

Speech to the Inaugural class of the Master of Science in Technology Management

Marist College – August 26, 2006

Good morning everyone. I'd like to introduce myself. My name is Jack Eberth and I graduated from Marist in 1969 with a degree in English.

I served in the U.S. Navy for four years as a cryptographer and Arabic analyst. And in 1974, I started my career with IBM as a salesman in the Springfield, NJ branch office working exclusively with Bell Telephone Laboratories.

In the early eighties my wife, Susan and I and our three kids moved to Dutchess County where I worked for IBM for 31 years, retiring last year. I am now working as a Marketing and Sales enablement consultant for GlassHouse Systems out of Toronto, Canada.

My oldest daughter, Kristen, is a Marist grad with a BS degree in Business and Math, my youngest, Cheryl, is a geologist and my son John is finishing his PhD in BioMedical Engineering.

Obviously my kids got their brains from their mom.

When Beate asked me to be the speaker for Marist's first ever cohort of the Masters in Science Degree for Technology Management program, I was honored.....

Then the reality set in, WHAT would I talk about?

- My experience as a Technology management Grad - NO! I haven't done that. At least not yet!**
- Pull from the experiences of others that have gone through the program. NO! Couldn't do that either. YOU are the first!**

Then I realized that that is the beauty AND the advantage of a program like this. YOU will be the first; YOU will have the very unique skills that very few of your peers possess. YOU will be differentiated by the skills you learn in this program and your experiences and your successes will be what YOU want them to be.

Now, I really don't want to talk to you about the program itself, because I'm sure that the faculty has already told you more than you want to know at this time and they are really the experts... not me.

What I can do is share with you some of my own experiences in the world of technology that I have had the opportunity experience with IBM. I also want to

share with you my opinion on how I think this program at Marist is a perfect fit for today's technological world.

Almost two years ago, Dean Fortino and Dr. Klinginberg ask me to help them put together a program to enable technologists manage the business use of technology. This was music to my ears because in the last few years at IBM I worked with an emerging business opportunity (EBO) where we provided engineering on demand services. My role in this EBO organization was to take a few hundred engineers and help them develop the skills that would allow them to function as sales/marketing and general business people individuals in a technology environment.

I was able to develop programs for them ranging from a "mini-MBA" to how to dress, eat and speak when with a customer. However, it was slow going, not as structured as we would like and certainly not a 100% repeatable process that we ultimately needed to use over and over with new employees. My first thought when Andres and Beate came to me was "what a wonderful concept they've come up with." And from an even more practical and broader view, what a great way to solve a growing business need for the majority of technology firms today.

Some of you may be IBM employees but I believe that most of you are NOT. Since my last 31 years have been working for IBM, I'd like to share some of my insights specifically about them.

IBM is one of the leading technology companies in the world. Last year IBM produced more patents than any other company in the world.

20 years ago ALL of the top management in IBM came from Marketing and Sales, ALL with MBA's and most from very specific Ivy League schools. This was also the case with companies like AT&T, Honeywell, United Aircraft, etc. Engineers and scientists were kept in the development labs and research centers and were rarely let out except to go home to eat and shower. Most other companies were no different. A company like Bell Labs (now Lucent) with about 26,000 people in the late seventies had over 12,000 engineers with NO corporate leaders coming directly from the engineering ranks. MBA's were shown off, while technical people stayed in the background unless they were receiving Nobel prizes. (Which was the case 3 times while I was working with Bell).

Then a strange thing happened. We common people discovered cell phones, home computers, laptops, bipods, Tivo and the internet.

Not that long ago, our society, our entire WORLD became more technical and we embraced it. The engineer, scientist, IT guru where no longer the unknown..... they were our neighbors, our friends, our heroes.

The emergence of people like Bill Gates the “super nerd” of all time is viewed as an icon for business leaders. Dilbert, by Scott Adams, is now the MOST quoted author in the general business environment today.

The dotcom boom companies that burst while others survived left a residue of an infrastructure that we model today.

However with the emergence of the engineer came new responsibilities.

In IBM, and other companies, we saw in the early nineties the start of a new phenomenon called “down-sizing”. The idea was that in order to improve profits, we would down-size (fire) people that were not critical to our mission. Thus improving profits by reducing costs.

Generally the first people to go were the non-technical people, because their skills were always easier to find than a technical person. For instance at IBM we let go many of our sales people, which reduced our ability to bring in revenue, which forced us to cut more costs in order to improve profits on the reduced revenue. If you can’t increase revenue then the only other thing you can do to improve profits is to cut costs. So we needed to let MORE people go.

The next group of expendable people were our Planners and financial people. After a short time we realized that without planners, we really didn’t know WHAT to ask our engineers and scientists to build. And without our financial community, we really didn’t really know if we were making any money after we built it.

So, instead of hiring back the planners and financial experts, in order to keep our costs down and to keep our profits up, we “hired from within.”

However, who was left “within?.... IT, Engineers and scientists! We took highly technical people and told them they now needed to think on the other side of their brain and come up with creative marketing, advertising and financial solutions. Were they prepared?

The Project Blue Story

I mentioned earlier that I really couldn’t speak from a position of experience in addressing how this program has helped me or other alums in business today. However, I can share with you an experience that made me a firm believer in this type of program and why I was so supportive when Andres and Beate approached me almost two years ago to help develop this.

In the early nineties, IBM was at a crossroads.... We had been the dominant player in a tremendously fast growing industry. ... Our margins were 800 to 1200% on a premier product line of large mainframe computers.

40% of the entire company revenue of approximately \$60B plus about 70% of the entire corporation's profit came from one area of IBM which is only about 2 miles down the road from here.

We were arrogant and cocky that nothing was more important in people's lives than buying goods from a company that uses an IBM mainframe. We talked to our customers in speeds and feeds, bits and bytes, cache sizes, and price per MIP.

We never focused on the customer's business problems, only on how much hardware/software they would need based on their current growth.

Then the shock hit us. The laptops, the desktops, and the minis had crept up on us overnight and we were surprised. Instead of millions of dollars for a computer with margins of 800-1200%, these upstarts were only charging a few thousands of dollars and they were willing to live with mere 15-20% margins.

Luckily we had great scientists and engineers that had positioned us to take advantage of the new technology, they JUST DIDN'T KNOW IT!.

They had managed the invention through scientific breakthroughs and not based on customer needs and solving business problems.

This is where we saw those individuals within IBM who had the ability and skills, although no formal training, to manage the invention and move it to innovation.

We focused on CMOS, data compression, chip speed, size and heat dissipation. CICS Subspace facilities, and some other acronyms and technical gobbly-guk that I've long since forgotten as have most other people.

What we needed was for our creative thinkers to visualize how these gee-whiz technologies were going to help solve customer problems.

The innovators, people like you will become in a few years, stepped forward and saved the day.

They saw how the smaller cooler technology required less customer resources like space and cooling.

They saw how data compression... the reduction in space required to store data, actually made the cost of buying a multi-million dollar computer less expensive, and in some cases required less money than what they were paying today.

They saw how the technology increased reliability which allowed our customers to perform more work and avoid costly errors.

They put the technology into terms of value that our customers understood and embraced.

NONE of these people were Inventors, but they were all INNOVATORS.

I may not have portrayed this example as dramatically as I would have liked but had we not had these people with their creative skills step forward..... IBM..... myself..... some of you..... and possibly even Marist College would not be here in it's prominence today.

A simple story with extreme ramifications.

One other quick real life example of how invention to innovation can make a difference. This one may be a bit more germane and shows the advantages to you as an individual rather than to a multi-national corporation.

A few weeks ago I had the pleasure to join some other Marist alumni and employees on a magnificent yacht out in Rhode Island.

The owner of this gigantic boat is a mid-80's Marist grad who has done VERY well in his career.

The reason that I mention this story because of what he told me about HOW he made his millions.

After graduation he had some failed business experiences and was at rock bottom when an opportunity arose.

He met someone in waste management... who had a marginal business. The business model was sound, the infrastructure in place but the execution, spotty.

Our Marist alum looked at the business model and realized that he could make it better. He told me that his training at Marist helped him "THINK" of a better way, to innovate and problem solve.

He applied some supply chain management processes, accounting fundamentals, organized pick-up, tipping fees, asset usage, work schedules, etc. To make the company VERY profitable.

He was so successful with this venture that he offered his services to other waste management companies as an “out sourcing” service.

This year, his out-sourcing services will gross over \$400M in revenue.

He didn't INVENT garbage or the supply chain software and processes, or even the accounting principles... he only saw their practical application in the waste management environment. He innovated the application to fit the need.

I used these two examples because I feel that these are the environments which will create future opportunities..... for people like yourself.... to step forward and make a difference in the your own life and in the world.

I think what this Masters in Technology Management program will do..... is to elevate your problem solving capability to a different level.

It will attempt to get you to think on the OTHER side of your brain.

Remember that when you are asked to solve a Business problem don't think of a “successful implementation” as the end result.

One of the things I liked to talk to our customers about when we were called in to solve a specific problem was the measurement of the end result. Most technologists expect that a “successful implementation” is the end goal. I tell them it is NOT. It is only a step to responding to the customer's need.

An example could be one of the many SAP installations that were put in throughout the nineties. Most were successful implementation but never realized the value promised!!

Think about what business problem you were asked to solve.

What keeps the CEO up at night?

For instance was the successful implementation of a wi-fi system the problem or was the business problem the easy accessibility of corporate resources to the user community? The wi-fi implementation may be a piece in the puzzle.

Think in the totality of the problem, user accessibility resulting in higher productivity, more sales, better and more accurate communications.,

ALWAYS think about the Value propositions for what you are doing. This is one of the major differences in being an innovator. So you focus on the value anticipated and value received rather than JUST the successful implementation.

I'd like to leave you with a few parting thoughts and comments;

This program will not make you successful.

It does NOT replace common sense and skills.

And it's NOT a 12 step approach to success.

You will be successful if you learn how to apply what you learn into your every day work experiences.

What I hope that you will learn here is that technology for the sake of technology means nothing..

BUT the application and proper management of that technology can lead to innovation and the successful solving of key business problems.

MY RECOMMENDATION TO YOU IS TO :

INNOVATE rather than INVENT !