Gülşen Akman, PhD

Assoc. Prof. of Operations Management
Industrial Engineering Department, Kocaeli University, Türkiye
gulsenakman@gmail.com   +905330407428
webpage: https://scholar.google.com/citations?user=Oa18SigAAAAJ
webpage: https://avesis.kocaeli.edu.tr/akmang

Google Scholar - All time Citations: 2014; h-index 15; i10-index: 21;
Research Gate – Researh Interest Score 721.2; h-index 10

I am currently working as an Associate Professor of Operations Management in Industrial Engineering at Engineering Faculty, Kocaeli University, Türkiye. I am currently looking for an exciting opportunity where I can make better use of my research and teaching skills to create a global impact. She has served engineering faculty coordinator of Erasmus since 2014, Erasmus departmental coordinator in Industrial Engineering since 2011.

Gulsen is currently Associate Professor of Operation Management in Industrial Engineering Department at Kocaeli University, Türkiye. Gülşen has also held post doctorate study at the Industrial and Manufacturing Department at the Pennsylvenia State University (USA). She has been working in the field of innovation and technology management since 2003, sustainability since 2009, artificial intelligence and business analytics since 2020. Her research focuses on innovation management, innovation capabilities, eco-innovation, digital innovation, digital transformation, sustainability, continuous improvement, SMEs, decision making, multicriteria decision making, fuzzy logic, advanced statistical analysis and machine learning.

At institutional level, as well as providing leadership to academic colleagues at the Kocaeli University, Gulsen supervised graduated 14 MSc students and graduated 5 PhD students. At international level, she has also provided leadership for 4 graduation theses for undergradute students from Romania and France, and examined 1 doctoral thesis from USA and 2 doctoral theses from India. Also she has been a member of ADAPS (Applied Decision Analysis Group for Improved Products & Systems) research group which is managed by Prof.Dr. Gul Okudan Kremer in USA.

From a teaching and learning perspective, Gülşen led the development of a number of undergraduate, postgraduate and post-experience courses and programmes Kocaeli University, Türkiye. Her approach to teaching supports self-directed and reflective learning whilst ensuring a balance between theory and practice. Throughout her career, Gülşen has also acted as external examiner for postgraduate programmes at various Turkish Universities such as Yıldız Technical University (Industrial Engineering), Gebze Technical University (Business faculty), Sakarya University (Industrial Engineering Department).

Gülşen has specifically published theory-driven, policy - and practice - relevant articles across the fields of innovation capability, innovation strategies, eco-innovation, digital innovation and digitalization. Gülşen's current research examines emerging innovation trends (such as artificial intelligence, machine learning) and their implications in the organisations in different sectors (i.e., automotive, white goods, tire manufacturing, woods, and etc).

Gulsen has published more than 50 articles, more than 100 papers, 7 books chapters and has won several publications awards such as "Emerald Literati Network, Outstanding Paper ward (2012)", "Publication Incentive Award from The Scientific and Technological Research Council of Turkiye

(TÜBİTAK)" (2011, 2012). She has secured more than $70.000 of research funding from: Kocaeli University Scientific Research Unit, and Turkish Enterprises. She has established an international networks with European, Indian, Taiwanese and American scientists.

Career History

2017 to date	Associate Professor of Industrial Engineering, Engineering Faculty and Institue of Science, Kocaeli University, Kocaeli, Türkiye
2015 to2016	Guest Lecturer of Industrial Engineering, Naval Academy, National Defense University, İstanbul, Türkiye
2010 to 2010	Posct doctorate fellow, Industrial and Manufacturing Engineering Pennsylvenia State University, USA
2005 to 2017	Assistant Professor of Industrial Engineering, Engineering Faculty and Institue of Science, Kocaeli University, Kocaeli, Türkiye
2003 to 2005	Lecturer of Industrial Engineering, Kocaeli University, Kocaeli, Türkiye
1998 to 2003	Research Assistant of Industrial Engineering, Kocaeli University, Kocaeli, Türkiye
1999 to 2003	PhD Student, Production Management in Business Administration Department, Gebze Institue of Technology, Gebze, Kocaeli, Turkey
1997 to 1998	Quality Assurance Chief, Çelik Halat ve Tel. San. AŞ.Kocaeli, Türkiye
1996 to 1997	Quality Assurance Responsible, Paksan AŞ., Kocaeli, Türkiye
1995 to1996	Industrial Engineer, Çamlıca İnşaat AŞ., İstanbul, Türkiye
1993 to1995	Industrial Engineer, D-Kare AŞ., İstanbul, Türkiye
1993 to1996	MSc Student, Industrial Engineering Department, İstanbul Technical University, İstanbul, Türkiye
1989 to1993	Student, Industrial Engineering Department, Yıldız Technical University, İstanbul, Türkiye

Academic Qualifications

2003 - Ph.D. in Business Management, Innovation Management, Gebze Technical University (Gebze Institue of Technology), Kocaeli Turkey
2004- English PreparationSchool, İstanbul Technical University, İstanbul, Turkey
1996 - MSc in Industrial Engineering, Istanbul Technical University, İstanbul, Türkiye
1993 - BSc in Industrial Engineering, Yıldız Technical University, İstanbul, Türkiye

Professional Qualifications

- Member of the Turkiye Operation Research Association, Türkiye
- Member of the Chamber of Mechanical Engineering, Türkiye
- Member of the Production Research Association, Türkiye
- Member of the Lean Institute Association, Türkiye
- Member of Strategic Purchasing Association, Türkiye
- Member of Logistics Association, Türkiye

Knowledge Exchange Portfolio

Gülşen has collaborated on a variety of projects over the course of her career with a broad range of clients, including:

- institutionalization and organisational development in SMEs
- Innovative capability evaluation and development in SMEs,
- Strategy Development in SMEs

- Strategic Planning and Management
- Lean Manufacturing Development in SMEs
- Performance Measurement in SMEs
- Supply Chain Management in SMEs, specifically Supplier Management
- Purchasing and Supply ChainManagement
- Constraints Management in SMEs

Gülşen has conducted consultancy and training assignments with clients in the Turkiye overing the following industry sectors.
- Automotive • Plastics • Tire manufacturing • Textiles

Research Portfolio

Gülşen's research portfolio includes:
- over 50 journal articles of which are in international academic journals
- Over 100 conference papers in international conferences, congress
- Supervised and graduated 5 PhD students and 19 MSc students in Industrial Engineering
- Delivered over 3-4 lectures as invited/keynote lecturer at many Turkish Universities
- Examined over 20 PhD theses in various Turkish universities, and 2 PhD theses in India
- Served on the review boards of over 10 international journals such as Socio-Economic Planning Sciences (SSCI), Journal of The Faculty of Engineering and Architecture Of Gazi University (SCI),Concurrency and Computation-Practice & Experience (SCI), IEEE Transactions on Engineering Management (SCI), European Journal of Innovation Management (SSCI), European Journal of Operational Research (SCI), European Journal of Industrial Engineering(SCI), Computers and Industrial Engineering (SCI), Journal Of Cleaner Production (SSCI), Supply Chain Management: An international Journal (SSCI), Industrial Management&Data Systems (SSCI), International Journal Of Industrial Engineering-Theory Applications and Practice (SCI exp.), Journal of Intelligent Manufacturing (SCI), Tekstil ve Konfeksiyon (SCI exp.), Sage Open (SSCI), International Journal of Production Research (SSCI)
- Collaborated with many international universities, throughout Erasmus programmes.
- Gülşen took part in the scientific committee of many international conferences such as iSCSi (2022, 2023), IEEE ICTMOD (2021, 2022), CEO (2020,2021,2022), ICORES(2023)
- Reviews many research proposals for TUBITAK
- As researcher and executive in 10 national and international projects

Selected publications

1. **Akman G.,** Yörür B., Boyacı A. İ., Chıu M. **(….).** Evaluating Innovation Capabilities of Manufacturing Companies by Combination of Unsupervised and Supervised Machine Learning Approaches **.** Applıed Soft Computıng Journal, ss.1-21, **Under review,** (SCI-Expanded), **(Scimago Q1)**
2. **Akman G.,** Kocabaş Akay M. **(….).** Evaluatıng Natıonal Innovatıon Capacıtıes The Organızatıon Of Turkıc States In The Context Of The Global Innovatıon Index **.**Bılıg, **ss.1-12, Under review,** (SSCI) **(Scimago Q3)**
3. **Akman G.,** Boyaci A. I., Chiu M. (….). Analysis of Difficulties Influencing Successful Adoption to Industry 4.0 in Turkish White-Goods Industry Using a Integrated MCDM Model. Decısıon Scıences, **ss.1-20, Under review,** (SSCI)), **(Scimago Q1)**

4. Özkan G., İnal M. M. , **Akman G**. (….). Determining Criticality of Maintenance Parts via an integrated approach of Fuzzy C-Means and Adaptive Neuro-Fuzzy Classifier Using Linguistic Hedges. Scientia Iranica , **Under review**, pp.1-22, 2023 (SCI-Expanded) **(Scimago Q2)**

5. Aksu B., **Akman G**. (…..) . How eco-innovation determinants and eco innovation strategy influences sustainability performance of SMEs? Mediating role of eco-innovation strategy. Journal Of The Knowledge Economy , **Accepted for puplication** pp.1-13, (SSCI) **(Scimago Q3)**

6. **Akman G.,** Kökümer Z. (2023). Endüstri 4.0 Kapsamında Beyaz Eşya Sektöründe Dijital Dönüşüm Yetkinliğinin Macbeth Ve Edas Yöntemleriyle Değerlendirilmesi. Journal Of The Faculty Of Engineering And Architecture Of Gazi University, 38(4), 2033-2053 (Sci-Expanded) **(Scimago Q2)**

7. Canbay K., **Akman G**. (2023). Investigating changes of total quality management principles in the context of Industry 4.0: Viewpoint from an emerging economy. Technological Forecasting And Social Change , 189, 122358, 1-17 (SSCI) **(Scimago Q1)**

8. **Akman G.,** Taphasanoğlu S. (2022). Determining Optimal Product Mix In Multiple Constraints Manufacturing Environment Via Theory Of Constraints And Goal Programming: An Application In The Textile Sector. Industria Textila, Vol.73, No.5, Pp.563-572. (Sci-Expanded) **(Scimago Q3)**

9. **Akman G.,** Boyacı A. İ. , Kurnaz S. (2022), Selecting The Suitable E-Commerce Marketplace With Neutrosophic Fuzzy Ahp and Edas Methods From Sellers Perspective In The Context Of Covid-19, International Journal Of Analytical Hierarchy Process, No.3, Pp.1-20 **(Scimago Q3)**

10. Chiu M., Huang J., Gupta S., **Akman G.** (2021). Developing A Personalized Recommendation System In A Smart Product Service System Based On Unsupervised Learning Model. Computers In Industry, Vol.128, 2021 (Sci-Expanded) **(Scimago Q1)**

11. Kuo T., Chiu M., Huang J., Chang C., Gupta S., **Akman G. (**2021). Development Of A Data-Driven Smart Product Service System Framework Utilizing Unsurprised Learning Model. International Journal Of Industrial Engineering-Theory Applications And Practice, Vol.28, No.1, Pp.130-147, 2021 (Journal Indexed In Sci) **(Scimago Q3)**

12. Karataş M., Craparo E., **Akman G**. (2018). Bistatic Sonobuoy Deployment Strategies For Detecting Stationary And Mobile Underwater Targets. Naval Research Logistics, Vol.65, No.4, Pp.331-346, 2018 (Sci-Expanded) **(Scimago Q1)**

13. **Akman G. (2015).** Evaluating Suppliers To Include Green Supplier Development Programs Via Fuzzy C-Means And Vikor Methods. Computers & Industrial Engineering, Vol.86, Pp.69-82. (Sci-Expanded) **(Scimago Q1)**

14. **Akman G.,** Ozcan B., Hatipoğlu T. (2015). Fuzzy Multi Criteria Decision Making Approach To Innovative Strategies Based On Miles And Snow Typology. Journal Of Intelligent Manufacturing, Vol.26, No.3, Pp.609-628, 2015 (Sci-Expanded) **(Scimago Q1)**

15. Kremer G. E. O. , **Akman G**. (2013). A Tool For Product Development Performance Monitoring (Pdpm) For Alignment With Competitive Priorities. International Journal Of Information Technology & Decision Making, Vol.12, No.6, Pp.1333-1360. (Sci-Expanded) **(Scimago Q2)**

16. Yulugkural Y., Yörür B., **Akman G.,** Aladağ Z. (2013). Assessment of Model Validity of Analytic Network Process Using Structural Equations Modelling: An Application of Supplier Evaluation Problem. European Journal of Industrial Engineering, Vol.7, No.1, Pp.55-77, 2013 (Sci-Expanded) **(Scimago Q2)**

17. Türkyilmaz A., **Akman G.,** Özkan C., Pastuszak Z. (2011). Empirical Study of Public Sector Employee Loyalty and Satisfaction Industrial Management & Data Systems, Vol.111, Pp.675-696, 2011 (Sci-Expanded**) (Scimago Q1)**

18. Ozkan C., **Akman G.,** Keskin G. A., Otkur F. M. (2011). Fuzzy Adaptive Resonance Theory Approach To Supplier Involvement In Product Development: A Case Study In Turkish Automobile Industry., European J. Industrial Engineering, Vol. 5, No. 1, pp.43-63 **(Scimago Q2)**

19. Ozkan C., **Akman G.,** Ozcan B. (2010). Effecting Factors Of Customer Satisfaction At Supply Chain Context: An Empirical Investigation At Turkish Manufacturing Industry. International Journal Of Industrial Engineering-Theory Applications And Practice, Vol.17, No.4, Pp.287-299, 2010 (Sci-Expanded) **(Scimago Q3)**

20. **Akman G.,** Yilmaz C. (2008). Innovative Capability, Innovation Strategy And Market Orientation: An Empirical Analysis In Turkish Software Industry. International Journal Of Innovation Management, Vol.12, No.1, Pp.69-111, 2008 (Scopus) **(Scimago Q2)**

21. Okudan G. E., **Akman** G. (2004). Manufacturing Performance Modeling And Measurement To Assess Varying Business Strategies. Global Journal Of Flexible Systems Management, Vol.5, Pp.51-59 (Scopus) **(Scimago Q1)**