

## **FEI Conference Speech**

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**The Role of Myths, Luck and  
Dream Slayers in Innovation**

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Good morning. I am honored, and to be honest quite humbled, to share my thoughts with such a group such a distinguished group. So thank you. Thank you to the conference organizers and thank you for allowing me to share my thoughts on the topic of innovation.

I must admit to being more than a little intimidated about coming to speak to a group of financial executives this morning. Standing in front of the financial executives has always invoked that fear in me. I am an engineer and in the early days of your career, the finance team and mostly certainly the CFO are from a different world.

I recall the first time I was brought in the CFO's office to discuss a new product I had been working on. I had been told that the CFO reviewed each major product development personally and that I should do my best to sell him the idea.

The conversation went something like this: Ty, please come in and take a seat. I understand that you've got some interesting ideas that seem to have got a bunch of folks, including the president, all excited.

Well, the conversation seemed to be starting okay. I relaxed a bit. The president was apparently on my side. This should be easy.

The CFO continued. Well, I am glad to hear the president likes your idea. But I need to make something very clear. I am not the president and I tend to look at things a bit different. You see, Ty, when our president looks out the window, he sees possibility – a field of dreams. But I do not have my head in the clouds. When I look out the window, I see the same field, but to me it is filled with cow paddies. I see a field full of risk where every step is just another opportunity to step in crap. My job as the CFO is manage risk for this company, to ensure we don't step in bogged down in ca-ca as we merrily follow the dreams of our CEO. Do you understand, Ty? This is where the rubber hits the road. I am glad that the president likes your proposal. But understand: projects don't move forward without my approval. And for me, it is all about risk.

And that was the start of my relationship with the CFO. We developed a great relationship and had many a conversation about cow paddies. Some ideas went forward and some did not. But, as you might imagine, every such conversation of this nature was a bit intimidating. And so when I was asked to speak to a crowd of CFO's on innovation, the old anxieties came to the surface.

In keeping with the lessons I've learned from my CFO friends, I am going to focus my discussion on innovation from the perspective of the CFO and the finance team.

I believe the agenda said I would speak to the challenges of innovation in start ups and established companies. I've taken some creative liberties and renamed the title: The Role of Myths, Luck, and Dream Slayers in Innovation.

### **[The Eureka Myth]**

I thought I would begin my presentation with a quick quiz. Does anyone recognize this individual and know why he is important to the topic of innovation?

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No? Well, its early I suppose. This is American philosopher Ralph Waldo Emerson. And why is he relevant to a discussion of innovation? The answer is that Ralph's philosophy is the cornerstone of most innovation strategies. It was Ralph that taught us that "if you build a better mousetrap, the world will beat a path to your door."

And who does not want the world beating a path to our door? That is what business is all about. Business leaders, journalists, and politicians alike are telling us that we must become more innovative. That innovation is the cure to our economic woes. And so with Ralph's famous words in mind, we scurry around in search of better mousetraps.

Unfortunately, Ralph left out a few important details.

- Ralph didn't mention how difficult it would be telling the world about our better mousetrap. He didn't mention that we'd have to market our products and service. He didn't mention that we'd

have to find a cool product name like Imousetrap or Mousetrap 2000 to get peoples attention. Nor did he mention you'd have to put it on the web, find a domain name. Ralph didn't mention that bettermousetrap.com was taken years ago

- Nor did Ralph mention that my I might need FDA approval or ISO certification to sell my mousetrap. He didn't mention I would have implement lean manufacturing techniques and outsource manufacturing to china to ensure I remained competitive with other mousetraps.
- Ralph surely did not mention all the funding required to bring the mousetrap to market. He skipped the part having to write a business plan with forward looking financial projections. He didn't mention that I would have to sell 70% of my company to a greedy venture capitalist to get my company financed.
- And Ralph did not mention that statistically 99% of better mousetraps don't make it to the market. And of those that do, 70% of them fail.

Ralph did not mention these things because Ralph didn't know what he was talking about. Ladies and Gentlemen, when it comes to innovation, Ralph was a liar and a fraud.

To quote the June 2005 edition of the Harvard Business Review:

*The Eureka moment is a hugely attractive idea, full of drama. But the act of inventing and improving is far often a long, hard slog. And the act of capitalizing on invention – of managing the transition from brain wave to the bustle of the marketplace – is really the hard part.”*

Unfortunately, most of the world has no idea that Ralph was such a fraudster. The vast majority of people with an innovation agenda are scurrying around in search of the elusive better mousetrap.

The question I have for you is whether your company falls into that category. Are you waiting for the world to beat a path to your door or are you taking your mousetrap out to the world?

### **[The Role of Luck]**

Now that we have Ralph out of the way, let us turn our attention to the hard part – bringing innovation to life in the marketplace. There is so much to discuss.

I recently read of an interesting study done at Oxford University on this very subject. I thought I would share some of the learnings.

Researchers were investigating successful startup companies with the goal of gleaming lessons for future business students. The research project involved interviewing many successful entrepreneurs and asking them what they believed were the factors that lead them to success.

It turned out that there were many common threads and factors. You already know what they are: market size, leadership, technology, etc. But there was one very surprising factor that was more common than any of those. The factor most often reported was luck. Yes, somehow luck was perceived as a major factor. The luck manifested itself differently. Sometimes market opportunities came in unexpectedly. Sometimes they lucked out a got a great person on board. And sometimes they just got lucky with a customer. But the underlying theme was luck.

As you might expect, the researchers were intrigued. What was this luck thing that everyone talked about? They decided to investigate further.

They put ads into the paper asking for folks that believed themselves lucky. And they put in separate ads asking for people that believed themselves unlucky. They now had two pools of people: people who believed themselves lucky, and people that believe themselves unlucky.

They then took each candidate – the lucky and the unlucky, on their own and gave them a task that would be measured by speed and accuracy. They gave them a newspaper and instructed them to count the number of photographs in the paper. They would be rewarded by their speed and accuracy.

Here is where things got interesting. When you opened the newspaper, one the third page was a giant advertisement that read: Stop Counting, There are 52 Photos in this News Paper. And once again on page 7, there was an advertisement that read “No really. Stop Counting. There are 52 photos.”

The results of the experiment were telling. The lucky group had significantly faster and more accurate results than the unlucky group.

It turned out that most of the Lucky People spotted one of the two clues, took a chance and answered 52. 52 was the right answer by the way. And most of the unlucky people were so focused on the plan – on counting, that they never even saw the clues.

When it comes to innovation, I believe there are some valuable lessons to be learned from that study.

### **[The Role of Dream Slayers]**

The thing that really jumps out at me from that study is the idea that the Lucky Ones took a risk. They departed from the plan – they didn't do what they were told. They still had the same objective but they had the courage to solve it in a different way. Put simply, they were opportunistic in their approach.

Risk and Innovation go hand in hand. This is especially true for nascent or disruptive innovation. Consider the old story about IBM originally estimating that the total addressable market for computers was about four. We laugh at this now but ask yourself, how would that type of market forecast fared in your company's stage-gate process? Would you or your company see the opportunity that laid beyond the unknown?

The biggest failure point of new ventures is when they attempt to scale – before they really understand the market the dynamics. Geoffrey Moore calls this chasm – the enormous gap between having a cool technology and a truly scalable product and business model.

The reality is that one can never accurately forecast the size of a market that doesn't exist yet. And that means that as we introduce new products into new markets, our planning approaches very resemble a process of discovery.

We know that the value of a company is inversely proportional to the uncertainty surrounding the assumptions that make up its business plan. And the truth is that no amount of planning and spreadsheet jockeying is going to firm up those projections. The only way you are going to firm up those business projections is to go into the market, try, and learn.

And therein lies the secret – a learning and adaptive approach to business planning. Don't just ask what the investment dollars will get

you, ask what it will allow you to learn. And don't just learn things about the mousetrap. Invest into the product yes, but also invest into validating the market and customer assumptions.

For example, instead of creating your collateral after the product is finished, build it before and try giving it to a few customers. See who bites and who doesn't.

Learning is another way of saying that you'll trip up and fail along the way. The secret to commercializing innovation therefore is not to avoid failure but rather make failure affordable. Hopefully on average you'll succeed more than you fail as you take two steps forward and one step back.

In essence, you must plan to fail and learn.

Yes, plan to fail. You cannot have innovation in your company without accepting the risks that go with it. And this brings me back to the lessons taught to me by my CFO friend. If finance is about managing risk, and risk is inherent to innovation, then it follows that finance must play a critical role managing in the innovation agenda of companies.

Your philosophy toward risk management will define the success of your innovation agenda. All too often I see companies which say that want to encourage innovation, and then kill that goal by following a strategy of risk avoidance rather than risk management. Risk avoidance is the arch enemy of innovation.

And so, as the head of risk management in your company – you can help lead the company through the myriad of cow paddies, or you can build a fence around that field of dreams – becoming dream slayers.

## **[Summary]**

I believe that I have pretty much used my allotted time so I should wrap up. Very quickly then, my advise for anyone with an innovation agenda is threefold:

Three don'ts:

1. Don't be sucked into the eureka myth. Having a better mousetrap is a necessary but insufficient condition.

2. Don't get too tied up in planning details. Yes, It is important to plan, but it is more important to be lucky
3. Don't be a dream slayer. Your approach to risk management will define whether you and your team are the slayer of dreams or the one who help navigate the cow paddies.

Thank you for your time.