. So you've got to think about you're disrupting a market, for example-- what's the response going to be? The incumbents are just going to sit there. So what's your plan for thinking it through? That's an example of the planning process. These are the kind of questions-- again, with Bob Jones tomorrow night we'll go into pricing, and distribution, and sales tactics.

And another VC expression is will the dogs eat the dog food. So it sounds like a great thing, you convinced me it's a great thing, but what evidence do you have that anyone wants it? That's customers-- will the dogs eat the dog food?

Now the development plan is how do you piece the different components together in order to make something that can work within the time constraint you have as a start-up. You don't want nuclear fusion. Nuclear fusion we've been working on for 50, 70 years now. And the problem is, if you've got a nuclear fusion kind of project, is until it completely works, nothing works. So there's really not a business. Is there a way you can take a portion of it and make it work?

I looked at Zipcar early on. Everyone's familiar with Zipcar? Fascinating concept-- it's revolutionized a whole bunch of transportation things. But there were so many moving parts that you had to put together in order to make that work.

At a place like MIT, where the joke is-- if you're recruiting a faculty member, you can have one of three things, you can have tenure, the Nobel Prize, or parking. So parking is what everyone picks. So here's a company Zipcar that's got to figure out how to get parking places. There are a lot of things that were out of their control. And at the end of the day, it may not have been a good investment. It may have changed things, but I don't think a lot of people made a lot of money in Zipcar. So you want to try to think through do you have to change the world totally in order to make a dent in the world. Because again, limited time.

The action plan-- this is part of what I like to think of as the identification of credibility testers. As engineers, if you said I've got to build a bridge across the Golden Gate, there's a lot of things you have to do to make that work. And engineering is very much a think everything through kind of thing and often is very sequential in its process.

The credibility testers, a different way of thinking of it is are there some things that will make this project extremely difficult that if I can show I can solve I can de-risk the situation. So thinking about a project from how do I convince somebody this is doable is an important part of it. Maybe in the case of the Golden Gate Bridge, it would be securing access right to an on-ramp. Or if you think the issue is a technical issue, doing are sounding to figure out how deep the bedrock was.

I was sitting out on Cape Cod beach one weekend with some house-guests. And one guys told me he's working on this project. It was very windy out there and he said it's really windy here. I said, yeah, it's always windy here. And he says we're working on something involving that.

And it turned out he was one of the guys from Cape Wind. And what they were doing was securing access rights to land the cables on it. Because if they didn't do that, they couldn't get to the next level.

So that first thing is can you identify credibility testers to reduce the risk. And if you reduce the risk, both for you and for investors, you have a higher probability of success.

The other thing is to think about-- whatever you're doing-- about how to sequence that relative to your resources. So the ideal scenario again, remembering H equals R divided by E, is you want to be able to ideally say I'm going to do X and actually achieve it. And then you can ask for additional resources to do the next step. If you don't plan that out well and you get stuck between tasks, then you might be able to get away with that once. But if you do it a second time, people are going to say, well, I'm not sure these guys can actually execute. So thinking about what are the steps I can do versus the resources in order to achieve something that I can say, look, I've added value so you should give me an opportunity to add even more value.

And I always like to try to avoid dependencies on others if I can. That's a big thing. When you deal with a large company as a start-up, you're moving fast. And what they think is fast is an eternity for a start-up, because they just have cumbersome processes. So if you can figure out how to avoid dependency on them.

We won't cover the lean start-up concept in the class here, but I do recommend the book for you to think about. How do you test out concepts with a minimum viable product? It's a valuable read. And it applies beyond the Web 2.0 area.

And then often there's some things you need in a plan. But this doesn't go in the plan, it goes in the appendices. All of these things about resumes, getting a business plan that has the founder with 15 pages of publications and stuff is just overkill. Put it in the appendices. If you have any of these other things, don't put it in the main plan, have it available.

So now we'll talk about the business plan as a financing document. And think of this about three different levels of reading. The first reading is like a resume. If you make the cut, you get the second reading, which is to figure out if this going to justify the investment. And the third reading is to say, OK, is this a plan that I as an investor and you as an entrepreneurial team can commit to. And the point is if you don't make the first cut, you don't get the second two cuts. So the question is what helps people make the first cut.

And these are some of the things that occur to people. Here's an idea there's just too good to ignore; god, what a brilliant idea. Or a financial promise that's too good to turn down, if you have that.

A team that's good enough to believe in-- most investors will tell you they'd rather invest in a top team, an A team, with a B idea than an A idea with a B team. Because things are going to change. You want to make sure you've got a team that can deliver on it when things happen.

An action plan that's credible and focused. Details to give assurance of insight, commitment, and follow through. And actually a format and style that says these guys are serious about achieving what they want to do.

Some reasons plans fail to make that first cut? One is just an insignificant market. I've seen plans that say our market is going to be $100 million. And you look at the financing requirements and they say we're going to need $20 million. Well, that's just too much money for that size market. So that's an example of either they have to redefine the market or figure out how to do it cheaper.

Non-credible technology-- this is usually not an MIT problem, although the issue can be at MIT that you're much too early along. That is, if it's working on the lab bench, there's a lot of steps until it actually gets into the market.

And then a failure to understand the market can be an example. For example, I was reading a plan that the device clearly required an FDA approval. I mean, I just couldn't believe it didn't. And yet, they never said anything about it. And the question was, well, they should've addressed that. And if I have to pull it out of them, then it gives you a negative feeling about the team.

And then other reasons. The plans is too optimistic or naive. Or maybe sometimes not ambitious enough-- I have a semiconductor device that I'm going to double the speed in five years. Well, that's probably not a big enough improvement. So these are all reasons why things may not get the second read.

There are cosmetic reasons. And I hate to say it, but it's so aggravating to see a team with really good ideas screw up on the basics like misspellings, sloppy stuff. Again, it's like a resume. If you can't get the resume looking professional, why would I even want to talk you or hire you?

So that's see the overview of things tonight for the business plan. Why write a plan or have a planning process, what should be in the plan. Again, at a high level we're going to go into each of the sections over the next six days. And then a little bit of thinking about the plan as a financing document.

And I'd like to leave you at this point with this triangle that we're going to come back to probably each night just to drill it in of what you're trying to do. At the end you're trying to come to a very clear idea of what you want to do, what it takes to do it, and have all the support underneath. And it's an iterative process. Some people think this is all linear-- I think about this, I test that, it moves on. It's very much like science can be-- we try something, it fails, we figure out why it fails, we go back and try it again. But the goal is to find that sweet spot where you can actually make a difference.

So with that, I'll ask if there are any questions. Again, this is a high level, but if there's some things that need clarification, I'll do the questions now.

Otherwise, we'll take a break. We usually say take 10 or 15 minutes and meet the people next to you. Because one of the requirements for the course, if you're doing it for credit, is you've got to put together a written requirement, the executive summary or a pitch deck. We want to try to get teams formed to help you if you're somebody with an idea and you need some people to help, vice versa. Given that it's probably a blizzard out there tonight, I think we'll defer that initial meeting until tomorrow night, take like a five minute break or so.

And we'll get Steve to get stuff, who's going to tell you how to make a pitch. So at the end of the day, after everything you've done, you've got to come and make that pitch. And Steve is going to give you the precursors of that. So we'll come back at about 7:15, give you eight minutes.