# **CELAL ALPAY HAVLE**

# **Contact Info Summary** ⊠ celal.alpay.havle@gmail.com Industrial Engineer holding a Ph.D. degree with 8 years of university celal.havle@ozyegin.edu.tr level experience including teaching and administrative duties. ✓ Istanbul/Turkey Proven achievement in model proposition and implementation in case studies for digital transformation journeys of the companies. Exceptional skills in strategic management, decision engineering, **Research Areas and Expertise** • Artificial Intelligence fuzzy multi-criteria decision-making, conceptualizing, application of analytical techniques. Proponent of the first digital • Decision Engineering • Digital Transformation service quality model. • Fuzzy Sets and Their Extensions **Key Skills** • Industrial Engineering Conceptualizing Teaching Decision-Making Metaverse • Model Development • Case Analysis Accreditation • Multi-Criteria Decision-Making • Publication • Curriculum • Quantitative Analysis • Strategic Management **EDUCATION** University Canada West, Vancouver, British Columbia, Canada 2023-2025 • MBA, Master of Business Administration • 87.29 %, Outstanding Academic Standing Galatasaray University, Istanbul, Turkey 2015-2022 • Ph.D. in Industrial Engineering • 94.00 %, Exceptional Academic Standing • Valedictorian, First Integrated Doctoral Graduate Galatasaray University, Istanbul, Turkey 2014-2015 • M.Sc. in Industrial Engineering • 94.50 % Exceptional Academic Standing • Admission to Integrated Doctorate Anadolu University, Eskisehir, Turkey 2009-2014 • B.Sc. in Industrial Engineering • 90.25 % Exceptional Academic Standing • Valedictorian and High Honor Graduate

Anadolu University, Eskisehir, Turkey

• Minor in Electrical and Electronic Engineering

2011-2014

#### **APPOINTMENTS**

Assistant Professor September 2024- Current

Özyeğin University, Faculty of Aviation and Aeronautical Sciences,

Çekmeköy, Istanbul, Turkey

**Assistant Professor** September 2022 - September 2023

Özyeğin University, Faculty of Aviation and Aeronautical Sciences,

Çekmeköy, Istanbul, Turkey

**Instructor** September 2016 - September 2022

Özyeğin University, Faculty of Aviation and Aeronautical Sciences,

Çekmeköy, Istanbul, Turkey

Research Assistant September 2015 - September 2016

Özyeğin University, Faculty of Aviation and Aeronautical Sciences,

Çekmeköy, Istanbul, Turkey

#### **AWARDS**

### **Best Paper**

3rd International Conference on Data Science and Business Analytics (ICDSBA), Istanbul, Turkey, 11-12 October 2019. Presented study: "Analyzing Success Factors of Digital Transformation in Aviation Industry Using Fuzzy Cognitive Map Approach"

## SCIENTIFIC RESEARCH

## **Peer Reviewed Journal Papers**

- Büyüközkan, G., Havle, C.A., & Feyzioğlu, O. (2021). An integrated SWOT based fuzzy AHP and fuzzy MARCOS methodology for digital 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**

- Havle, C.A., Büyüközkan, G. (2023). Sustainable Future Technology Evaluation with Digital Transformation Perspective in Air Cargo Industry Using IF ANP Method. In: Kahraman, C., Sari, I.U., Oztaysi, B., Cebi, S., Cevik Onar, S., Tolga, A.Ç. (eds) Intelligent and Fuzzy Systems. INFUS 2023. Lecture Notes in Networks and Systems, vol 759. Springer, Cham. <a href="https://doi.org/10.1007/978-3-031-39777-6">https://doi.org/10.1007/978-3-031-39777-6</a> 47
- 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. <a href="https://doi.org/10.1007/978-3-030-23756-1-73">https://doi.org/10.1007/978-3-030-23756-1-73</a>

#### **Full Paper Conference Proceedings**

- Havle, C.A., & Büyüközkan, G. (2024). Evaluation of Artificial Intelligence Requirements in Aviation Industry using Fuzzy Cognitive Map Approach. Proceedings of the 9th North American Conference on Industrial Engineering and Operations Management, Washington D.C., USA, June 4-6. [Accepted, will be presented and published.]
- Büyüközkan, G., Feyzioğlu, O., & Havle, C.A. (2024). Digital Service Quality Analysis in Aviation Industry with Aviation 4.0 Perspective using Fuzzy Analytic Hierarchy Process Methodology. Proceedings of the 9th North American Conference on Industrial Engineering and Operations Management, Washington D.C., USA, June 4-6. [Accepted, will be presented and published.]
- Havle, C. A., Kilic, S., & Ucler, C. (2023, June). Modernizing data and cloud practices: A review and model proposal for future studies. In 2023 IEEE International Conference on Engineering, Technology and Innovation (ICE/ITMC) (pp. 1-7). IEEE.

- Büyüközkan, G., Feyzioğlu, O., & Havle, C.A. (2023) Evaluation of Digital Transformation Success Factors in Air Cargo Industry using IFCM Approach. Proceedings of the 8th North American International Conference on Industrial Engineering and Operations Management, Houston, Texas, USA, June 13-16.
- 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).
- 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.
- 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). 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.

#### **Presentations in Conferences**

IEEE International Conference on Engineering, Technology and Innovation (ICE/ITMC), Edinburgh, UK, 19-22 June 2023. Presented study: "Modernizing Data and Cloud Practices: A Review And Model Proposal For Future Studies".

- 5th International Conference on Intelligent and Fuzzy Systems (INFUS), Istanbul, Turkey, 22-24 August 2023. Presented study: "Sustainable Future Technology Evaluation with Digital Transformation Perspective in Air Cargo Industry Using IF ANP Method".
- 8th North American International Conference on Industrial Engineering and Operations Management, Houston, Texas, USA, 13-16 June 2023. Presented study: "Evaluation of Digital Transformation Success Factors in Air Cargo Industry using IFCM Approach".
- 7th International Conference on Advances in Production Management Systems (APMS), Nantes, France, 5-9 September 2021. Presented study: "Intuitionistic Fuzzy Cognitive Map Based Analysis of Supply Chain Risks".
- International Conference on Intelligent and Fuzzy Systems (INFUS), Istanbul, Turkey, 23-25 June 2019. Presented study: "Analysis of Success Factors in Aviation 4.0 Using Integrated Intuitionistic Fuzzy MCDM Methods".
- 9th International Conference on Informatics, Environment, Energy and Applications, Amsterdam, Netherlands, 13-16 March 2020. Presented study: "Integrated Fuzzy Multi Criteria Decision Making Approach for Sustainable Energy Technology Selection".
- 3rd International Conference on Data Science and Business Analytics (ICDSBA), Istanbul, Turkey, 11-12 October 2019. Presented study: "Analyzing Success Factors of Digital Transformation in Aviation Industry Using Fuzzy Cognitive Map Approach".
- 17<sup>th</sup> International Logistics and Supply Chain Congress, İstanbul, Turkey, 17-18 October 2019. Presented study: "Digital Transformation Risk Analysis in Turkey Aviation Industry".
- 9th IFAC Conference on Manufacturing Modelling, Management and Control MIM 2019: Berlin, Germany, 28–30 August 2019. Presented study: "Intuitionistic Fuzzy AHP Based Strategic Analysis of Service Quality in Digital Hospitality Industry".
- 39. Operations Research ve Endüstri Mühendisliği Ulusal Kongresi (YAEM2019), Ankara, Türkiye, 12 14 Haziran 2019. Presented study: "Türkiye Sağlık Sektöründe Dijital Dönüşüm ve Hizmet Kalitesinin Stratejik Analizi".
- 2<sup>nd</sup> International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), Ankara, Istanbul, 19-21 October 2018. Presented study: "Enablers for Industry 4.0".
- The Third International Conference on Computational Mathematics and Engineering Sciences (CMES2018), Girne, Cyprus, 4-6 May 2018. Presented study: "Risk Analysis of Ports in Maritime Industry in Turkey Using FMEA Based Intuitionistic Fuzzy TOPSIS Approach".
- 16<sup>th</sup> International Logistics and Supply Chain Congress, Denizli Turkey, 18-20 October 2018. Presented study: "Digital Transformation Strategy Analysis of Turkey Aviation Industry".

- 16th International Logistics and Supply Chain Congress, Denizli Turkey, 18-20 October 2018. Presented study: "A New Service Quality Model for Aviation Industry".
- 7<sup>th</sup> National Logistics and Supply Chain Congress, Bursa, Turkey, 3-5 May 2018. Presented study: "Havacılık Endüstrisinde Dijital Dönüşüm ve Türkiye Analizi".
- 15th International Logistics and Supply Chain Congress: Big data analytics in logistics and supply chain, Istanbul, Turkey, 19 20 October 2017. Presented study: "Airline Service Quality Analysis by Using Fuzzy Cognitive Map Approach".

### DISSERTATIONS

## Ph.D. in Industrial Engineering, Galatasaray University

2022

**Thesis:** "Strategic Analysis of Digital Transformation in Aviation Industry and Proposition of a New Digital Service Quality Model"

Advisor: Prof. Dr. Orhan Feyzioğlu

# **B.Sc. in Industrial Engineering, Anadolu University**

2014

Thesis: "Application of Value Stream Mapping Technique in a White Good Manufacturing Company"

Advisor: Dr. Mümtaz Erdem

#### **TEACHING**

**Teaching:** More than 2500 hours

- Human Performance and Limitations PPL/ATPL
- General Navigation PPL/ATPL
- Meteorology PPL/ATPL

### ADMINISTRATIVE

- Member of AABI, Professional Flight Program, Özyeğin University (Program Level)
- AABI Form 204 Self Study Report, Professional Flight Program, Özyeğin University (Program Level)
- AABI Continuous Improvement, Professional Flight Program, Özyeğin University (Program Level)
- Member of Curriculum Committee, Professional Flight Program, Özyeğin University (Program Level)
- Member of Curriculum Committee, Özyeğin University (University Level)
- Member of Academic Advising Improvement Committee, Özyeğin University (University Level)
- Member of Campus Services Advisory Board, Özyeğin University (University Level)
- Member of Disciplinary Committee, Professional Flight Program, Özyeğin University (Program Level)

## **CERTIFICATES & BADGES**

## Digital Marketing Associate Certificate, Vancouver, British Columbia, Canada

2024

- Institute: Digital Marketing Institute & University Canada West
- Syllabus Version 3.0, Graduate No: CA-UCW263317
- Success Rate: 92%

• Duration of Education: 2 Months Financial Accounting Micro-credential, Vancouver, British Columbia, Canada 2024 • Institute: University Canada West • Success Rate: 100% • Duration of Education: 1 Month Learning for Success Badge, Vancouver, British Columbia, Canada 2023 • Institute: University Canada West • Duration of Education: 1 Month Academic Writing Strategies Badge, Vancouver, British Columbia, Canada 2023 • Institute: University Canada West • Duration of Education: 1 Month Strategies for Learning Success Badge, Vancouver, British Columbia, Canada 2023 • Institute: University Canada West • Duration of Education: 1 Month Academic Integrity Badge, Vancouver, British Columbia, Canada 2023 • Institute: University Canada West • Duration of Education: 1 Month Theoretical Knowledge Instructor Authorization Certificate, Istanbul, Turkey 2018 • Institute: Directorate General of Civil Aviation • 061 General Navigation ATPL (TR, EN) • Validation Period: 26.02.2018 – Indefinite Theoretical Knowledge Instructor Authorization Certificate, Istanbul, Turkey 2018 • Institute: Directorate General of Civil Aviation • 040 Human Performance and Limitations ATPL (TR, EN) • Second Validation Period: 26.02.2018 - Indefinite Theoretical Knowledge Instructor Authorization Certificate, Istanbul, Turkey 2015 • Institute: Directorate General of Civil Aviation • 040 Human Performance and Limitations ATPL (TR, EN) • First Validation Period: 27.12.2015 – 26.12.2018 THESIS COMMITTEE MEMBERSHIP Committee Member of a M.Sc. Thesis in Industrial Engineering, 2023 Galatasaray University, Istanbul, Turkey