Michael Pennotti

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Stevens Institute of Technology

Place of Birth: Queens, New York (USA)
Current Residence: River Edge, New Jersey (USA)

Years in systems engineering: 46!
Year joined INCOSE: 2004
Roles in INCOSE: INCOSE Institute for Technical Leadership – Coach; INCOSE Fellow

"I believe systems engineering leaders must see the forest *and* the trees … but avoid the weeds."

What are the top 3 attributes of a successful systems engineering leader?
I believe systems engineering leaders must:

- See the forest ***and*** the trees … but avoid the weeds
- Fill in the white spaces and connect the dots
- Focus on results, not just deliverables

You have worked on anti-submarine warfare systems, business communications, people strategies and more – what was the most challenging?
All three were challenging. The progression was like a series of concentric circles that reflect the way systems engineering problems expand, from mostly technical, to larger business issues, and finally, to encompass entire enterprises.

Early on, the challenge was to overcome limitations imposed by the laws of physics to solve complicated technical problems. In the second phase, developing great technical products was no longer enough. We also had to break down functional stovepipes to develop/deploy cross-functional processes that enabled us to design, build, market, distribute and service those products.

Finally, in my enterprise phase, the challenge was overcoming organizational inertia to align 27,000 people across a global business to execute a strategy for success in a rapidly changing technical and industrial landscape.

If you could be a systems engineer in any industry that you have not worked in, what would it be?
I really like transportation – from smart cars to sustainable infrastructure to intelligent highways to more efficient air transport.

Where do you see INCOSE going in the next 25 years?
I'd like to see INCOSE make good on its commitment to provide benefit in non-traditional domains. We need to modify some of our orthodoxy and translate our principles/approaches into the languages of different domains and industries.