IEOM Industry Solutions

Achieving and Sustaining Operational Excellence

IEOM Industry Solutions sessions will showcase the industrial case studies and their impacts of the industrial solutions using IE / OM tools and techniques (lean, six sigma, FMEA, simulation, design of experiments, optimization, TOC, PLM, CAE, statistical analysis, etc.) IEOM 2015 Orlando Conference will have a dedicated session for the Industry Solutions where distinguished practitioners provide their presentations including their experiences and journey to be successful. Twenty four speakers will be from various part of the world to address industrial challenges and opportunities for continuous improvement and sustainability.

DISTINGUISHED SPEAKERS

Thursday (September 10, 2015)

11:30 - 12:45 Industry Solutions I (Thursday) - Salon 6

Session Chair: Dr. Jeanann Boyce, Montgomery College, Maryland



Nikhil K. Joshi

CEO SNic India Vijayanagar, Bangalore India

Nikhil Joshi is currently the CEO of SNic India, a firm specializing in Industrial Engineering, Simulation, Planning, Scheduling & Optimization solutions to enable Cost Reductions and Productivity Improvements in Business. After his degree in Industrial Engineering & Management from M.S. Ramaiah Institute of Technology Bengaluru, Nikhil became a co-founder of SNic India.

The idea initially, only to apply the industrial engineering passion to different business grew into combining fundamental concepts of Operations, Industrial Engineering & Supply chain with Technology to provide solutions that can provide sustainable business Improvements. He also has a Masters Degree in Consultancy Management from BITS, Pilani and has created proficiency in running a professional services firm. Nikhil is passionate about making a difference in the lives of today's engineers, and is working on creating innovative solutions for business organizations that are seeking solutions to sustain cost reductions and productivity improvements.



Saurabh Gupta

Head, Process Excellence ILTD, ITC India

Successful Lean Six Sigma Deployment in Non-Traditional Setting of Agri-Business

Mr. Saurabh Gupta established Process Excellence Function for Leaf Tobacco Division of ITC in April, 2013 with the launch of division wide Lean Six Sigma Deployment iPIPs (ILTD Process Improvement Practices). Mr. Gupta joined ILTD as Management Trainee in 2011 after completing

B.Tech in Electrical Engineering from Indian Institute of Technology Delhi. Mr. Gupta led numerous Process Improvement Projects across different functions of Tobacco and Spices Businesses before launching iPIPs. In 2012, Mr. Gupta established Quality Assurance Cell for Spices Business and achieved BRC Certification with Grade A for its processing facility. Under iPIPs, he has led 70 Lean Six Sigma projects and coached 200 managers so far. Mr. Gupta has contributed to the divisional value touch points through projects executed in the following focus areas: Service Improvement, Product Consistency, Purchase Price Optimization, Yield Improvement, Capacity Enhancement, Manpower & Inspection Rationalization, Energy Consumption Reduction, and Packing Material Wastage Reduction and has already saved 5 times the total cost of the initiative to the division ranging from training to manpower deployment.



Dr. Jeanann Boyce

Professor, Business, Economics, Accounting Computer Applications and Paralegal Studies (BEACAPS) Montgomery College Takoma Park / Silver Spring Campus Takoma Park, MD 20912

Sustainable Technologies: The Impact Neuromorphic Chips on the Future

Abstract: The presentation will analyze some of the latest developments in computer science algorithms that relate to changes in future technologies. Neuromorphic engineering is a new interdisciplinary subject that combines aspects of biology, physics, mathematics, computer science and electronic engineering to design artificial neural systems, such as vision systems, head-eye systems, auditory processors, and autonomous robots, whose physical architecture and design principles are based on those of biological nervous systems. Previous work in exoskeletons is now being expanded to link embedded computer sensors into neural networks to bypass normal motor functions and movement into the brain with computer software. This arena holds great promise individuals who has missing limbs or damaged spinal cords.

A fascinating emerging technology is the development of microprocessors based on biological models of the human brain. Robert D. Hof (2014) calls these chips, "neuromorphic," though they are still silicon-based. Hof states, these chips, "are designed to process sensory data such as images and sound and respond to changes in that data in ways not specifically programmed." (p.55). Multiple uses are proposed, from medical tracking devices to more accurate facial recognition. The limitations include the use of very fast parallel processors which add to the cost. Also, the accuracy of the technology is limited by the abilities of programmers to accurately make predictions about the sensory input and have the chip incorporate this data into future activities. So the question arises, "Can computers really learn and adapt?" and "Should we incorporate Asimov's three laws of robotics as an ethical foundation for building and constructing these devices?"

The last component of this presentation will focus on the ethical and legal aspects associated with advances in neurotechnology. These areas include autonomy, culpability, and sustainability within the larger population. Some time for discussion and questions will be allowed at the conclusion.

Bio: Dr. Jeanann S. Boyce has extensive experience as an educator and trainer in Education and Computer Systems over the past thirty years. Her wide teaching background spans business, computer, and management courses from the undergraduate through doctoral levels. She is currently teaching Computer Science and Computer Applications, Montgomery College, Takoma Park Campus, of Maryland. She specializes in teaching artificial intelligence programming and systems and intelligent agents. In addition, she has served as a lead faculty involved on the 11-school Advanced Technology Centers Cyberwatch grant for the National Science Foundation since the inception of the program and sits on the planning committee for the Cybersecurity Information Systems Security Colloquium which helps define security training for the post-secondary level.

Dr. Boyce is recognized as a leader in and technical education training. She is an active professional who has written many articles and presents regularly at national and international technical education conferences. She has maintained a currency in technology through continuous consulting and writes on neurotechnology and ethics. She is certified in a Capability Maturity Management and Configuration Management from the Software Engineering Institute of Carnegie Mellon University and is an evaluator for the American Council on Education. Her current research interests include systems process improvement and the optimization of virtual environments.

13:00 – 14:00 *Lunch Keynote:* Thomas Seubert, North American Delivery Lead for Manufacturing Execution Systems, Tata Technologies, Novi, Michigan, USA

14:00 - 14:30 Networking Break

14:30 - 15:45 Industry Solutions II (Thursday) - Salon 6

Session Chair: Dr. Sushil K. Shetty, Lean Specialist II, Temple, Texas, USA

2:30 – 2:55 pm



Dr. Ishtiaq Hussain

Manufacturing Lead General Motors Corporation World Headquarters Pontiac Michigan USA

Dr. Muhammad Ishtiaq Hussain is Adjunct Faculty in Lawrence Tech University. He earned his Doctoral of Engineering in Manufacturing Systems (DEMS) and Master of Engineering in Manufacturing Engineering (MEMS) Degrees in May 2008 from Lawrence Tech University, Michigan, USA. He also earned Master of Science in Quality from Eastern Michigan University in

2003. Dr. Hussain is a certified DFSS Black Belt from General Motors University and CMI from ASQ. He is currently working in General Motors Corporation Headquarter in Powertrain division in USA. Dr. Hussain has expert level knowledge in the following disciplines.

- Design of Experiment (DOE)
- Statistical Process Control (SPC)
- Geometric Dimensioning and Tolerances (GD&T)
- Design for Six Sigma (DFSS)
- Manufacturing Processes & Technology
- Gauging and Inspection (GR&R)
- Process Quality Analysis
- Machining Expert and MQL (green manufacturing) Expert

Dr. Hussain is a source of knowledge to all the GM machining plants. He has launched many New and major GM Powertrain engine programs. Dr. Hussain authored and published several papers in machining and measurement systems.

2:55 – 3:20 pm



Sushil K. Shetty Ph.D. Lean Specialist II Temple, Texas, USA

Listen to your Employees as much as you listen to your Customer

Abstract: Lean Six Sigma's foundation is all about understanding the 'Voice of the Customer', Needs of the Customer, etc. etc. As much as this is of key importance, I believe that when it comes to improvement of process, understanding and learning from an employee, directly working on the task, is the most important piece to solving the puzzle with reference to that

customer need. Organizations that have succeeded doing continuous improvement have made this a key focal point of their journey. Studying and learning from an employee can reap tremendous benefits for the Continuous Improvement (CI) Process. During this session you will be introduced to a method and tool called EPLIT that is used to gather employee feedback regarding a Kaizen or a CI activity.

Bio: Sushil K. Shetty has completed his Doctorate in Industrial Engineering from the University of Alabama and is currently working as Lean Specialist II for Wilsonart in Temple, TX. He has 8+ years of manufacturing experience in a variety of industries, such as, automotive, apparel, consulting and engineering surfaces. He has always held roles that dealt with process improvement and process design. In all his roles he has worked with both, management at all levels and with people on the frontline to provide long lasting solutions to the organization while saving millions of dollars to the bottom line.

He is currently working with a group of researchers across 3 continents and 8 universities to study employee perception of Lean implementation in the healthcare industry.

3:20 - 3:45 pm



Dr. Joseph M. Ogundu, MBB

Principal – Emerald Global Consulting Inc. West Bloomfield, Michigan, USA

A seasoned lean and operations leader with extensive experience in leading change through application of lean business principles, six-sigma, operations management and business process excellence in the automotive, Oil and Gas, Energy and other manufacturing industries and non-manufacturing industries. A hands on executive with the leadership credentials in starting new organizations/departments, directing and managing activities of multiple and large scale operations. A change agent that understands the impact of change in an organization and its

employees. Experienced in cost savings, cost control, budget control, profit and loss, quality deployment, strategy development and implementation, Quality systems and total quality management. Experienced coach and trainer of lean business principles, Lean Six-Sigma, continuous improvement, project and program management.

15:45 - 16:00 Break

16:00 - 17:15 Industry Solutions III (Thursday) - Salon 6

Session Chair: Foad Hosseinkhanli, Amor Health Services, Inc., Brownsville, Texas, USA

4:00 – 4:30 pm



Gil Lugo

Certified RABQSA (Exemplar Global) QMS Lead Auditor Certified SCS FSC & PEFC CoC Lead Auditor

President Green and Sustainable Solutions, Inc. Fort Lauderdale Florida, USA

"Battle of the Improvement Methodologies"

We've all heard people say "...if we hadn't implemented LEAN we wouldn't be in business

today..." or my boss just got back from a conference and we have to do Six Sigma today or, I just read "The Goal" and we have to implement Theory of Constraints (TOC) right away. How about," we have to be ISO certified because our biggest customer will stop buying from us if we're not. With so much hype and emotion about these methodologies how do we choose the "BEST" one? Today we'll explore these "Improvement Methodologies" to get the answer to the number one question clients ask. "Which methodology is really the best one?" And more importantly WHY is it the best one for my organization?

Gil Lugo, President of Green And Sustainable Solutions, Inc., will share with us his many years of experience training and implementing ISO 9001, ISO 14001, OHSAS 18001, LEAN, Six Sigma and Theory of Constraints (TOC) during a presentation titled "Battle of the Improvement Methodologies". After many years of successfully implementing all these methodologies in all types of organizations he felt that there was still something missing. Mr. Lugo will provide many examples illustrating that by themselves each methodology works but the road to long term sustainable success can be harder and more complicated depending on how, and when, each methodology is implemented. Join us for this informative and revealing presentation which will help you determine which methodology is right for your organization.

Bio: GIL LUGO is a dynamic and articulate individual with over thirty five years of extensive and diversified experience helping companies reach exponential profitable growth by training and deploying methodologies such as Lean, ISO based Management Systems, Six Sigma and Theory of Constraints. Mr. Lugo specializes in "fixing broken companies and making good ones even better". An English-Spanish Bi-Lingual who is an accomplished Auditor, Leader, Mentor and Trainer. Mr. Lugo has set up, owned and operated companies in various countries. In addition Mr. Lugo was employed by the National Institute of Standards and Technology (NIST) sponsored program known as The Florida MEP where he was awarded "The Above and Beyond Award for Outstanding Contribution to the Vitality and Prosperity of American Manufacturing".

Mr. Lugo has a Bachelor of Science Degree in Mechanical Engineering, is an Exemplar Global (RABQSA) Certified Quality Management System Lead Auditor, an SCS Global Lead Auditor for FSC, PEFC & SFI CoC. He is an Expert Trainer and Implementer of LEAN Enterprise, TOC "Theory of Constraints", Six Sigma and ISO based Management Systems. Additionally, Mr. Lugo was the General Manager and Co-developer of ISO Training and Auditing Curriculum for an Accredited ISO Registrar. Mr. Lugo is also certified by Exemplar Global (RABQSA) and to teach the ISO 9001, ISO 14001 and OHSAS 18001 Lead Auditor Courses.

Mr. Lugo has published articles in numerous Trade Journals, is an Adjunct Professor at Palm Beach State College and has been a guest lecturer at: FAU School of Engineering; Broward College; Construction Standards Institute; US Small Business Administration; the South Florida Manufacturers Association (SFMA) and the American Society for Quality (ASQ) to name a few.

In addition Mr. Lugo is the Chairman of the Society of Manufacturing Engineers (SME) Chapter 150, the past Chairman of the American Society for Quality (ASQ) Section 1515, on the Industrial Advisory Committee for the Florida Advanced Technology Education and a member to the US TAG (Technical Advisory Group) to ISO/TC 176 (Quality Management) & TC 207 (Environmental Management).

4:30 - 5:00 pm



Foad Hosseinkhanli

Director of Quality Assurance Performance and Business Improvement Amor Health Services, Inc. Brownsville, Texas, USA

Quality Assurance, Performance and Business Improvement: A Lean Six Sigma Approach

Mr. Hosseinkhanli is Director of Quality Assurance, Performance and Business Improvement Amor Health Services, Inc. in Brownsville Texas USA. He was General Manager of Almana

Trading in Doha Qatar Middle East and responsible for all aspects in creation and implementing of successful growth of new

market development and turn- key operation for various products. Mr. Hosseinkhanli was involved with financial negotiation with national and international banking, corporation, private sources and trading organization. Volvo International Development Corporation, Gothenburg Sweden, Marketing Director For The Middle Eastern Countries, UAE, Saudi Arabia, Bahrain, Turkey and Iran. Negotiated and established exclusive franchise agreement and turn- key operation. Did market analysis and feasibility studies for Volvo International in the Middle Eastern countries and increase annual sales in excess of 55%. Chief Industrial Engineer, United Carr, manufacturer of plastic knobs for Automotive Industries, Knoxville Tennessee USA.

His education background is: Master of Business Administration from IMMEDE Management Institute in Lausanne Switzerland majoring in financing. Bachelor of Science in Industrial and System Engineering from University of Rhode Island in Kingston Rhode Island USA. Certified Business Analyst from International profit Association in Buffalo Grove IL USA. Certified Six Sigma Green and Black Belt from Institute of Industrial Engineers.

Extra Curriculum Activity: Senior Member of Institute of Industrial Engineers, Senior Member of ASQ and Senior Member of Swedish Method and Time Measurement Language: Fluent in English, Swedish, German, Turkish, Farsi and some Spanish.

5:00 - 5:30 pm



Ahmed Al-Jabr, CMBB

President, Saudi IEOM Society Dhahran, Saudi Arabia

"Challenges and Opportunities of Lean and Six Sigma for Saudi Industries"

Ahmed Aljabr is a president of IEOM Society – Saudi Arabian Chapter, as quality engineer and Six Sigma Mater Blackbelt Certified, his experience span most industries and operational areas including working in different successful project, such as working win the International Automotive Components (IAC) to install a solar photovoltaic panel system within their facility, *Whitlam Label Company* (WLC) to layout the travel distance to minimize the non-value added transportation time on their factory, and Shiloh Industries Inc. through a Six Sigma project with an annual cost savings of over \$500,000, figured how the process was mapped, characterized, analyzed, improved and controlled, and explore which tools were used to quantify the amount of variation

within the process as well as the cost of that variation.

He is an expert in the areas of Lean Six Sigma, Continues Improvement, Quality Management, Lean Manufacturing, Operational Excellence, Optimization, Strategy, Project Management, Supply Chain Management, Public Relation, and Global Leadership. He is an active member of SAE, IIE, ASQ, ASME, LEI, IEOM, and SME. He was a president of the Saudi Student Union at LTU, President of Arab American Association of Engineers and Architects *(AAAEA)*, he received an Exemplary Leadership Award, Best leader of the year from Lawrence Technological University, and Outstanding Leadership Award from Saudi Arabian Cultural Mission, Saudi Embassy at Washington D.C. He has BS in Mechanical Engineering, MS in Manufacturing System Engineering, MS in Engineering Management, and he is PhD Candidate Manufacturing System Engineering at Lawrence Technological University.

Upcoming IEOM Annual Conferences

IEOM Kuala Lumpur, March 8-10, 2016 IEOM Istanbul, April 11-13, 2017 IEOM Singapore, March 2018 IEOM Dubai, March 2019 IEOM Bali, March 2020

Upcoming Regional IEOM Conferences

IEOM Johannesburg (South Africa), September 2016 IEOM Rio (Brazil), September 2017 IEOM Rabat (Morocco), September 2018 IEOM Tokyo (Japan), September 2019 IEOM Rome, (Italy), September 2020