

Technical Meeting

Topic: A Road Map from Lean to Agile Manufacturing (a System Approach)

Speaker: Dr. Mohamed Gadalla

Date: Thursday January 22, 2009

Time: 6:00 PM (Social Gathering)
6:30 PM (Dinner)
7:30 PM (Presentation)

Place Sovereign Hotel (Best Western)
1228 Western Avenue
Albany, NY 12203
(Across from SUNY – Albany)

RSVP by Monday (Noon) January 19, 2009

Contact:

Lewis Stitt (Ph: (518) 266-3540 Email: stittl@asme.org or lstitt_02@earthlink.net).

E-mail contact is preferred.

Abstract:

Lean or world class manufacturing is highly proficient in a controllable environment. Agile manufacturing is concerned with activities in a non-controllable environment. The manufacturing paradigm is moving away from the current transfer line concept (originally developed by Henry Ford) due to of intensifying global competition, mass markets fragmenting to niche markets, increasing partnerships among companies, customers preferring lower volume and high quality, custom products, shorter product life cycles, development time, and production lead times.

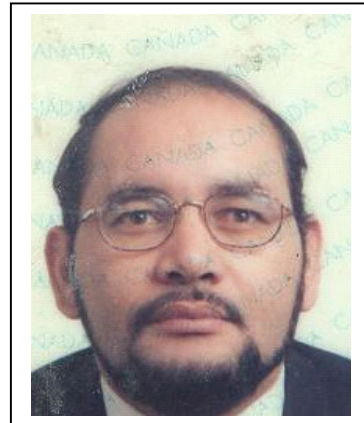
In a broader sense, this effort can be classified into two main categories. In the first, the development efforts are concentrated on increasing system efficiency through development and enhancement of hardware, software, and automation tools intended to increase system flexibility. This added flexibility is normally geared to accommodate variations in lot sizes, different operations, and product mix.

Flexible Manufacturing System (FMS), group technology, manufacturing work cell, and Computer Integrated Manufacturing (CIM) systems are good examples of these efforts.

In the second, the focus is on operation management, where new tools and strategies are being adopted to further control the manufacturing planning, decrease scrap rates, eliminate waste, decrease or eliminate Work In Process (WIP), and finally structuring the companies around their value stream(s). Lean manufacturing, six sigma, Total Quality Management (TQM), Quality Function Deployment (QFD), and Lean management are good examples of these efforts.

In this presentation, high level abstraction (system approach) will be discussed to recognize the next developmental step after being Lean. A proposed trip from lean to agile is suggested. This trip is based on the concept that there is a road map from current to agile. The different benchmarks, of that road will be recognized according to their precedence order.

Speaker:



Dr. Gadalla is currently an assistant professor in the Mechanical Engineering Department at Central Connecticut State University.

Dr. Gadalla has a Ph. D. in Mechanical Engineering from the University of Western Ontario in Canada. He graduated with honor from Cairo University with B.Sc. in Mechanical Engineering followed by a Master degree (M. Sc.) from the same university.

Dr. Gadalla served as a research engineer and visiting scholar in several universities in USA, Canada, Germany, and Egypt. He also served as a program coordinator for the

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computer Integrated Design and Manufacturing at Kean University.

He joined industry as an application engineer designing Computer Maintenance Management (CMM) programs for two years. He also worked in industry as a CNC programmer and manufacturing engineer in US.

He has over 32 papers in refereed journals and conference proceedings, including some on curriculum research, and workforce development.

Dinner:

This event is a seated dinner, with appetizer, salad, entrée, and desert. Drinks can be purchased from the bar. Dinner choices include:

- Chicken Pistachio
- Baked Stuffed Fillet of Sole
- Asian Stir Fry Vegetables

Cost:

\$20 – Members and Guests (only one guest per member)
\$25 – Non-Members
\$10 – Students (with current College ID)
Free - Lecture Only (No Dinner)

The Hudson Mohawk section of the ASME is subsidizing this meal. Students from all local colleges (with valid student ID's) are welcome and will be charged the discounted student fee.

Reservations:

To reserve your seat, contact Lewis Stitt, Ph: (518) 266-3540, Email: stittl@asme.org or lstitt_02@earthlink.net by noon January 19th. Please specify entree choice. E-mail contact is preferred.

If you are attending the lecture only, please respond anyway so we can arrange for adequate seating.

Letter from the Chair

Our December event "Silent War", a talk by Ray Misiewicz about how nuclear submarines were used to conduct special operations to acquire intelligence information during the Cold War was very well attended. Over 40 people showed up, requiring the Italian-American Community Center to move us to a larger room. This talk was fascinating. If you missed event, Mr. Misiewicz is offering the same talk at the Guilderland Public Library on Thursday January 15th at 7 PM. See <http://www.guilpl.org> for details.

We have a full line-up for the remainder of the Winter and Spring of 2009 please see our website "Calandar of Events" for details.

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Distribution of Section Newsletter

The Hudson Mohawk newsletter is posted at:
<http://sections.asme.org/hudson-mohawk/>

Once each newsletter is posted on the Section's web page, an e-mail notification and link to the above website is sent to members who have e-mail addresses in the ASME member database. If you are an active member of ASME and did not receive an e-mail notification, please go to the ASME web site and update your membership information. Additionally, please make you're your e-mail service does not block e-mail sent from ASME.

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