

## Assoc. Prof. Cenk BUDAYAN

### Personal Information

Office Phone: [+90 212 383 5255](tel:+902123835255)

Web: <https://avesis.yildiz.edu.tr/budayan>

### International Researcher IDs

ORCID: 0000-0002-8433-2824

Yoksis Researcher ID: 139952

### Education Information

Doctorate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, İnşaat Mühendisliği, Turkey 2004 - 2009

Undergraduate, Middle East Technical University, Faculty Of Engineering, İnşaat Mühendisliği, Turkey 2003 - 2009

### Research Areas

Civil Engineering, Building Management, Construction Management, Engineering and Technology

### Academic Titles / Tasks

Associate Professor, Yildiz Technical University, Faculty Of Civil Engineering, Civil Engineering Department, 2019 - Continues

Assistant Professor, Yildiz Technical University, Faculty Of Civil Engineering, Civil Engineering Department, 2013 - 2019

Other, University of Salford, Mühendislik Fakültesi, Built And Environment, 2012 - 2013

Research Assistant PhD, Selçuk University, Faculty Of Engineering, İnşaat Mühendisliği, 2009 - 2012

Research Assistant, Middle East Technical University, Faculty Of Engineering, İnşaat Mühendisliği, 2004 - 2009

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Development of a knowledge-based tool for waste management of prefabricated steel structure projects**  
Mirshekarlou B. R., BUDAYAN C., DİKMEN TOKER İ., BİRGÖNÜL M. T.  
JOURNAL OF CLEANER PRODUCTION, vol.323, 2021 (SCI-Expanded)
- II. **Reasons for Performance Differences among ISO 9001:2015-Certified Construction Companies in the Perspective of TQM Elements**  
OKUDAN O., BUDAYAN C.  
Journal of Management in Engineering, vol.37, no.5, 2021 (SCI-Expanded)
- III. **A knowledge-based risk management tool for construction projects using case-based reasoning**  
OKUDAN O., BUDAYAN C., DİKMEN TOKER İ.  
Expert Systems with Applications, vol.173, 2021 (SCI-Expanded)
- IV. **Development of a conceptual life cycle performance measurement system for build-operate-transfer (BOT) projects**  
OKUDAN O., BUDAYAN C., Dikmen I.

Engineering, Construction and Architectural Management, vol.28, pp.1635-1656, 2021 (SCI-Expanded)

- V. **Determination of Important Building Construction Nuisances in Residential Areas on Neighbouring Community**  
Budayan C., Çelik T.  
Teknik Dergi, vol.32, no.2, pp.1-12, 2021 (SCI-Expanded)
- VI. **Identification and prioritization of stage-level KPIs for BOT projects - evidence from Turkey**  
BUDAYAN C., OKUDAN O., DİKMEN TOKER İ.  
INTERNATIONAL JOURNAL OF MANAGING PROJECTS IN BUSINESS, vol.13, no.6, pp.1311-1337, 2020 (SSCI)
- VII. **Construction cost map of European countries**  
BUDAYAN C., Dikmen I., BİRGÖNÜL M. T.  
Engineering Economist, vol.65, no.2, pp.135-157, 2020 (SCI-Expanded)
- VIII. **Assessing the social cost of housing projects on the built environment: Analysis and monetization of the adverse impacts incurred on the neighbouring communities**  
Çelik T., ARAYICI Y., BUDAYAN C.  
Environmental Impact Assessment Review, vol.77, pp.1-10, 2019 (SSCI)
- IX. **Key Performance Indicators of Vocational Education and Training in the Construction Industry**  
IŞIK Z., BUDAYAN C., ALADAĞ H., DEMİRDÖĞEN G., YILMAZ T., ARDİTİ D.  
TEKNIK DERGI, vol.30, no.3, pp.9147-9174, 2019 (SCI-Expanded)
- X. **Estimation at Completion Simulation Using the Potential of Soft Computing Models: Case Study of Construction Engineering Projects**  
AlHares E. F. T., BUDAYAN C.  
SYMMETRY-BASEL, vol.11, no.2, 2019 (SCI-Expanded)
- XI. **Implementation of Genetic Algorithm Integrated with the Deep Neural Network for Estimating at Completion Simulation**  
Kareem Kamoona K. R., BUDAYAN C.  
Advances in Civil Engineering, vol.2019, 2019 (SCI-Expanded)
- XII. **Evaluation of Delay Causes for BOT Projects Based on Perceptions of Different Stakeholders in Turkey**  
BUDAYAN C.  
JOURNAL OF MANAGEMENT IN ENGINEERING, vol.35, no.1, 2019 (SCI-Expanded)
- XIII. **Effects of Risk Attitude and Controllability Assumption on Risk Ratings: Observational Study on International Construction Project Risk Assessment**  
Dikmen I., BUDAYAN C., BİRGÖNÜL M. T., HAYAT E.  
JOURNAL OF MANAGEMENT IN ENGINEERING, vol.34, no.6, 2018 (SCI-Expanded)
- XIV. **A Computerized Method for Delay Risk Assessment Based on Fuzzy Set Theory using MS Project (TM)**  
BUDAYAN C., Dikmen I., BİRGÖNÜL M. T., GHAZIANI A.  
KSCE JOURNAL OF CIVIL ENGINEERING, vol.22, no.8, pp.2714-2725, 2018 (SCI-Expanded)
- XV. **Analysis of critical success factors in public private partnership projects by triangulation method: Turkey perspective**  
BUDAYAN C.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.33, no.3, pp.1029-1044, 2018 (SCI-Expanded)
- XVI. **An expert system for the quantification of fault rates in construction fall accidents**  
BİRGÖNÜL M. T., Dikmen I., BUDAYAN C., Demirel T.  
INTERNATIONAL JOURNAL OF OCCUPATIONAL SAFETY AND ERGONOMICS, vol.22, no.1, pp.20-31, 2016 (SSCI)
- XVII. **Alignment of project management with business strategy in construction: evidence from the Turkish contractors**  
BUDAYAN C., Dikmen I., BİRGÖNÜL M. T.  
JOURNAL OF CIVIL ENGINEERING AND MANAGEMENT, vol.21, no.1, pp.94-106, 2015 (SCI-Expanded)
- XVIII. **Comparing the performance of traditional cluster analysis, self-organizing maps and fuzzy C-means**

### **method for strategic grouping**

Budayan C., Dikmen I., BİRGÖNÜL M. T.

EXPERT SYSTEMS WITH APPLICATIONS, vol.36, no.9, pp.11772-11781, 2009 (SCI-Expanded)

### **XIX. Strategic Group Analysis in the Construction Industry**

Dikmen I., BİRGÖNÜL M. T., Budayan C.

JOURNAL OF CONSTRUCTION ENGINEERING AND MANAGEMENT-ASCE, vol.135, no.4, pp.288-297, 2009 (SCI-Expanded)

## **Articles Published in Other Journals**

### **I. ASSESSMENT OF PROJECT CHARACTERISTICS AFFECTING RISK OCCURRENCES IN CONSTRUCTION PROJECTS USING FUZZY AHP**

Okudan O., Budayan C.

Sigma Journal of Engineering and Natural Science, vol.38, no.3, pp.1447-1462, 2020 (ESCI)

### **II. Determination of the Critical Success Criteria for Public-Private Partnership (PPP) Projects in Turkey**

Okudan O., Budayan C.

Journal of Polytechnic, vol.2020, 2020 (Peer-Reviewed Journal)

### **III. Project Portfolio Management Applications for Turkish Construction Industry in Istanbul Region**

BUDAYAN C.

JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.20, no.3, pp.699-709, 2017 (ESCI)

### **IV. Investigation of drivers and modes of differentiation in Turkish construction industry**

Budayan C., Dikmen Toker İ., Birgönül M. T.

Engineering, Construction and Architectural Management, vol.20, pp.345-364, 2013 (Scopus)

### **V. Hybrid strategic groups in construction**

BUDAYAN C., Dikmen İ., Birgönül T.

Engineering Project Organization Journal, vol.1, no.3, pp.183-196, 2011 (Scopus)

## **Refereed Congress / Symposium Publications in Proceedings**

### **I. Matlab Script for Fuzzy AHP Analysis**

Okudan O., Budayan C.

6th international Project and Construction Management Conference, İstanbul, Turkey, 12 - 14 November 2020, pp.1377-1385

### **II. Determination of KPIs for Small and Medium Sized Construction Companies**

Okudan O., Budayan C.

14TH INTERNATIONAL CONFERENCE ORGANIZATION, TECHNOLOGY AND MANAGEMENT IN CONSTRUCTION, Zagreb, Croatia, 4 - 07 September 2019, pp.160-176

### **III. Role of Vocational Education and Training in the Construction Industry Performance**

IŞIK Z., ALADAĞ H., DEMİRDÖĞEN G., BUDAYAN C., YILMAZ T.

IJAS 2018 (International Journal of Arts Sciences) - International Conference for Teaching and Education, 23 - 27 July 2018

### **IV. Critical Success Factors for Public Private Partnership Projects in Turkey**

BUDAYAN C.

5th international project and construction management conference, Girne, Cyprus (Kktc), 16 - 18 November 2018, pp.1570-1582

### **V. Akademisyenlerin ve Özel Sektörün Yeni Mezun İnşaat Mühendislerinin Sahip Olması Gereken Yeteneklere Dair Bakış Açıları**

BUDAYAN C., ÇELİK T.

4. Proje ve Yapım Yönetimi Kongresi, Turkey, 3 - 05 November 2016
- VI. **How the Residents are Affected from Construction Operations Conducted in Residential Areas**  
CELİK T., BUDAYAN C.  
World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium, WMCAUS 2016, Prague, Czech Republic, 13 - 17 June 2016, vol.161, pp.394-398
- VII. **Türkiye İnşaat Sektöründe ISO 9000 Sahip Firmaların Toplam Kalite Yönetim Sistemini Uygulama Seviyeleri**  
Budayan C., Karakaya E., Öztürk M., Hacıdursunoğlu Y.  
3. Proje ve Yapım Yönetimi Kongresi, Antalya, Turkey, 01 November 2014, pp.100-101
- VIII. **Avrupa Ülkeleri Arasındaki İnşaat Maliyetlerinin Kıyaslanmasına Yönelik Bir Kümeleme Analizi**  
BUDAYAN C., BİRGÖNÜL M. T., DİKMEN TOKER İ.  
2. Proje ve Yapım Yönetimi Kongresi, Turkey, 13 - 16 September 2012
- IX. **İNŞAAT FİRMALARI İÇİN WEB TABANLI RİSK BİLGİSİ TOPLAMA PLATFORMU KAVRAMSAL ÇERÇEVE**  
BUDAYAN C.  
1. Proje ve Yapım Yönetimi Kongresi, Turkey, 29 September - 01 October 2010
- X. **Strategic group analysis by using fuzzy clustering**  
BUDAYAN C., DİKMEN TOKER İ., BİRGÖNÜL M. T.  
Proceedings of Fifth International Conference on Construction in the 21th century, 20 - 22 May 2009, pp.245-252
- XI. **Modes of differentiation strategies in the construction industry**  
BUDAYAN C., DİKMEN TOKER İ., BİRGÖNÜL M. T.  
Proceedings of International Research Symposium, 27 - 28 January 2009, pp.309-323
- XII. **Strategic group analysis by using self organizing maps**  
Budayan C., Dikmen I., Birgonul T.  
23rd Annual Conference on Association of Researchers in Construction Management, ARCOM 2007, Belfast, United Kingdom, 3 - 05 September 2007, vol.1, pp.223-232
- XIII. **Türk İnşaat Sektöründe Stratejik Grup Analizi**  
BUDAYAN C., DİKMEN TOKER İ., BİRGÖNÜL M. T.  
4. İnşaat Yönetimi Kongresi, Turkey, 30 - 31 October 2007
- XIV. **Research Trends In Construction Management Throughout Twenty Years**  
BUDAYAN C., Alshawi M., Arayici Y.

## Supported Projects

Budayan C., Okudan O., Project Supported by Higher Education Institutions, A KNOWLEDGE-BASED RISK MANAGEMENT TOOL FOR CONSTRUCTION PROJECTS USING CASE-BASED REASONING, 2020 - 2021

Budayan C., Işık Z., Aladağ H., Yılmaz T., Demirdöğen G., EU Supported Other Project, Determination of a European Standart for Key Performance Indicators KPIs in Vocational Training Models of Construction Industry, 2014 - 2017

BUDAYAN C., TUBITAK Project, İnşaat Projelerinde Ortaya Çıkan Risk Bilgisinin Elde Edilmesi Ve Bu Bilginin Tekrar Kullanılabilmesi İçin Web Tabanlı Bir Platformun Geliştirilmesi, 2012 - 2013

## Metrics

Publication: 40

Citation (WoS): 165

Citation (Scopus): 335

H-Index (WoS): 6

H-Index (Scopus): 8