



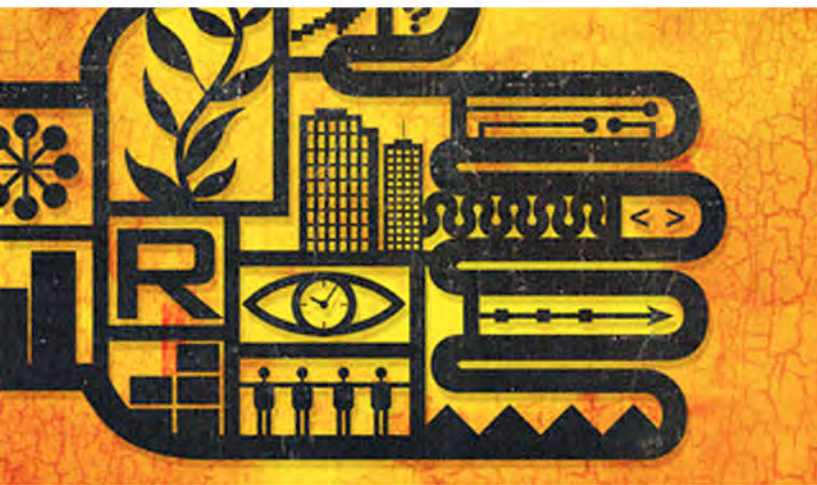
GLOBAL CONFERENCE ON ENGINEERING AND TECHNOLOGY MANAGEMENT



**"Gaining a Competitive Edge
through
Engineering and Technology Management"**



SCIENTIFIC PROGRAM



**JUNE 23-26, 2014
ISTANBUL, TURKEY**



Gold Sponsor

Silver Sponsor

Bronze Sponsor

Keynote Speaker
Sponsor

Supporting Authority

Arçelik A.Ş.

FINEKSUS

ARI
TEKNOKENT
advanced research and innovation

ASKON
ANADOLU ASLANLARI İŞADAMLARI DERNEĞİ
haklı zenginlik

TÜBİTAK
TÜSSİDE

www.gcetm.com



Global Conference on Engineering and Technology Management

"Gaining a Competitive Edge
Through Engineering and Technology Management"

23rd to 26th June 2014

Istanbul - Turkey

Conference Final Program

MONDAY, 23rd JUNE (morning)

08:30 REGISTRATION

08:45 Welcome address by Fethi CALISIR

09:00 **Keynote Speech: "The Role of Management Science in Engineering Management: An Example from Enterprise (Accounting) Risk Management", Professor Sardar M. N. Islam, Victoria University, Melbourne, Australia**

C – 101

Management science or quantitative models play an important role in engineering management. An important area of engineering management where this role of management science has not been explored enough yet is the area of accounting risk management which is an essential part of enterprise risk management. This emerging area of accounting risk management (i.e., analysing, modelling and managing accounting risks) is a relatively new research agenda. In addition, accounting risk management is imperative for improved enterprise risk management and corporate governance, and for avoiding corporate collapses, financial crises and economic slowdowns as an evidence of improved engineering management. Analysing and managing accounting risks by adopting management science models is useful for enterprise risk management to be effective. Some of the management science models which can be applied for accounting risk management include the following: 1. risk analysing methods including risk measures such as variance, probability of loss; risk prediction methods, and other statistical and econometric methods for accounting risk analysis and management; 2. optimisation methods for accounting risk management including the following conventional deterministic optimisation methods (linear programming, non-linear programming, etc.) and optimisation under uncertainty (simulation optimisation, stochastic, scenario and robust optimisation, decision (tree) analysis, etc.). Stakeholders, such as engineers, need to contribute to these research agenda and risk management practices for achieving good engineering management via accounting risk management to avoid corporate, financial and economic risks and crises.

Sessions

1

Technology Transfer, Marketing, and
Commercialization

F-133 Chair: Umut Asan

2

Engineering and Technology
Management in Developing Countries

F-135 Chair: Alp Ustundag

10:00 An Empirical Analysis for Measuring Technology Transfer
Performance of US Universities

Isikli E., Istanbul Technical University, Turkey

Effective Energy Management Through Effective Systems
Engineering

Fechtelkötter P., IBM, USA

Amaba B., IBM, USA

Tufekci O., IBM, Turkey

Cakmak K., IBM, Turkey

Soyler Akbas A., University of Central Florida, USA

10:30 BREAK

Sessions

3

Engineering and Technology
Management in Service Industries

F-133 Chair: Emre Cevikcan

4

Innovation and Entrepreneurship

F-135 Chair: Erkan Isikli

11:00 Reference Model Application for Large Scale Industry
Management

Valeev S., Ufa State Aviation Technical University, Russia

Kondratyeva N., Ufa State Aviation Technical University, Russia

Creativity in Precipitation of Oil Cooling Tanks, in Plastic
Injection Molding Machine, Using the ARIZ 71 Algorithm

Harsej F., Islamic Azad University Branch Nour, Iran

Mohajeri S., Islamic Azad University Branch Nour, Iran

11:30 A Lean Approach To Process Management In Public
Institutions By Applying Value Stream Mapping
Techniques

Bal A., Istanbul Technical University, Turkey

Budak A., Istanbul Technical University, Turkey

Durmusoglu M.B., Istanbul Technical University, Turkey

The Effect of Organizational Learning, Transformational
Leadership and Market Orientation on Firm Performance

Calisir F., Istanbul Technical University, Turkey

Altin Gumussoy C., Istanbul Technical University, Turkey

Basak E., Istanbul Technical University, Turkey

Gurel G., Istanbul Technical University, Turkey

12:00 Development of a Prediction System for Ship Fuel
Consumption using a Least Median of Square

Bal E., Istanbul Technical University, Turkey

Arslan O., Istanbul Technical University, Turkey

Use of Cognitive Maps for Investigating the Success Factors
of Innovation Technologies in Service Sector

Isik M., Istanbul Technical University, Turkey

Ozaydin O., Dogus University, Turkey

12:30 LUNCH BREAK



Global Conference on Engineering and Technology Management

"Gaining a Competitive Edge
Through Engineering and Technology Management"

23rd to 26th June 2014

Istanbul - Turkey

MONDAY, 23rd JUNE (afternoon)

Sessions	5	Supply Chain Management and Logistics	6	Sustainability and Technology Management
	F-133	Chair: Mirela Sohaci	F-135	Chair: Ali Turkyilmaz
13:30	Information Technology, Information Systems Management and Supply Chain Management Applications in Logistics Industry <i>Suder A., Istanbul Technical University, Turkey</i>		Maintenance Management of Production Systems with Sensors and RFID: A Case Study <i>Bal A., Istanbul Technical University, Turkey</i> <i>Satoglu S.I., Istanbul Technical University, Turkey</i>	
14:00	An Application With Fuzzy VIKOR to Supplier Selection <i>Yazici I., Istanbul Technical University, Turkey</i> <i>Akman G., Kocaeli University, Turkey</i> <i>Alkan A., Kocaeli University, Turkey</i>		Technology Roadmapping and Acquisition Planning in Aerospace Sector <i>Kara G., Turkish Aerospace Industry (TAI), Turkey</i> <i>Solakoglu E., Turkish Aerospace Industry (TAI), Turkey</i> <i>Gokpinar S., Turkish Aerospace Industry (TAI), Turkey</i>	
14:30	Proposed of a Grey System for Return Weee Product Quantity Forecasting in Reverse Logistics Network <i>Ayvaz B., Istanbul Commerce University, Turkey</i> <i>Bolturk E., Istanbul Technical University, Turkey</i> <i>Kactioglu S., Istanbul Commerce University, Turkey</i>			
15:00	BREAK			
Sessions	7	R&D Management	8	Information and Communication Technology Management
	F-133	Chair: Mehmet Sevkli	F-135	Chair: Sule I. Satoglu
15:30	Agile Technology Development: A Model for Turkish Aerospace Industry <i>Songur E., Tusas Engine Industries Inc. (TEI), Turkey</i> <i>Gokce E., Tusas Engine Industries Inc. (TEI), Turkey</i> <i>Toprak S., Tusas Engine Industries Inc. (TEI), Turkey</i>		Factors Affecting the Use of E-Learning System among Undergraduate Students in Turkey: An Extended TAM <i>Altin Gumussoy C., Istanbul Technical University, Turkey</i> <i>Kisa O., Istanbul Commerce University, Turkey</i>	
16:00	Lean Principles in R&D Projects <i>Al E., Fatih University, Turkey</i> <i>Ali Z., Fatih University, Turkey</i> <i>Turkyilmaz A., Fatih University, Turkey</i> <i>Zaim S., Istanbul Technical University, Turkey</i>		Human Capital Development by Improving the Environmental Engineer Skills with Master Programs <i>Sohaci M., University Politehnica Bucharest, Romania</i> <i>Predescu C., University Politehnica Bucharest, Romania</i> <i>Ecaterina Matei E., University Politehnica Bucharest, Romania</i> <i>Csaki I., University Politehnica Bucharest, Romania</i> <i>Berbecaru A., University Politehnica Bucharest, Romania</i>	

18:00 Welcome Reception

Welcome reception, Management Faculty Garden

Scan QR Code for google maps location





Global Conference on Engineering and Technology Management

23rd to 26th June 2014

Istanbul - Turkey

"Gaining a Competitive Edge
Through Engineering and Technology Management"

TUESDAY, 24th JUNE (morning)

08:30 REGISTRATION

09:00 **Keynote Speech: "Technology Management Practices in a Growing Company", Iffet Iyigun Meydanli, Arcelik A.S., Turkey**

In the last 25 years, parallel to Turkish economy Arcelik A.S. (A global home appliance company based in Turkey) has been transformed its operations from a licensee company to a technology leading company. One of the main factors behind this transformation is establishment of R&D activities. We'll discuss the role of technology management practices for such a change. The use of technology management tools advantages as well as the challenges and difficulties will be shared as well.

Sessions

9

New Product Development

F-133 Chair: Ayberk Soyer

10:00 The Role of Contemporary Marketing Tools in Concurrent Engineering

Ozturk N., Marmara University, Turkey
Vayvay O., Marmara University, Turkey

10

Technology and Competitiveness

F-135 Chair: Cigdem Altin Gumussoy

Dynamic Modeling of Critical Factors in Energy Service Contracting Using Fuzzy Time Cognitive Mapping

Kadaifci C., Istanbul Technical University, Turkey
Kucukyazici G., Istanbul Technical University, Turkey
Asan U., Istanbul Technical University, Turkey
Bozdog E., Istanbul Technical University, Turkey

10:30 BREAK

Sessions

11

Information and Communication
Technology Management

F-133 Chair: Sagit Valeev

11:00 Information Technology and Security Policy for Organizations and Applications in Istanbul Technical University

Suder A., Istanbul Technical University, Turkey

12

Technology and Knowledge
Management

F-135 Chair: Gulgun Kayakutlu

A Methodology with Analysis of Production Management in ERP Systems: A Case Study in an Industrial Sector

Erbiyik H., Yalova University, Turkey
Erdil A., Yalova University, Turkey

11:30 Development of a Framework to Enhance Information Provisioning Support for Site-based Construction Workers in The Kingdom of Saudi Arabia

Alaboud N., University of Salford, UK
Zeeshan A., University of Salford, UK

RFID Based Warehouse Management System in the Wool Yarn Industry

Ustundag A., Istanbul Technical University, Turkey
Oner M., Istanbul Technical University, Turkey

12:00

Measuring the Efficiency of Intellectual Capital: for the Case of Fabricated Metal Products, Machinery and Equipment Sector

Calisir F., Istanbul Technical University, Turkey
Isik M., Istanbul Technical University, Turkey
Bayraktaroglu A.E., Istanbul Technical University, Turkey

12:30 LUNCH BREAK



Global Conference on Engineering and Technology Management

"Gaining a Competitive Edge
Through Engineering and Technology Management"

23rd to 26th June 2014

Istanbul - Turkey

TUESDAY, 24th JUNE (afternoon)

Sessions	<div>13</div> <div>F-133</div> <div>Chair: Seyda Serdar Asan</div>	<div>Human Factors in Engineering and Technology Management</div>	<div>14</div> <div>F-135</div> <div>Chair: Tufan Vehbi Koc</div>	<div>Technology Foresight and Forecasting</div>
13:30	Balancing U-Shaped Assembly Lines by Considering Human Factors <i>Oksuz M.K., Istanbul Technical University, Turkey</i> <i>Satoglu S.I., Istanbul Technical University, Turkey</i>		Reintroducing the Technology Life Cycle into Technological Forecasting: Reconceptualization and a Model of System Disaggregation <i>Hauptman O., University of Western Sydney, Australia</i> <i>Intepe G., Istanbul Technical University, Turkey</i>	
14:00	Analysis of Factors Affecting Satisfaction Level of Employees: A Case Study of Heavy Mechanical Complex, Taxila, Pakistan <i>Rukh L., University of Engineering and Technology, Pakistan</i> <i>Choudhary M.A., University of Engineering and Technology, Pakistan</i> <i>Abbasi S.A., King Fahd University of Petroleum and Minerals, Saudi Arabia</i>		Modeling a National Policy Making in the Areas of Superconducting Technology Development Based on Technology Foresight <i>Attari M., Amirkabir University of Technology, Iran</i> <i>Rahmati F.S., BTF Institute, Iran</i>	
14:30	BREAK			
Sessions	<div>15</div> <div>F-133</div> <div>Chair: Selim Zaim</div>	<div>Project Management</div>	<div>16</div> <div>F-135</div> <div>Chair: Umut Asan</div>	<div>Information and Communication Technology Management</div>
15:00	Significant Factors Affecting the Selection of the Appropriate Project Delivery Method in Electricity Company's Projects <i>Alebarkous A., General Electricity Company of Libya, Libya</i> <i>Aburwees A.F.A., General Electricity Company of Libya, Libya</i>		The Evaluation of Implementation Levels for RFID Applications using Fuzzy Information Axiom <i>Cevikcan E., Istanbul Technical University, Turkey</i> <i>Ustundag A., Istanbul Technical University, Turkey</i>	
15:30	Sales Quotation and Order Process Value Stream Mapping: A Case Study <i>Baysan S., Istanbul Technical University, Turkey</i> <i>Durmusoglu M.B., Istanbul Technical University, Turkey</i>		A Research on Measuring Computer Network System Productivity and Efficiency with Simulation Modeling <i>Salkin S.C., Istanbul Technical University, Turkey</i>	

18:00 Gala Dinner

Gala Dinner, Oba Restoran & Sultan Cafe

Scan QR Code for google maps location





Global Conference on Engineering and Technology Management

"Gaining a Competitive Edge
Through Engineering and Technology Management"

23rd to 26th June 2014

Istanbul - Turkey

WEDNESDAY, 25th JUNE (morning)

08:30 REGISTRATION

Sessions 17 Special Session (in Turkish)
F-133

09:00 Ulusal Akademik Ar-Ge Proje Destekleri, *Fatih Sinan Esen, TÜBİTAK – ARDEB, Turkey*

Sessions 18 Special Session
F-133

10:00 American Society for Engineering Management (ASEM) - Master's Program Certification, *Ben Baliga, ASEM, USA*

11:00 BREAK

Sessions 19 Supply Chain Management and Logistics
F-133 *Chair: Ben Baliga*

20 Innovation and Entrepreneurship
F-135 *Chair: Hulya Behret*

11:30 Approximations to Aggregated Orders Bullwhip Effect
Variance in Two-Echelon Supply Chains
El-Tannir A.A., Beirut Arab University, Lebanon

Identifying the Need for Innovation Risk Management
Boothe K.O., Karlsruhe Institute of Technology, Germany
Kasteren T.V., AGT International, Germany
Terzidis O., Karlsruhe Institute of Technology, Germany

12:00 Modeling a Stochastic Multi-objective Order Allocation
Problem in Uncertain Supply Environment
Liu X., Dalian University of Technology, China
Li Z., Dalian University of Technology, China
He L., Dalian University of Technology, China
Nan Zhang, Dongbei Special Steel Group Co., Ltd., China

A Literature Based Model to Measure Innovation Capability
Calisir F., Istanbul Technical University, Turkey
Argun B., Yalova University, Turkey
Calik E., Yalova University, Turkey

12:30 LUNCH BREAK



Global Conference on Engineering and Technology Management

"Gaining a Competitive Edge
Through Engineering and Technology Management"

23rd to 26th June 2014

Istanbul - Turkey

WEDNESDAY, 25th JUNE (afternoon)

Sessions	<div>21</div> <div>F-133</div> <div>Chair: Akram A. El-Tannir</div>	Human Factors in Engineering and Technology Management	<div>22</div> <div>F-135</div> <div>Chair: Basak Argun</div>	Engineering and Technology Management in Service Industries
13:30	A Study to Evaluate the Familiarity and Usage of Theories of Motivation <i>Baliga B., St. Cloud State University, USA</i> <i>Shah H., St. Cloud State University, USA</i> <i>Bista M., St. Cloud State University, USA</i> <i>Chebolu V., St. Cloud State University, USA</i>		Lean Manufacturing Principles Applied to University Library: A Lean Library <i>Kantar S., Fatih University, Turkey</i> <i>Shahbaz M., Fatih University, Turkey</i> <i>Turkyilmaz A., Fatih University, Turkey</i>	
14:00	Effects of CIOs' Positive Characteristics and Competencies on their Perceived Management Effectiveness in a Transformed IS Organization <i>Yokkhun A., University of Vienna, Austria</i> <i>Quirchmayr G., University of Vienna, Austria</i> <i>Chutimasakul W., King Mongkut's University of Technology Thonburi, Thailand</i>		Alliance Management Process Design With Design for Six Sigma <i>Tuna B., Erciyes University, Turkey</i> <i>Behret H., Erciyes University, Turkey</i>	
14:30	Enhancing Health & Safety Management in Construction Sites by Using Mobile Computing in Saudi Arabia <i>Balgheeth Y., University of Salford, UK</i> <i>Alaboud N., University of Salford, UK</i> <i>Zeeshan A., University of Salford, UK</i>		A Review of Small Scale Distributed Power Generation Technologies Using Solar Energy <i>Ghozzi S., The University of Nottingham, UK</i> <i>Boukhanouf R., The University of Nottingham, UK</i>	
15:00	BREAK			
Sessions	<div>23</div> <div>F-133</div> <div>Chair: Alp Ustundag</div>	Strategic Management	<div>24</div> <div>F-135</div> <div>Chair: Atcharaporn Yokkhun</div>	Project Management
15:30	A Model Suggestion for Measuring Dynamic Capabilities <i>Gul S., Halic University, Turkey</i> <i>Soyer A., Istanbul Technical University, Turkey</i> <i>Cevik Onar S., Istanbul Technical University, Turkey</i>		Total Quality Management of Projects in the Saudi Construction Industry: A Critical Review <i>Hijazi S., The University of Salford, UK</i> <i>Aziz Z., The University of Salford, UK</i>	
16:00	Conceptualization of Organizational Modularity <i>Eris O.U., Istanbul Technical University, Turkey</i> <i>Soyer A., Istanbul Technical University, Turkey</i> <i>Umut Asan U., Istanbul Technical University, Turkey</i>		Current Status of Offsite Construction in Saudi Arabia <i>Almutairi Y., The University of Salford, UK</i> <i>Arif M., The University of Salford, UK</i>	
16:30	Developing Strategic Plan for Manufacturing Companies Located in Developing Countries <i>Bataineh K., Jordan University of Science and Technology, Jordan</i>			



Global Conference on Engineering and Technology Management

"Gaining a Competitive Edge
Through Engineering and Technology Management"

23rd to 26th June 2014

Istanbul - Turkey

THURSDAY, 26th JUNE (morning)

Sessions	25 F-133	Human Resources in Engineering and Technology Management Chair: Emre Cevikcan	26 F-135	Managing Emerging Technologies Chair: Asli Suder
10:00	An Application of MCDM in Competence Sourcing <i>Erensal Y.C., Istanbul Okan University, Turkey</i>		Potentials of Laser Technologies in Processing Panel Display Glass <i>Grochowski E.M., University of Stuttgart, Germany</i> <i>Dewes K., University of Stuttgart, Germany</i> <i>Heber D., University of Stuttgart, Germany</i>	
10:30	BREAK			
Sessions	27 F-133	Supply Chain Management and Logistics Chair: Selim Zaim	28 F-135	Strategic Management Chair: Yasemin Claire Erensal
11:00	A Web Based Optimization System for Supply Chain Network <i>Ustundag A., Istanbul Technical University, Turkey</i> <i>Budak A., Istanbul Technical University, Turkey</i> <i>Oner M., Istanbul Technical University, Turkey</i>		Strategic Evaluation of High Technology Companies Based on Game Theory and Hierarchical Balanced Scorecard <i>Oleyaei-Motlagh S.Y., Islamic Azad University, Iran</i>	
11:30	Creativity in Supply Chain Performance of Eram Sanat Company by Using the ARIZ71 Algorithm <i>Harsej F., Islamic Azad University Branch Nour, Iran</i> <i>Mohajeri S., Islamic Azad University Branch Nour, Iran</i>		Risk Management Efficiency Analysis in Banks Using Data Envelopment Analysis (DEA) Approach Based on Hedge Accounting: Perspectives and Implications <i>Zakaria S., Victoria University, Australia</i> <i>Islam S.M.N., Victoria University, Australia</i>	
12:00			Assessment of Sustainability Performance Indicators in Manufacturing <i>Eseoglu G., Marmara University, Turkey</i> <i>Vayvay O., Marmara University, Turkey</i> <i>Simsit Z.T., Marmara University, Turkey</i>	