Distinguished Speakers – Industry Solutions

Friday, September 23, 2016

Session I: Industry Solutions

Room Engineering Building E201, 8:00 – 9:15 am (Friday) Session Chair: Joe LaRussa, Brose Group, Auburn Hills, Michigan

08:00 - 08:25 (Friday)



Joseph J. LaRussa, PE Industrial Engineering Manager - Drives Brose North America, Inc. Auburn Hills, Michigan, USA

Joe LaRussa is a registered professional engineer in the State of Michigan with diversified experience in product development, manufacturing engineering, and project management. He is personally responsible for over \$2.5M in financial benefit to his employers, and is currently responsible for Industrialization and Manufacturing Engineering for the Drives Business in North America at Brose, a global supplier of automotive mechatronic systems. In this role Joe leads a regional team in the planning and realization of industrialization projects, manufacturing business planning, and manufacturing technology road mapping. Joe is a member of SAE International and the Society of Manufacturing Engineers (SME), and Joe has served in other volunteer leadership roles at his alma mater, the University of Michigan-Dearborn, and NorthRidge Church in Plymouth.

08:50 – 09:15 (Friday) **Ahmad Rashed**Faculty of Engineering and Faculty of Graduated studies

An Najah National University, Nablus, Palestine

Palestinian construction sector

Session II: Industry Solutions

Room Engineering Building E201, 2:30 – 3:45 pm (Friday)

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



2:30 – 2:55 (Friday) **Edly Ferdin Ramly**Certification Director

EFR Certification

Johor Bahru, Malaysia

Operational Diagnosis - Application of Balance Scorecard and Value Stream Mapping to identify operational improvement opportunities

Abstract: Organizations need to diagnose their current operation performance and identify the opportunities for improvement in order to stay competitive. Based on literature, the common operational diagnosis approaches to identify operational improvements opportunities are: 1) Quality Audit; 2) Business Excellence Assessment; and 3)

Project Selection for Lean and Six Sigma. While Balance Scorecard (BSC) and Value stream Mapping (VSM) are powerful tools in operation management. Both of the tools have been utilized in operational diagnosis. The presentation provides the case studies in integration approaches to apply BSC and VSM in operational diagnosis to identify operational improvement opportunities in quality auditing, and BE Assessment.

Biography: Presently Mr. Edly is Certification Director and Lead Auditor for various certification schemes including ISO/TS16949. Apart from auditing, he is currently providing Lean, Business Excellence, Quality (ISO9001 and ISO/TS16949), Environment (ISO14001) and Safety (OHSAS18001) management system related consultancy, research and trainings to local and multi-national companies that seek operational improvement and breakthrough.

His industrial experience was in the automotive industry. During his stayed with the TRW Automotive, he was tasked with the responsibility of promoting and implementing Lean and Six-Sigma within the Organization. Due to his extensive exposure in Lean and Six-Sigma Management System, he was invited by Malaysia Productivity Corporation (MPC) and Asia Productivity Organization (APO) to conduct training in the area of Lean and Six-Sigma implementation.

Mr. Edly Ramly graduated from University of Bradford, UK with Bachelor Degree in Manufacturing System with Management. He then furthered his studies at Sheffield Hallam University, UK and awarded with a Master Degree of Science in Engineering with Management.

2:55 - 3:20 (Friday)



Md Kawsar Ali Chief Operating Officer Comfit Composite Knit LTD Dhaka, Bangladesh

To control TDS (total dissolved solid) in discharge water of Dyeing

Md. Kawsar Ali is a well-known expert and mentor in the garment industries of Bangladesh. He has twenty one years of professional experiences in RMG sector. He has worked in different capacities in leading companies like Beximco, Square, Orion and DBL. He has got strong communication, interpersonal relations, mentoring, negotiation and cross-cultural organizational skills, and has demonstrated such over the years with utmost productivity and reputation. He is also expert in Total Quality Management, Lean manufacturing, Kaizen, Leadership and self-development courses like Meditation and Yoga. Mr. Kawsar has completed his graduation from Khulna University

of Engineering and Technology (KUET) also obtained an MBA degree from Dhaka University. He has participated in many workshops, seminars and training sessions in Bangladesh and abroad.

3:20 - 3:45 (Friday)



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

Failure Mode and Effect Analysis: 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, Senior Member of ASQ and Senior Member of Swedish Method and Time Measurement Language: Fluent in English, Swedish, German, Turkish, Farsi and some Spanish.

Session III: Industry Solutions

Room Engineering Building E201, 4:00 – 5:15 pm (Friday)

Session Chair: Zakir Siddique, Cooper Standard Automotive, Novi, Michigan

4:00 - 4:25 (Friday)



Sardar Asif Khan, M.Sc., MBA, PE, PMP Manager - World Class Manufacturing (WCM) Mack Engine Plant Fiat Chrysler Automobiles (FCA) Detroit, Michigan

Asif Khan brings over 25 years of engineering and management experience from industry. With strong Lean / World Class Manufacturing experiences, he has helped companies transform from traditional methodologies to Lean Manufacturing. In his current role as WCM lead at the Mack Engine Plant, Asif is responsible for the implementation of WCM, a methodology that focuses on reducing waste, increasing productivity, and improving quality and safety in a systematic and organized approach. Asif's solid experience comes with a strong belief in creating a culture that respects and promotes people's ingenuity and creativity to create trust and bond, which then becomes a potent recipe for collaboration, problem-solving and value-creation. After the re-birth of

the Mack Engine Plant, Asif was appointed to establish the WCM organization and lead activities to implement WCM processes, while achieving financial and audit score results to support the FCA's WCM route map and targets. His role includes strategizing and implementing plans through coaching, auditing and training employees of all levels at the facility.

Previously, Asif led activities as an Industrial Engineering Manager at Mack Engine Plant to launch a new program (V6 pentastar engine). Prior to this role, Asif has had increased responsibility positions including decommissioning an axle plant while transferring the products over to a new facility, as the Industrial Engineering Manager. Asif Khan has helped numerous organizations in translating the WCM methodology into actionable and practical strategies for implementation and integration into factory ways of working. Asif has also worked as a process improvement consultant with the DTE corporate office to stream line their processes.

Asif earned a Bachelor of Science degree in Electrical Engineering (1990), Master of Science degree in Manufacturing Engineering (2001) and Master of Business Administration degree (2007) from the USA. Currently he is pursuing a Doctorate of Manufacturing Systems Engineering at Lawrence Technological University, Michigan (expected completion 2018). Concurrently, he is an Adjunct Professor at the University of Windsor, where he teaches a graduate engineering course on Process Improvement/ Six Sigma methodologies. Asif sits on numerous boards and committees, and loves volunteering for giving back to the engineering profession and community.

Professional affiliations: Member: Professional Engineers Ontario, Vice Chair: Windsor-Essex Chapter Board, Professional Engineers Ontario, Member: Project Management Institute (PMP) and Member: PAC (ME Program Approval Committee, St. Clair College Windsor)

4:25 - 4:50 (Friday)



Moin Baig
CAE Engineer Airbag systems
General Motors Company
Warren, Michigan

Lean Product Development

Mr. Baig's background:

- Experienced mechanical engineer with strong emphasis in non-linear dynamic crash simulation for automotive applications using LS-Dyna. Expert in Hypermesh, PRIMER and ANSA. Experienced in linear static analysis and analytical software code NASTRAN.
- Experience in development, testing and CAE simulation of vehicle occupant restraint systems.
- Innovated restraint system for alleviating chest injury in front impact.
- Knowledge of sheet metal forming. Lean implementation and strategies and product development using LEAN principles and TPS.
- Proficient in six sigma techniques such as Critical to Quality, Voice of Customer, Quality Functional Diagrams and Tradeoff analysis.
- Excellent written and oral communication skills. Developed technical presentations and reports.

4:50 – 5:15 (Friday)

Zakir Siddique, PMP

Senior Program Manager Cooper Standard Automotive Novi, Michigan

Zakir Siddique is a Senior Global Program Manager at Cooper Standard, Novi, Michigan. He has lead several global teams consisting of engineering, test & validation, quality, purchasing, supplier development, accounts management and operations team members to deliver global projects on time and within budget and quality requirements. Mr. Siddique is in charge of creating and managing budget for programs, take active role in resource planning and lead strategic planning for operations for our plants in NA and Asia.

He was a Senior Program Manager at Meritor and managed a global cross functional team consisting of 15+ members from North America, UK, Turkey and India through all program development activities while focusing on tight adherence to timing milestones, cost budgets, and quality targets to deliver Meritor's Air Disc Brake products for commercial, defense, specialty and off-highway vehicles. Mr. Siddique lead his team from concept to delivery of brake products to customers like Volvo NA, Daimler NA, Navistar, PACCAR, BAE-Caiman and other vocational vehicle OEMs.

He was a Program Manager at TRW Automotive and managed multiple safety electronics programs for TRW's two most important customers: Toyota and Honda. Lead VAVE activities to meet corporate financial metrices. Mr. Siddique was a Project Leader, Project Management Office at Visteon and established Project Management Office (PMO) and led Driver Information department to achieve CMMI Level II compliance. Before Project Lead, he designed and released instrument clusters for mainly Ford vehicles.

Mr. Siddique received Executive MBA from Michigan State University, Master of Science in Mechanical Engineering from University of Texas at Arlington and Bachelor of Science in Mechanical Engineering from Bangladesh University of Engineering and Technology (BUET), Bangladesh. He is PMI certified PMP.

Saturday (September 24, 2016)

Session IV: Industry Solutions
Room Engineering Building E201, 8:00 – 9:15 am (Saturday)
Session Chair:

08:00 - 08:25 (Saturday)



Abdul Talib Bon and Ooi Shi Jun
Department of Production and Operations Management
Universiti Tun Hussein Onn Malaysia
Raja, Johor, Malaysia

Demand Forecasting for Strategic Resource Planning

Abstract: Demand forecasting is to forecast the future demand so that manager can easily control the production. Demand is defined as a need (Balbo, Gabriel. 2005). From need we will know how much to supply. Therefore, in this study the expected result is that demand forecasting can be effectively used by the manager to make decision in strategic resource planning. This research study objective is to determine how the implementation of demand forecasting into strategic resource allocation decision can be done and to analyze the issues and develop the new model that will affect the results of demand forecasting and strategic resource

planning. To prove this study, the data collection from the firm is needed. The study will be proven from the simulation of the demand forecasting with the collected data from the firm in 4-5 years in order find the best model. The demand data of steel is provided by the Joon Hee MICRON Sdn. Bhd. Nevertheless, Demand Forecasting and Strategic Resource planning are having positive relationship. The hypothesis is accepted. The objectives are successfully achieved and the new model is created. Decisions are made all the time, although sometimes the decision comes unconsciously (Fraga & Anema, 2009). Demand forecasting will be the key to effective decision making process for strategic resource planning.

Biography: Dr. Abdul Talib Bon is Professor of Technology Management in the Department of Production and Operations Management at the Universiti Tun Hussein Onn Malaysia. He has a PhD in Computer Science, which he obtained from the Universite de La Rochelle, France. His doctoral thesis was on topic Process Quality Improvement on Beltline Moulding Manufacturing. He studied Business Administration in the Universiti Kebangsaan Malaysia for which he was awarded the MBA. He's bachelor degree and diploma in Mechanical Engineering which his obtained from the Universiti Teknologi Malaysia. He received his postgraduate certificate in Mechatronics and Robotics from Carlisle, United Kingdom. He had published more 150 International Proceedings and International Journals and 8 books. His research interests include manufacturing, forecasting, simulation, optimization, TQM and Green Supply Chain. He is a member of IEOM, IIE, IIF, TAM, MIM and council member's of MSORSM.

8:25 - 8:50 am



Srini Mandadapu, MSE, MBA
Quality Leader - Product Development
Lead Master Black Belt (MBB)
General Motors

Srini is a "Lead Master Black Belt" working for the General Motors (GM) team and he has 20 years of exceptional experience that led him to hold two U.S. Patents in his diversified portfolio. One of his Patents ('Flexible & removable cargo tie-down hooks' – for Truck Pick up Box – a first-to-market 'patented' product that differentiates GM trucks) is generating \$14 million in profit for his company and a total profit of \$70 million over a five-year program. He is a strategic thinker, innovator, and master problem solver; creator of numerous Best Practices, reusable tools, and methods to improve future designs and optimize processes. In his illustrious career, he coached over 100+ product development/engineering projects that delivered \$200+ million in annual

cost savings. His work means business, and business is his passion. Two-time recipient of GM's "People Make Quality Happen (PMQH) Awards", in recognition of his outstanding contributions to GM quality, and for solving tough quality problems, resulting in significant quality improvement.

Srini has been a Sr. member of an ASQ for over 15 years and holds 'Six ASQ certifications'. He is a "Design for Six Sigma - Master Black Belt (DFSS MBB)" from GM. He also holds an ASQ "Six Sigma Master Black Belt" and "Quality Manager (CMQ/OE)" certifications. On a daily basis, he works strategically with senior management and provides a project mentorship. His duties involve coaching and mentoring Lead Engineers and engineering teams. He is highly rated, and his advice is "no nonsense". Srini also holds MBA from Kelley School of Business, Indiana University and MS in Industrial Technology, Quality Management Major, Eastern Michigan University. Don't miss this opportunity to meet him and listen to what he has to say!

08:50 - 09:15 (Saturday)



Joseph Ghislain

Senior Manager, LSO – North America Regional & Global Body Exterior& Body Interior 6-Sigma Black Belt, CEM, REM,CSDP, CP EnMS- Industrial, SEP Performance Verifier – Industrial Ford Motor Company Global Purchasing – Lean Supplier Optimization (LSO)

Session V: Industry Solutions

Room Engineering Building E201, 11:30 am – 12:45 pm (Saturday)

Session Chair: Dr. Mehran Doulat, Razak School of Engineering and Advanced Technology, UTM Kuala Lumpur, Malaysia

11:30 - 11:55 (Saturday)



Foad Hosseinkhanli

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

Failure Mode and Effect Analysis: 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.

11:55 - 12:20 (Saturday)



Mehran Doulat, BSc., MEM, MQM, EFQM, Ph.D. Senior Research Fellow Genichi Taguchi Center for Quality and Sustainability Razak School of Engineering and Advanced Technology UTM Kuala Lumpur Kuala Lumpur, Malaysia

Mehran Doulat Abadi is currently a Visiting Senior Research Fellow at University of Technology Malaysia (UTM). He has special interest in examination issues relating to Multi Criteria Decision Making (MCDM), Engineering Management and business excellence including the use of the European Foundation for Quality Management (EFQM) Excellence Model. He holds double Master's Degrees in Engineering Management with specialization in Quality Management and a Graduate Certificate in Project Management from University of Wollongong. New South

Wales, Australia. He has written numerous papers on the topic of quality management and business excellence based on his research and consultative works. His papers have been published in refereed scientific journals as well as international conferences. He is a Registered Professional with Australian Organization for Quality (AOQ) and a senior member of the American Society for Quality (ASQ). He is a Certified European Excellence Assessor in Dubai Quality Award (DQA) program since 2007. He was recently engaged as a senior project coordinator in the Mystery Shopper Service Excellence Project under the directive of Prime Minister's Office (PMO) in Dubai, UAE.

12:20 - 12:45 (Saturday)



Dr. Ishtiaq HussainManufacturing Process Lead
General Motors Corporation
World Head Quarters
Pontiac, Michigan

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.

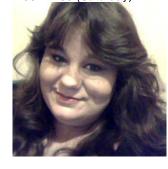
- Design of Experiment (DOE)
- Statistical Process Control (SPC)
- Geometric Dimensioning and Tolerances (GD&T)
- Design for Six Sigma (DFSS)
- Manufacturing Processes & Technology
- Gauging and Inspection (GR&R)
- Process Quality Analysis
- Machining Expert and MQL (green manufacturing) Expert

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.

Session VI: Industry Solutions Room Engineering Building E201, 2:30 – 3:45 pm (Saturday)

Session Chair: Dr. Mohammad Hijawi, Fiat Chrysler Automobiles (FCA), Auburn Hills, Michigan

2:30 - 2:55 (Saturday)



Michelle (Matson) Hackett CAD Production Manager RGIS Auburn Hills, Michigan

Michelle Hackett is a results-driven, business professional with a proven record of success within engineering environments; experienced in taking large conceptual projects, dividing them into components, establishing plans and a critical path, and then delivering projects on time. Her professional work experience consists of: delivering design and engineering information that is precise, unquestionably communicated, and complete, then teaching others to do this as well. This includes performing needed engineering calculations, precision measuring for reverse engineering or quality reasons, applying drafting techniques for creating layouts, 3D models, assemblies,

and details. Additional responsibilities included: preparing of bills of materials, completing engineering change orders, tracking revisions, order entry, sales quoting, purchasing of materials, creating production hot lists, drawing file, and database maintenance.

Experiences:

- CAD Production Manager RGIS
- CAD Professor, Oakland Community College
- CAD Professor, Macomb Community College
- Past Chair SME Detroit Chapter One
- 3D CAD Designer, Oxbow Machine Products Inc.
- Application Engineer, Studica, Inc.
- Computer Drafting & Design Instructor, ITT Technical Institute
- CAD Designer, FASTUBE, LLC

Education:

- University of Phoenix Livonia Campus, Master's, Business Administration, 2006 2008
- University of Phoenix Livonia Campus, Bachelor's, Business Management, 2003 2006
- Schoolcraft College, 3 Associates Degrees (Computer Assisted Manufacturing 2002, Computer Aided Design Tool Design 1997 and Computer Aided Design Mechanical Design 1993)

2:55 - 3:20 (Saturday)



Dr. Neil MurrayEngineering Manager
ZF TRW
Livonia, Michigan

3:20 - 3:55 (Saturday)



Dr. Mohammad HijawiTechnical Fellow - Powertrain Quality Reliability Engineering Fiat Chrysler Automobiles (FCA)
Auburn Hills, Michigan

Mohammad Hijawi is a Global Reliability Technical Fellow in the Powertrain Quality and Reliability group at FCA US LLC. He has 28 years of engineering, research, and managerial experience specializing in Quality and Reliability. He received the doctorate in Mechanical Engineering from Wayne State University. His main areas of interest are proactive reliability, statistics, reliability demonstration, accelerated life testing, reliability growth, problem solving, warranty forecasting and Design for Six Sigma. He is a certified DFSS master blackbelt. He authored multiple professional publications on the topics of reliability, statistics, vibrations, and Six Sigma.

Session VII: IEOM Women in Industry and Academia Forum Room Engineering Building E201, 4:00 – 5:15 pm (Saturday)

Session Chair: Dr. Rashmi Jha, Guru Gobind Singh Indraprastha University, New Delhi, India

Challenges and Opportunities

Dr. Galia NovakovaFaculty of Mathematics and Informatics
Sofia University
Bulgaria



Dr. Rashmi Jha
Associate Professor and Program
Coordinator of Master of Computer
Applications
Gitarattan International Business
School
Guru Gobind Singh Indraprastha
University
New Delhi, India



Dr. Chee-Ming Chan

Associate Professor and Deputy Dean (Academic and Research) Centre for Graduate Studies Universiti Tun Hussein Onn Malaysia Batu Pahat, Johor, Malaysia



Sunday (September 23, 2016)

Session VIII: Industry Solutions

Room Engineering Building E201, 8:00 – 9:15 am (Sunday) Session Chair: Gregg Young, Young Associates, Inc., Midland, MI



08:00 – 08:25 (Sunday) **Bob Doering, MBA**Quality Engineering Professional

Expert in CorrectSPC for Precision Machining - Trainer, Consultant Lagrange, Ohio

Bob Doering has been in the quality field for over 20 years. He is currently a quality engineer for an automotive component manufacturing firm, as well as a consultant in SPC, Metrology and Quality Concepts training. He holds associates degrees from Lorain County Community College of Elyria, Ohio and The University of Akron of Akron, Ohio; BA in Business and MBA in Systems Management from Baldwin-Wallace College, Berea, Ohio.



08:25 – 08:50 (Sunday)

Walter Schwartz

Sustainability & Business Strategy Supervisor
Ford Motor Company

Manufacturing Analytics: The State of Implementation across Industries

Bio: Mr. Schwartz is a Sustainability & Business Strategy Supervisor at Ford Motor Company. He has the following areas of expertise and interests:

Manufacturing

- Ford Blackbelt Exam Passed
- Seven years of manufacturing process engineering in an aluminum transmission plant

Corporate Support

- Supervisor of Fuel economy team to lead CAFE (Corporate Average Fuel Economy) efforts
- Supervisor of Business, Strategy, and Sustainability at the Research level
- Data analytics supervisor

He has supervised sustainability and strategy efforts including fuel cell program to ensure future product portfolio remains competitive with other OEMS. Also Mr. Schwartz has coordinated business issues including preparation of high level management documents for monthly and quarterly review. Mr. Schwartz received bachelor's degree in industrial engineering from University of Toledo and master's degree in manufacturing systems engineering from University of Michigan-Dearborn.

08:50 - 09:15 (Sunday)



Gregg YoungPresident and Founder
Young Associates, Inc., Midland, MI

"Lost Secrets of the Origin of Six Sigma

Bio: Gregg Young is President and Founder of Young Associates, Inc. (http://youngassocinc.com). He has worked with large corporations and small businesses helping them to solve problems, improve quality, increase profits, and develop successful new products. Gregg has spent over 40 years solving problems, leading teams, and teaching problem solving skills. He experienced both successes and frustrations, so he studied dozens of processes searching for best practices he could add to his clients' processes so they would deliver bigger results faster. When he discovered that best practices do exist, it sparked his passion to share this knowledge, so that anyone can solve problems as effectively as Sherlock Holmes solved crimes. He is the author of three books focused on upgrading business processes by adding convergent,

observation-based methods to existing processes. His latest book is Reasoning Backward: How Sherlock Holmes Can Make You a Better Problem Solver. It adapts these techniques for students as well as businesses, providing everyone with the skills they need to solve problems effectively and create a competitive advantage in the global marketplace. His most recent work has been the development of Active Time Profiles, a graphic tool to accelerate and focus cycle time reduction in any system. Young has a B.A. in Chemistry from Rice University.

Session IX: Industry Solutions Room Engineering Building E201, 2:30 – 3:45 pm (Sunday) Session Chair: Ahmed Al-Jabr, Saudi IEOM Society, Dhahran, Saudi Arabia

2:30 - 2:55 (Sunday)



Abdul Talib Bon and Silvia Firda Utami Department of Production and Operations Management Universiti Tun Hussein Onn Malaysia Johor, Malaysia

SukonoDepartment of Mathematics, Faculty of Mathematics and Natural Sciences Universitas Padjadjaran Bandung, Indonesia

Modeling Analytical Hierarchy Process and Fuzzy Inference System Tsukamoto for Crude Palm Oil Production
Planning

Abstract: Decision making has become a routine activities carried out by the production manager at Sindora Palm Oil Mill. The decision making process does not always run smoothly, sometimes arisen obstacles because uncertainty and vagueness. The obstacles come from various factors of production such as capital, labor and raw materials and machine, and as well as other factors such as, suppliers, inventory and market demand. These obstacles can be cause major problems if not dealt with quickly and accurately. One of the problems that will arise is the decline in production quantity. Therefore, this study intended to help the company to determine the optimal amount of crude palm oil production and to determine the order of priority factors influencing the decline in production quantity and also apply the Analytical Hierarchy Process (AHP) and Fuzzy Inference System Tsukamoto (FIS Tsukamoto) methods in the production planning the company to assist and facilitate the decision-makers in making decisions. FIS Tsukamoto is a method for decision making that using monotone reasoning. The data input obtained from documentation like inventory, demand and production data. In addition, AHP also is a method for decision making and the data obtained from interviews and questionnaire. The results of this study is the total production and inventories of Crude Palm Oil by the year 2014 turned into optimal and stable; profit is higher than previously; then, the plot data also showed that the total production in 2014 is not stable because there are still decreased. Then, the main factors affecting the decline of total production is internal factors. The Order of priority of the internal factors is factor capital, labor, raw materials and technology & machines. This study is particular suited if used in crude palm oil company like Sindora Palm Oil Mill, because give more benefit to the company.

Biography: Dr. Abdul Talib Bon is Professor of Technology Management in the Department of Production and Operations Management at the Universiti Tun Hussein Onn Malaysia. He has a PhD in Computer Science, which he obtained from the Universite de La Rochelle, France. His doctoral thesis was on topic Process Quality Improvement on Beltline Moulding Manufacturing. He studied Business Administration in the Universiti Kebangsaan Malaysia for which he was awarded the MBA. He's bachelor degree and diploma in Mechanical Engineering which his obtained from the Universiti Teknologi Malaysia. He received his postgraduate certificate in Mechatronics and Robotics from Carlisle, United Kingdom. He had published more 150 International Proceedings and International Journals and 8 books. His research interests include manufacturing, forecasting, simulation, optimization, TQM and Green Supply Chain. He is a member of IEOM, IIE, IIF, TAM, MIM and council member's of MSORSM.

2:55 - 3:20 (Sunday)



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.

3:20 - 3:45 pm (Sunday)

Ishak ZamanProduct Development Engineer Ford Motor Company

"Offshore and Onshore Wind Farming in Bangladesh and Developing Countries"

Ishak Zaman is working as a Product Development Engineer at Ford Motor Company. He has worked as design and release engineer of Restraints systems (Steering Wheel, Driver Airbag, Seat belts, Side Airbag, Side Air Curtain, Passenger Airbag) led restraints engineering cost attack team, led vehicle cost attack engineering team for Focus Seat & Restraints, durability engineer and vehicle launch management engineer. Mr. Zaman earned Master of Science in Mechanical Engineering from Oklahoma State University and Bachelor of Science in Mechanical Engineering from Bangladesh University of Engineering and Technology. Mr. Zaman is serving as a member of the Board of Director of IEOM Society. He is awarded with a US Patent and has pending US patent applications.

Session X: Industry Solutions

Room Engineering Building E201, 4:00 – 5:15 pm (Sunday)

Session Chair: Rasheed Khan, Hyundai-Kia American Tech Center, Ypsilanti, Michigan

4:00 – 4:25 pm (Sunday)



Gregg YoungPresident and Founder
Young Associates, Inc., Midland, MI

"Using Active Time Profiles to Jumpstart Lean and Cycle Time Improvement"

Bio: Gregg Young is President and Founder of Young Associates, Inc. (http://youngassocinc.com). He has worked with large corporations and small businesses helping them to solve problems, improve quality, increase profits, and develop successful new products. Gregg has spent over 40 years solving problems, leading teams, and teaching problem solving skills. He experienced both successes and frustrations, so he studied dozens of processes searching for best practices he could add to his clients' processes so they would deliver bigger results faster. When he discovered that best practices do exist, it sparked his passion to share this knowledge, so that anyone can solve problems as effectively as Sherlock Holmes solved crimes. He is the author of three books focused on upgrading business processes by adding convergent,

observation-based methods to existing processes. His latest book is Reasoning Backward: How Sherlock Holmes Can Make You a Better Problem Solver. It adapts these techniques for students as well as businesses, providing everyone with the skills they need to solve problems effectively and create a competitive advantage in the global marketplace. His most recent work has been the development of Active Time Profiles, a graphic tool to accelerate and focus cycle time reduction in any system. Young has a B.A. in Chemistry from Rice University.

4:25 - 4:50 pm (Sunday)



Nirav Sheth Manufacturing Engineer

Eberspaecher North America Brighton, Michigan

Nirav Sheth is a Manufacturing Engineer at Eberspaecher North America, Brighton, Michigan. He has completed Master of Science Industrial Engineering from Lawrence Technological University, Michigan, USA. He holds a Bachelor of Engineering in Mechanical Engineering from Pune University, India. He has experience in design and quality engineer at Ploytech Cooperation, Mumbai India. He has published Proceeding in Industrial Engineering & Operation Management. His research Interest Includes manufacturing, optimization, productivity, simulation (Arena), Microsoft Project Management, Minitab, Six Sigma and 3D Modeling (CATIA, Pro/E, Unigraphics, AutoCAD).

4:50 – 5:15 pm (Sunday)

Jack He

Project Manager

MCC (Xiang Tan) Mining Equipment LLC

Xiangtan City, Hunan

China

5:15 - 5:40 pm (Sunday)



Dr. Taufiqul IslamOperations Manager
IEOM Society International
Canton, Michigan

Dr. Taufiqul Islam is an operations manager of Industrial Engineering and Operations Management (IEOM) Society International, Michigan, USA. He is managing IEOM membership, conference activities, editing newsletter, arranging tour and coordinating training activities. He received B.Sc. (Agricultural Engineering) from the Bangladesh Agricultural University in 1981 and M.S. (Agricultural Engineering) from the Newcastle University, United Kingdom, in 1984. He has earned Ph.D. degree in Bio-Systems Engineering from the Michigan State University in 2004.

In 1981 Dr. Islam joined in the Department of Agricultural Engineering, Bangladesh Rice Research Institute (BRRI) as Scientific Officer and became Senior Scientific Officer in 1990 and Principal Scientific Officer in 1996. He has modeled and investigated experimentally Seed Corn Drying in a commercial seed processing facility. The model was used to assess the effect of the main operating parameters on the dryer capacity and energy cost. Dr. Islam served in different capacity (as a Research Assistant, Research Associate, Software Engineer, QA Tester) in Tumblewind Corporation, Avtrex Inc., and AdeptMax Corporation.

Dr. Islam attended industrial training in the field of Agricultural Machinery Testing (IAM, BRAIN, Japan) and Principles of IC Engine Operation (BADC, Bangladesh). He was awarded Agricultural Research Management Program scholarship (1998), and Japan International Cooperation Agency scholarship, *Agricultural Machinery Testing* (1992). Dr. Islam has also published number of papers in different journals around the World. Dr. Islam has attend seminars and conferences. He is a member of IEOM Society.