# Practice Periodical



ASEM was started in the middle of America nearly 50 years ago. Since then the society has reached a tipping point. Over the last few years we have been able to consolidate and expand the various valuable services that we

provide to our members. Publications, virtual and face-to-face networking opportunities, training, sponsorships, AEM/PEM certification, master level certification programs, the EMBoK, the EM Handbook - the intrinsic capital that our society has to offer has never been greater.

Now it is time for us to share all this expertise with the world; for the benefit of our society, for sure, but more importantly, for the benefit of all. Both the core knowledge and spirit of our professional society — bringing people and technology together — will be essential for EM leaders facing the global challenge of increasing complexity.

And that is exactly what we are doing. Already 40% of the EMJ reviewers are international. A large portion of our LinkedIn members come from around the world. Fourteen different countries will be represented at the 2014 International Annual Conference, with almost 15% of the abstracts coming from international presenters. But more needs to be done. Several countries are reaching out to us for training, certification, and knowledge sharing; they are knocking at our door! Let's provide them a warm welcome, while even further stretching the value that we provide.

It truly will be an honor to serve as the first international ASEM officer. Join our team if you too are looking for an opportunity to serve with a purpose. Practitioners, academics, and students from around the world, together, we can make a difference by building a global ASEM family!

Geert Letens, Ph.D. 2014 ASEM Secretary

It is not enough to do your best; you must know what to do, and then do your best.

~ W. Edwards Deming

## ASEM 2014 INTERNATIONAL ANNUAL CONFERENCE

Entrepreneurship Engineering:
Harnessing Innovation
October 15-18, 2014 in Virginia Beach

Early registration ends on August 15, 2014

Conference Venue and Hotel:

Hilton Virginia Beach Oceanfront Hotel 3001 Atlantic Avenue, Virginia Beach, USA ASEM special room rate of \$129/\$149 is available for a limited time through this link.

Airport serving Virginia Beach:

<u>ORF</u>: Norfolk International, 18 mi. from hotel. <u>PHF</u>: Newport News/Williamsburg Intl., 44 mi.

#### **KEY DATES**

The abstract submission phase has concluded and we are currently in the paper submission phase. Upcoming deadlines for the conference are as follow:

16 June, 2014 Paper submissions

21 July, 2014 Paper acceptance notification

4 Aug, 2014 Final paper submission

15 Aug, 2014 Presenting author registration

For more information on submission and conference technical contents, please contact one of our technical chairs:

Dr. Suzanna Long, longsuz@mst.edu

Dr. Ean H. Ng, ean.ng@oregonstate.edu

Dr. Craig Downing, downing@rose-hulman.edu

#### **GUEST COLUMNIST**

### **Managers Can Make a Big Difference**

By: Donald Kennedy

Looking through some of the titles of works by Douglas McGregor before he published *The Human Side of Enterprise,* it seems clear that he was well on the way to developing his concepts more than 60 years ago. As happens often in the world, the common understanding of what he said is not really what he did say and he could see that his work was being misapplied. In a very basic level, what McGregor said is "Managers greatly influence outcomes."

Over my career, I have seen people be promoted quickly into a management position because of their proficiency at doing real work. (This is in keeping with the "Peter Principle" - which again is commonly viewed as simply a joke, not realizing it was the result of intensive research bv Laurence Peter). Sometimes these newbie managers have the good fortune of being placed in charge of a mature team with the workers mostly knowing what they are supposed to be doing. In some choice industries, margins are high due to external circumstances and the business continues as usual. This new manager may wonder if they are doing anything at all, and does their presence have any significance at all? The findings of Douglas McGregor say that they do and it does.

My experiences in observing others agree with Michael Badawy's comment that most engineering managers find themselves in management for the wrong reasons. The typical reasons are for the pursuit of more power and / or money, nicer office and the prestige. The concept of a parallel technical career track for engineers who eschew management seems to have not been widely adopted. Badawy said that the best motivation for entering management should be a desire to direct and work with people. As it is, these new managers often are not really sure what they should be doing. So typically, they just look around at the other managers and copy what they see, paying special attention to the behaviors of their superiors (if I behave that way, maybe I too can move

up). This is an example of McGregor's concept because the actions of the upper managers are creating the work environment of those below.

McGregor's message was one that encouraged awareness of your actions in a managerial role. If you are wondering about your role, whether you are making the right decisions, and what sort of outcomes should you be looking for, the answer may not be to simply look at what your peers are doing. What if they are just like you and are simply winging it by copying the actions of their predecessor. By learning what management is, how to recognize desired outcomes, and what these desires should be, one can turn confusion and fear into a rewarding experience.

#### Reference

Badawy, Michael K. 2004, "Why Managers Fail," in Ralph Katz, editor, The Human Side of Managing Technical Innovation, second edition, pp. 86-93.

McGregor, Douglas M., 1960, *The Human Side of Enterprise*, McGraw-Hill.

Peter, Laurence J. and Raymond Hill, 1970, Why Things Always Go Wrong, Bantam Books.



**Dr. Donald Kennedy,**Ph.D., P.Eng. is a long time attendee of the ASEM international annual conference.
His two books "Flogging

the Innocent" (2010 Freerange Buddy Publications) and "It Works in Theory" (2014 Decabooks), explore similar ideas in the application of EM principles to practice.

#### **WEBINARS**

ASEM webinars are complimentary for members. To register for the webinar, please send an email with the subject line "ASEM Webinar" to <a href="mailto:asem-hq@mst.edu">asem-hq@mst.edu</a>. Upcoming webinars include:

Economic Analysis – Part 2 (12 June, 2014) Publishing in EMJ (June/July 2014)

Please visit the ASEM web site at <a href="http://www.asem.org">http://www.asem.org</a> for more information.

#### **BOOK DIGEST**

Book: Turn the Ship Around! How to Create Leadership at Every Level, 2013, David Marquet, Portfolio Hardcover, ISBN-13: 978-1591846406. By Harry Juneau, Ph.D., PEM.

"You know you have an emancipated team when you no longer need to empower them. Indeed, you no longer have the ability to empower them because they are not relying on you for their sources of power" – David Marquet, p. 213

Command-and-control organizations pay knowledge workers to think and pay everybody else to comply with orders. The resultant leadercompliance, follower structure sets independent critical thinking, as the objective and management making decisions in a vacuum without broad employee input. The leaderfollower structure is outdated and saps energy, initiative, and curiosity - our most valuable employee contributions. Consequently, leaderfollower is fundamentally coercive and no longer the most effective model for human interaction.

Conversely, leader-leader structures have thinking people at all levels of the organization. Efficacy and the pursuit of excellence in operations are the objective. Instead channeling information up a chain to be distilled and decided upon by those at the top, they disaggregate decision authority and push it to those who have the information. Agility and speed of decision-making increase and the organization responds to changes in technology or the external environment more rapidly. Resilience and adaptability naturally follow and, as a result, endurance. In summary, the leaderleader structure evolves organizations into effectiveness systems where increases exponentially over time.

In the book titled "Turn the Ship Around!" by CAPT L. David Marquet (Retired) demonstrated examples on how to shift the leadership paradigm in a well-established command and control organization are provided. His revolutionary approach rests on the following pillars:

<u>Control</u>. Give control, don't take control.

<u>Competence</u>. Create technical competence in the workplace.

<u>Clarity</u>. Be honest, public, and clear about the organization's goals.

<u>Courage</u>. Resist the urge to follow cultural stereotypes of the "in charge" leader.

If you are currently an Engineering Manager or evaluating a prospective hire's leadership potential this book is a must read. One fundamental question needs to be answered after reading the book:

What legacy will (did) I leave for those that follow? The response will provide insight on their effectiveness for building team capacity, promoting creativity of their employees, and creating new leaders in the organization. The idea is to separate the "take control, attract followers" personalities from the "give control, create leaders" people. If you have an organization that depends upon the creativity, passion and intellect of people, you want to be the second type of Engineering Manager.

#### WHAT'S YOUR TAKE?

Last issue's challenge: What was the best management advice you ever got?

*William Daughton* – Never wrestle with a pig in the mud. You both get dirty but only the pig enjoys it.

*Kim Needy* – During a conflict, be sure to hear all sides of the story before making a decision or ruling.

Neal Lewis – Think asymmetrically. Optimistic and pessimistic estimates are rarely symmetrical about your best estimate.

Jerry Westbrook – Engineering Management is about people, processes, and resources but it starts with people. Letting people do what they are capable and willing to do is the key to success.

Susan Murray – Ethics is a requirement, not a luxury.

This issue's challenge: What is your advice for working internationally?

Email your take on the question to <a href="mailto:news@asem.org">news@asem.org</a>. The winner, selected by Auntie EM, will receive an ASEM prize. Look for the winning advice in our next issue.

# GUEST COLUMNIST Participating in ASEM Student Case Competitions

#### By Heidi Ann Huettner

Heidi participated in 2012 & 2013 competitions

Competing in the ASEM case competition was great both years I participated. The first year, I didn't quite know what to expect but I was on a strong team and we learned a lot. We ended up tied for first



place which was an amazing accomplishment. The second year, I went into the competition with my experience from the first year and felt more prepared. Even though we didn't win that time, I still learned valuable lessons on what it means to work on a team in a high pressure situation.

Just attending conference was a lot of fun too. It was a superb way to network with other people (both industry professionals and other students) involved with Engineering Management. I was really delighted to meet other students who were EM majors. My school had a small EM program so it was really neat to meet others around the country pursuing the same degree I was.

I graduated from the University of Arizona this past December. As I was going through interviews for various companies last semester, a lot of the interview questions were behavioral based (for example "Tell me about a time you were in a difficult situation and had to work on a team to accomplish something new?"). I was often able to utilize my experiences with the ASEM conference case competition. I found this to be a really valuable example to use in interviews and I my interviewers always found my stories intriguing.

I'm now working for General Motors doing software development and I know what I've learned at conference partly helped me to get here!

## **Editors' Note: About Student Case Competition**

The ASEM Student Case Competition is an annual competition that is run concurrently with the ASEM International Annual Conference. A team of four students will have four to six hours to prepare a solution to a case study using engineering management tools, and will have 15 minutes to present their solution to a panel of judges and five minutes for Q&A, which is open to the public. The competition is divided into graduate and undergraduate competition.

**Eligibility:** University and colleges that offer engineering degree are eligible to send one team of four undergraduate students with declared major in engineering. For graduate team eligibility, please contact Dr. Sedrick.



Interested in participating or getting involved in Student Case Competition? Please contact our perennial ASEM Student Case Competition Chair,

Dr. Greg Sedrick, greg.sedrick@mtsu.edu.

## American Society for Engineering Management

The society that speaks for the engineering management profession across the world



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