
DR. CELAL ALPAY HAVLE

Research Areas

**Industrial Engineering
Strategic Management
Digital Transformation
Conceptualizing
Multi-Criteria Decision-
Making and Its Applications
Fuzzy Sets and their
Extensions**

Profile

Dr. Havle received his Ph.D. in Industrial Engineering from Galatasaray University in 2022 after finishing M.Sc in Industrial Engineering at Galatasaray University in 2015. Dr. Havle, graduated from Anadolu University Industrial Engineering Undergraduate Program with a high honor degree and first place in 2014. At the same time, he completed Electrical and Electronic Engineering Minor Program with a high honor degree in order to start his graduate studies in 2014. He worked on several projects during his undergraduate and graduate education.

Dr. Havle has been carrying out academic and administrative duties at Özyeğin University, Faculty of Aviation and Aeronautical Sciences, Professional Flight Program since 2015. Research areas of Dr. Havle are digital transformation, applications of digital transformation in aviation industry and other industrial areas, strategic management, multi-criteria decision making methods and applications, applications of fuzzy sets and their extensions, conceptualization and model development.

Experience (Total: More than 9 years)

Instructor, Özyeğin University; Faculty of Aviation and Aeronautical Sciences, Professional Flight Program, İstanbul – 2016-Today (6 years 8 months)

- **Given courses:**

- Human Performance & Limitations (040) (PPL/ATPL)
- Navigation (061) (PPL/ATPL)

- **Administrative duties:**

- Coordinator of AABI (Aviation Accreditation Board International) in Professional Flight Program
- Member of Curriculum Committee of Professional Flight Program
- Member of Advisory Board of Campus Services
- Member of Academic Advising Improvement Group

- **Authorization Certificates:**

- Navigation (061) (PPL/ATPL) (TR/ENG)

Research Assistant, Özyeğin University; School of Civil Aviation, Pilotage, İstanbul – 2015-2016 (1 year)

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- Member of Advisory Board of Campus Services
 - Authorization Certificates:
 - Human Performance & Limitations (040) (PPL/ATPL) (TR/ENG)

Production Engineer, Somartech; Smart Visual and Industrial Desing, İstanbul – 2015-2015 (6 months)

- Duties:
 - Observation of the production lines
 - Preparation of the work order
 - Production planning

Industrial Engineer, Thor Marine, International Ship Supply, Port Services & Foreign Trade Inc.; İstanbul – 2014-2015 (6 months)

- Duties:
 - Ship track
 - Purchase and order
 - Order track
 - Scheduling

Project Based Long Term Intern, Eczacıbaşı Yapı Gereçleri Vitra A.Ş.; Bilecik – 2012-2012 (3 months)

- Duties:
 - Process controlling.
 - WIP examination and code creating for SAP.
 - Industrial Supervisor: Mehmet Duman
 - Academic Advisors: Prof. Dr. Mine Şenel & Prof. Dr. Bilgin Şenel

Education

Galatasaray University, Graduate School of Science and Engineering, Industrial Engineering; İstanbul – Ph.D Degree, 2022

- Research Areas:
 - Digital transformation, aviation industry, multi-criteria decision-making, fuzzy sets and their extensions, conceptualizing and model development
- GPA: 3.76 / 4.00.

Galatasaray University, Graduate School of Science and Engineering, Industrial Engineering; İstanbul – Master Degree, 2015

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- GPA: 3.78 / 4.00.

- **Research Areas:**

- Digital transformation, multi-criteria decision-making, fuzzy sets, conceptualizing and model development

Anadolu University, Faculty of Engineering, Industrial Engineering; Eskişehir – Bachelor Degree, 2014

- GPA: 3.61 / 4.00.

- High honor graduate.

- First of the department.

- **Research Areas:**

- Value stream mapping, simulation, manufacturing.

Anadolu University, Faculty of Engineering, Electrical & Electronic Engineering; Eskişehir – Minor Degree, 2014

- GPA: 3.51 / 4.00.

Computer Competency

- Microsoft Office (Word, Excel, Powerpoint, Access) - Advanced,
- C# and Visual Programming - Intermediate,
- C - Beginner,
- Matlab - Elementary,
- VBA (Excel Macro) - Elementary,
- Arena Simulation - Upper Intermediate,
- Others: Pajek, Minitab, GAMS.

Language Competency

- English - Speaking: Advanced, Reading: Advanced, Writing: Advanced.
- German - Speaking: Elementary, Reading: Advanced, Writing: Advanced.
- Russian - Speaking: Beginner, Reading: Low-Int., Writing: Elementary.
- French - Speaking: Beginner, Reading: Low-Int., Writing: Beginner.

Scientific Publications

- **Journal Articles:**

- Büyüközkan, G., Havle, C. A., & Feyzioğlu, O. (2021). An integrated SWOT based fuzzy AHP and fuzzy MARCOS methodology for digital
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transformation strategy analysis in airline industry. *Journal of Air Transport Management*, 97, 102142.

- Büyüközkan, G., Havle, C. A., & Feyzioğlu, O. (2021). Digital competency evaluation of low-cost airlines using an integrated IVIF AHP and IVIF VIKOR methodology. *Journal of Air Transport Management*, 91, 101998.
 - Büyüközkan, G., Havle, C. A., & Feyzioğlu, O. (2020). A new digital service quality model and its strategic analysis in aviation industry using interval-valued intuitionistic fuzzy AHP. *Journal of Air Transport Management*, 86, 101817.
 - Büyüközkan, G., Havle, C. A., Feyzioğlu, O., & Göçer, F. (2020). A combined group decision making based IFCM and SERVQUAL approach for strategic analysis of airline service quality. *Journal of Intelligent & Fuzzy Systems*, 38(1), 859-872.
 - Havle, C. A., & Kılıç, B. (2019). A hybrid approach based on the fuzzy AHP and HFACS framework for identifying and analyzing gross navigation errors during transatlantic flights. *Journal of Air Transport Management*, 76, 21-30.
 - Havle, C. A., & Ucler, C (2016). EBA: A structured approach for evidence based lean implementation. *Eurasian Academy of Sciences Eurasian Business & Economics Journal*, Vol. S, pp. 272-281.
 - **Book Chapters:**
 - Büyüközkan, G., Havle, C.A., Feyzioğlu, O. (2021). Intuitionistic Fuzzy Cognitive Map Based Analysis of Supply Chain Risks. In: Dolgui, A., Bernard, A., Lemoine, D., von Cieminski, G., Romero, D. (eds) *Advances in Production Management Systems. Artificial Intelligence for Sustainable and Resilient Production Systems. APMS 2021. IFIP Advances in Information and Communication Technology*, vol 634. Springer, Cham. https://doi.org/10.1007/978-3-030-85914-5_67.
 - Büyüközkan G., Feyzioğlu O., Havle C.A. (2020) Analysis of Success Factors in Aviation 4.0 Using Integrated Intuitionistic Fuzzy MCDM Methods. In: Kahraman C., Cebi S., Cevik Onar S., Oztaysi B., Tolga A., Sari I. (eds) *Intelligent and Fuzzy Techniques in Big Data Analytics and Decision Making. INFUS 2019. Advances in Intelligent Systems and Computing*, vol 1029. Springer, Cham. https://doi.org/10.1007/978-3-030-23756-1_73.
 - **National & International Conference Proceedings:**
 - Büyüközkan, G., Havle, C. A., Feyzioğlu, O., & Uztürk, D. (2020, March). Integrated Fuzzy Multi Criteria Decision Making Approach for Sustainable Energy Technology Selection. In *Proceedings of the 2020 The 9th International Conference on Informatics, Environment, Energy and Applications* (pp. 93-98).
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- Büyüközkan, G., Feyzioğlu, O., & Havle, C. A. (2019). Analyzing Success Factors of Digital Transformation in Aviation Industry Using Fuzzy Cognitive Map Approach. In 2019 3rd International Conference on Data Science and Business Analytics (ICDSBA) (pp. 124-128). IEEE.
 - Havle, C.A., Büyüközkan, G. & Feyzioğlu, O., (2019). Digital transformation risk analysis in Turkey aviation industry. Proceedings of the 17th International Logistics and Supply Chain Congress, October 17-18, İstanbul, Turkey.
 - Büyüközkan, G., Feyzioğlu, O., & Havle, C. A. (2019). Intuitionistic Fuzzy AHP Based Strategic Analysis of Service Quality in Digital Hospitality Industry. *IFAC-PapersOnLine*, 52(13), 1687-1692.
 - Havle, C. A., & Üçler, Ç. (2018, October). Enablers for industry 4.0. In 2018 2nd International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT) (pp. 1-6). IEEE.
 - Şenel, M., Şenel, B., & Havle, C. A. (2018). Risk analysis of ports in Maritime Industry in Turkey using FMEA based intuitionistic Fuzzy TOPSIS Approach. In *ITM Web of Conferences* (Vol. 22, p. 01018). EDP Sciences.
 - Feyzioğlu, O., Havle, C.A. & Büyüközkan, G., (2018). Digital transformation strategy analysis of Turkey aviation industry. Proceedings of the 16th International Logistics and Supply Chain Congress, October 18-20, Denizli Turkey.
 - Büyüközkan, G., Feyzioğlu, O. & Havle, C.A. (2018). A new service quality model for aviation industry. Proceedings of the 16th International Logistics and Supply Chain Congress, October 18-20, Denizli Turkey.
 - Büyüközkan, G. & Havle, C.A. (2018). Havacılık endüstrisinde dijital dönüşüm ve Türkiye analizi. Proceedings of the 7th National Logistics and Supply Chain Congress, 3-5 May, Bursa Turkey.
 - Feyzioğlu, O., Havle, C.A., Büyüközkan, G. (2017). Airline service quality analysis by using fuzzy cognitive map approach. Proceedings of the 15th International Logistics and Supply Chain Congress : Big data analytics in logistics and supply chain.
 - **National & International Conferences**
 - 15th LMSCM: 15th International Logistics and Supply Chain Congress : Big data analytics in logistics and supply chain. 19-20 October, İstanbul, Turkey. - Presentation: Airline service quality analysis by using fuzzy cognitive map approach (2017)
 - 3rd CMES: International Conference of Computational Mathematics and Engineering Sciences, 4-6 May, Girne, Cyprus. - Presentation: Risk
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analysis of ports in Maritime Industry in Turkey using FMEA based intuitionistic Fuzzy TOPSIS Approach (2018)

- 38th YAEM: 38. Yöneylem Araştırması Endüstri Mühendisliği Ulusal Kongresi, 26-29 Haziran, Eskişehir, Türkiye. - Presentation: Dijital hizmet kalitesi model önerimi (2018)
 - 7th ULTZK: 7. Ulusal Lojistik ve Tedarik Zinciri Kongresi, Bursa, Türkiye. - Presentation: Havacılık endüstrisinde dijital dönüşüm ve Türkiye analizi (2018)
 - 16th LMSCM: 16th International Logistics and Supply Chain Congress, October 18-20, Denizli, Turkey. - Presentation: A new service quality model for aviation industry (2018)
 - 16th LMSCM: 16th International Logistics and Supply Chain Congress, October 18-20, Denizli, Turkey. - Presentation: Digital transformation strategy analysis of Turkey aviation industry (2018)
 - 2nd ISMSIT: 2nd International Symposium on Multidisciplinary Studies and Innovative Technologies, October 20-22, Ankara, Turkey. - Presentation: Enablers for industry 4.0 (2018)
 - 17th LMSCM: 6th International Logistics and Supply Chain Congress, October 17-18, İstanbul, Turkey. - Presentation: Digital transformation risk analysis in Turkey aviation industry (2019)
 - 39th YAEM: 39. Yöneylem Araştırması Endüstri Mühendisliği Ulusal Kongresi, 12-14 Haziran, Ankara, Türkiye. - Presentation: Türkiye sağlık sektöründe dijital dönüşüm ve hizmet kalitesinin stratejik analizi (2019)
 - 9th IFAC MIM: 9th IFAC Manufacturing Modelling, Management and Control Congress, August 28-30, Berling, Germany. - Presentation: Intuitionistic Fuzzy AHP Based Strategic Analysis of Service Quality in Digital Hospitality Industry (2019)
 - 3rd ICDSBA: 3rd International Conference on Data Science and Business Analytics, October 11-12, İstanbul, Turkey. - Presentation: Analyzing Success Factors of Digital Transformation in Aviation Industry Using Fuzzy Cognitive Map Approach (2019)
 - INFUS: International Conference on Intelligent and Fuzzy Systems, July 23-25, İstanbul, Turkey. - Presentation: Analysis of Success Factors in Aviation 4.0 Using Integrated Intuitionistic Fuzzy MCDM Methods (2019)
 - 9th IEEA: 9th International conference on Informatics, Environment, Energy and Applications, March 13-16, Amsterdam, Netherlands. - Presentation: Integrated Fuzzy Multi Criteria Decision Making Approach for Sustainable Energy Technology Selection (2020)
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- APMS: Advances in Production Management Systems Conference, September 5-9, Nantes, France. - Presentation: Intuitionistic Fuzzy Cognitive Map Based Analysis of Supply Chain Risks (2021)

Awards

- Best paper award: Büyüközkan, G., Feyzioğlu, O., & Havle, C. A. (2019, October). Analyzing Success Factors of Digital Transformation in Aviation Industry Using Fuzzy Cognitive Map Approach. In 2019 3rd International Conference on Data Science and Business Analytics (ICDSBA) (pp. 124-128). IEEE.
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