



DETERMINATION OF OPTIMAL LEADERSHIP STYLE FOR AN ORGANIZATION: CASE OF HASAN POLATKAN AIRPORT

Ayşe Küçük Yılmaz¹, Gökhan Tanrıverdi², Mehmet Şahin Durak³

¹ *Anadolu University, Faculty of Aeronautics and Astronautics, Iki Eylul Campus, Eskişehir (Turkey), tel:+90 (222) 321 3550 / 6820, e-mail: akucukyilmaz@anadolu.edu.tr*

² *Anadolu University, Faculty of Aeronautics and Astronautics, Iki Eylul Campus, Eskişehir (Turkey), tel:+90 (222) 321 3550 / 7031, e-mail: gkhantanriverdi@gmail.com*

³ *Anadolu University, Faculty of Aeronautics and Astronautics, Iki Eylul Campus, Eskişehir (Turkey), tel:+90 (222) 321 3550 / 7041, e-mail:msdurak@anadolu.edu.tr*

Article history:

Received 21 January 2016

Accepted 6 April 2016

Available online 13 April 2016

Abstract: *Hasan Polatkan airport has a unique structure among airports in the world in terms of that it is operated by cooperation of government and university and it's international operations. Problem of this research is flexibility which is needed due to the university's autonomous structure and dynamic nature of the aviation industry, conflicts with bureaucracy that has dominant position on government.*

Purpose of this paper is to determine optimal leadership style for organization structure of Hasan Polatkan Airport. This will contribute to decrease the impact of bureaucracy resulting from structure of the organization and enable to organization to act faster in a dynamic sector like aviation as well. Analytical Hierarchy Process (AHP) that is a method for multi-criteria decision-making was used as a method in this paper. In scope of the work, leadership styles obtained from literature are accepted as alternatives. Further of the work, aim and alternatives are transformed to hierarchical structure, compared and prioritized using AHP. As a result of prioritization and comparison, optimal leadership style for Hasan Polatkan Airport is determined as engaged leadership. The paper is expected to present contributions to literature and determination of organization structure of airport.

Key words: *Leadership Styles, Organization Structure, Hasan Polatkan Airport, Analytic Hierarchy Process, AHP*

1 INTRODUCTION

Airports operated by an authority or a city may have different management structures. Authorities are independent entities that have ability to effect change and operate easily than a city. Airports operated by a city are government institutions and managed in accordance with government rules that are processes, procedures, and standards for hiring and terminating employees. Also they may have direct authority on the assignment of the executives as well as influence over the airport's operating strategy [13].

Hasan Polatkan airport is located in the border of İki Eylül Campus at Anadolu University. Hasan Polatkan airport has a unique structure among airports in the world in terms of that it is operated by cooperation of government and university and its operations are international. In this direction, the airport's management scheme is hierarchically as follow; dean of Faculty of Aeronautics and Astronautics is at top of the scheme as accountable manager. One of vice deans is business manager under dean. They have represented university side at top management. There is also airport chief that represents government side at the top management. Quality manager, security manager, safety management system (SMS) manager etc. have represented government side as well. In 2007, the airport became the 21st airport that took business license in Turkey, after it provided standards of International Civil Aviation Organization (ICAO) and was documented that it is secure and safe [11]. Airport's general aviation apron has used for park apron for educational and general aviation aircrafts. It also has 18 park positions for aircrafts which is under 5700 kg and 4000 m² passenger terminal that can be used for domestic and international flights [1].

Leadership has no specific definition in the management literature. This situation results from that there are lots of leadership approaches reached to now. These are respectively; leadership is a trait, leadership is an ability, leadership is a skill, leadership is a behavior, leadership is a relationship and finally leadership is an influence process [9]. As a linked with leadership approaches directly, many of new leadership styles was produced to increase efficiency of organizations in today's global competitive environment. For each organization structure, in terms of contingency theory, these leadership styles can be different and can have some advantages and disadvantages.

Problem of this research is flexibility which is needed due to the university's autonomous structure and dynamic nature of the aviation industry, conflicts with bureaucracy that has dominant position on government. Because of the said reason, it is required to be adopted optimal leadership style for airport organization structure to decrease barriers that bureaucracy makes. Purpose of this paper is to determine optimal leadership style for organization structure of Hasan Polatkan Airport. Thus, it could be easier to prevent situations that may create disadvantage for the airport. First, this will contribute to internal customers to focus on their works positively in a dynamic sector like aviation. Second, it will decrease the impact of bureaucracy resulting from structure of the organization and thus it will enable to organization to act faster. Analytical Hierarchy Process (AHP) that is a method for multi-criteria decision-making was used as a method in this paper. In scope of the work, leadership styles obtained result of literature review, have been accepted as main criteria.

2 LITERATURE

Leader is basically a person who can easily influence and activate people around it thanks to some qualifications from birth it has. It is counted enormous leadership definition derived via leadership approaches different from one another. Also there are a lot of leadership styles and numerous studies about them as a linked with that reason in literature.

Many of these studies have concentrated on transformational leadership lately. [2] examined relationship between transformational leadership and institutional learning and put forth transformational leadership paradigm on change. The findings showed that transformer leaders not only to capture the change, they also play a leading role to create change in person in the institution and they provide institutional learning by increasing staff loyalty. Ozalp and Ocal (2000) examined transformational leadership approach on transformation management process. It was found that transformer leaders have significant for process of transformation management in the realization of radical change in organizations. They provide subordinates participate in transformation process actively by getting their supports. [8] carried out a survey on 90 SME's about relationship between knowledge management capabilities and perception of transformational leadership. As a result of the study, on the one hand while it is seen that perception of transformational leadership effects positive and significant both to be knowledge organization and to create organizational knowledge partly, being knowledge organization have significant and positive effect on creating organizational knowledge.

Leadership styles in the public sector were also examined by researchers. [7] carried out a survey of more than 203 middle and upper-middle managers to explore charismatic leadership in Canadian public sector. The results showed that charismatic leadership in public sector includes four dimensions respectively: energy and determination, vision, challenge and encouragement and risk taking. Also it is apparent that findings concerning charisma in relation to outcomes are not large in significance and findings may point to the complexities between public sector organizations and charismatic leadership. In another study, [3] examined recent developments in leadership literature with a view to highlight importance of public leadership. As a result of this study, it is stated that there is not a certain definition or understanding concerned to public leadership.

There are several studies made by using different methods related to leadership styles as well. One of these methods is Analytic Hierarchy Process (AHP). Zendeh and Aali [14] determined suitable leadership style founding a mathematical framework with AHP. They used position power, leader-member relation, task structure and followership development as main criteria and selling style, telling style, participating style and delegating style as alternatives. We also present a selection of optimum leadership style in our study going beyond offer a model by differentiating from the other studies. Our study investigates the optimum leadership style for organization structure of Hasan Polatkan airport that enables educational flights first and international flights secondly (just to Brussels in Belgium for immigrant people formerly living around Eskisehir).

3 METHOD

Although there are number of leadership styles as leadership definitions, some of them are used commonly. For the aim of the this study, we referenced leadership styles defined by Goleman in "Leadership That Gets Results" (Young & Price, 2013 cited from Goleman, 2000) which are highly applicable in the airport environment and benefited for features of these leadership styles from "True North" (Young & Price, 2013 cited from George & Sims, 2007). These are directive leadership, engaged leadership, coaching leadership, democratic leadership, affiliative leadership and expert leadership as described in Table 1.

Tab. 1 Features and special skills of six leadership styles

Leadership Style	Feature	Special Skills
Directive leadership	wants immediate compliance	Driving: the ability to collect resources and direct energy around objectives
Engaged leadership	mobilizes people toward a vision	Motivating: the ability to identify and address the wishes of others
Coaching leadership	contributes development of people for the future	Teaching: the ability to bring others along a path of learning a new skill or domain.
Democratic leadership	builds consensus providing participation	Collaborating: the ability to respond to others and build on their contributions with one's own perspectives.
Affiliative leadership	Helps to occur an emotional togetherness	Empathizing: ability to understand the feelings and states of mind of others
Expert leadership	anticipates excellence and self-direction with little direct oversight	Mastering: the ability to transform new knowledge to a domain of expertise

The overall procedure of the AHP for this research methodology is shown in Figure 1 [5]. Procedure of AHP is put into practice step by step in this section.

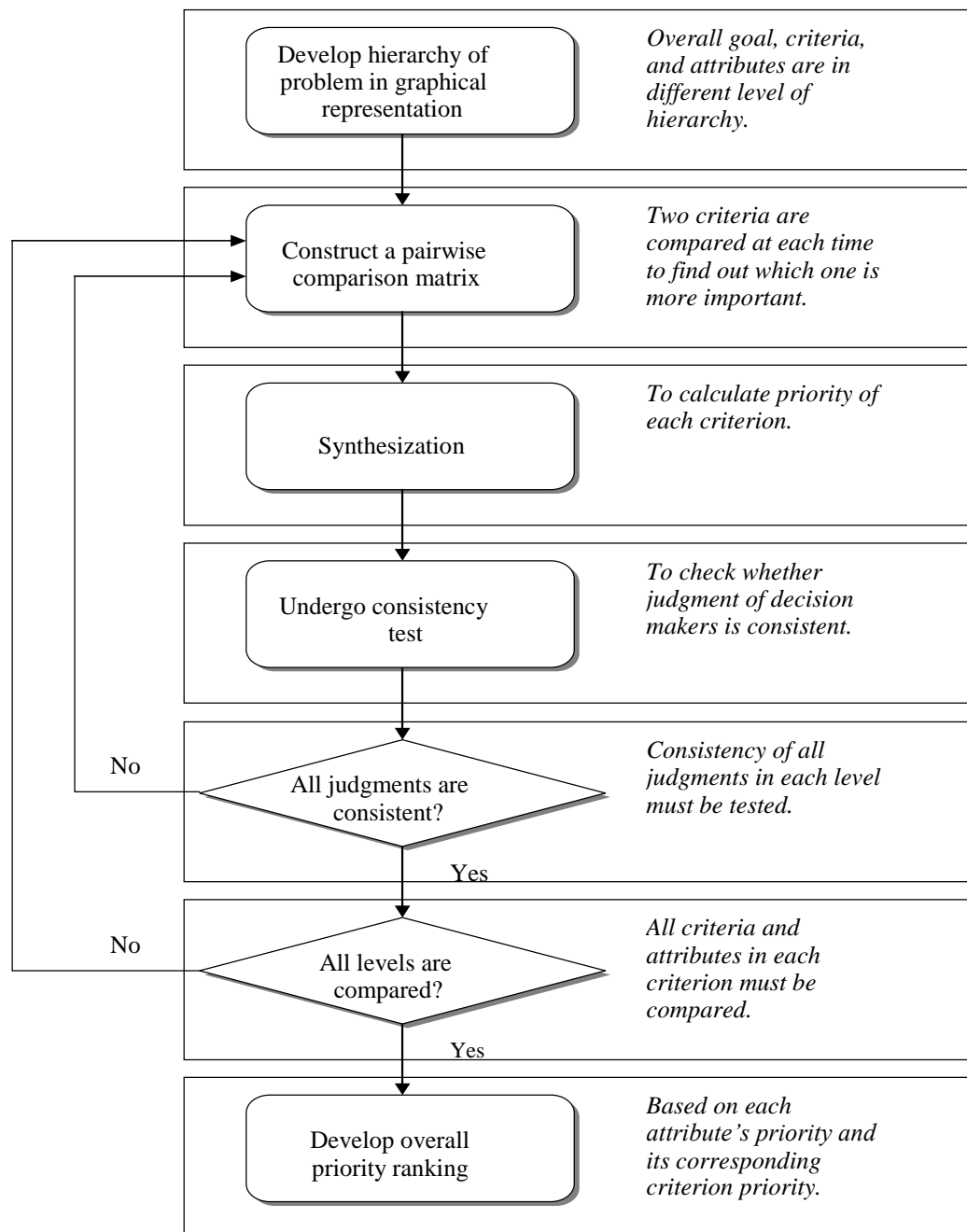


Fig. 1 The flow of the analytic hierarchy process

Analytical Hierarchy Process (AHP) that is a method for multi-criteria decision-making was used as a method in this paper. In scope of the work, leadership styles referenced from (Young & Price, 2013 cited from Goleman, 2000) have been accepted as alternatives. Further of the study, objective of the study and alternatives are transformed to hierarchical structure as Figure 2. After creating a hierarchical structure, all criteria must be compared with each other. Then, impact degrees of criteria are determined depending on experience and knowledge of decision makers using fundamental scale of AHP of certain values 1 to 9.

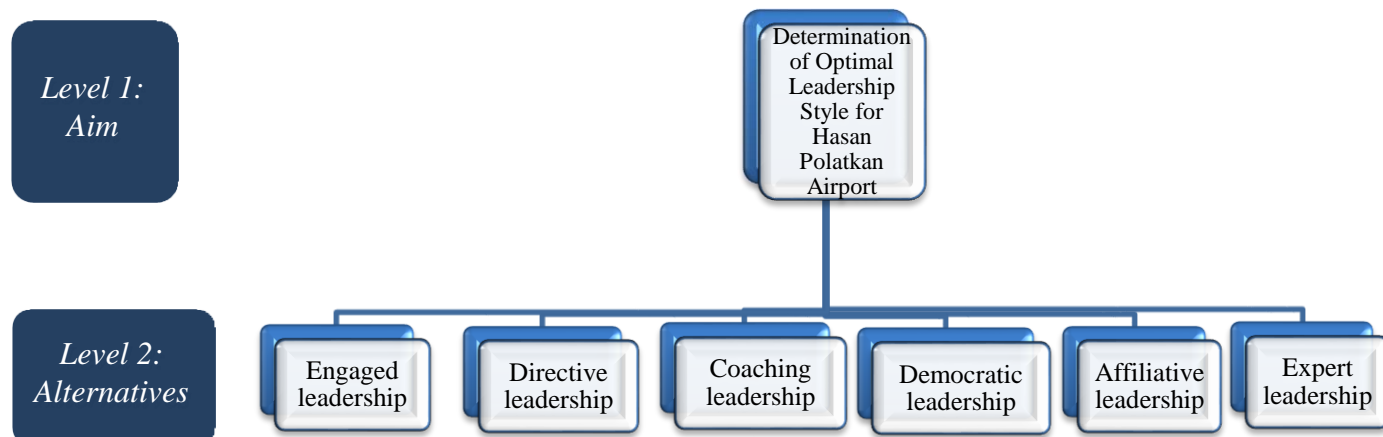


Fig.2 Hierarchical structure of leadership styles

The logic behind the process is that the more important criteria should have higher weights or values, thus being given more attention in making a decision or an assessment (Park, Choi, & Zhang, 2009). In an effort of conducting the study, 15 survey questions are sent out to six academicians at Anadolu University who are expert on leadership and know situation of Hasan Polatkan Airport, by form on the internet. The process of taking feedback about answering the survey lasted about 2 weeks. The results of analysis of the survey on determination of optimal airport leadership style was composed of six main leadership criteria. The survey results are as table 2.

Tab. 2 Comparison Matrix

	Directive Leadership	Engaged Leadership	Coaching Leadership	Democratic Leadership	Affiliative Leadership	Expert Leadership
Directive Leadership	-	1/3	6	3	7	3
Engaged Leadership	-	-	8	5	9	4
Coaching Leadership	-	-	-	1/4	3	1/5
Democratic Leadership	-	-	-	-	5	1/3
Affiliative Leadership	-	-	-	-	-	1/6
Expert Leadership	-	-	-	-	-	-

After the construction of the comparison matrix of survey results, the next important task in the AHP analysis is to pair comparison with expert choice software. Figure 3 shows the outcome of the pair comparison calculation from expert choice software.

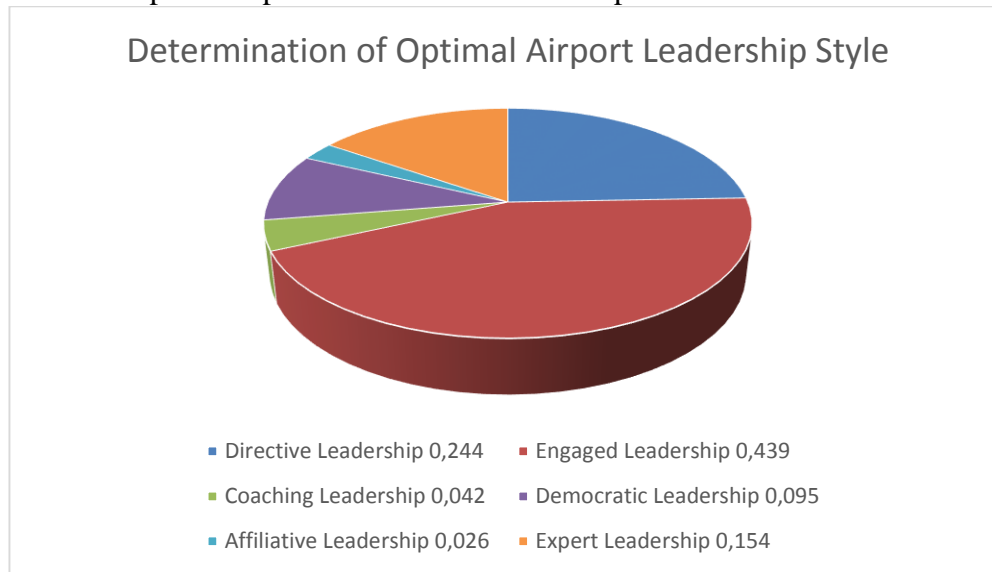


Fig. 3 Pairwise comparisons of the determination of optimal airport leadership style criteria

It can be seen from the figure 3 that engaged leadership (0.439) is considered to be most suitable of airport leadership style. As for the other criteria, affiliative leadership (0.026) is the lowest points unlike engaged leadership style. The next criteria is the directive leadership (0.244) which is the second important leadership style. The third one is expert leadership (0.154) which is followed by democratic leadership (0.095) and coaching leadership (0.042).

While building above each of pairwise comparison matrix, it is must be check consistency by calculating consistency ratio (CR) as ratio of Consistency Index (CI) and Random Index (RI) [4]. If the CI values are higher than 0.1 (they are highly inconsistent), the questionnaires must be revised [6]. A value of CR less than 0.1 is acceptable because human judgements need to be always consistent [12].

In order to control the result of the method, the consistency ratio for above matrices and overall inconsistency hierarchy are calculated. The consistency ratio is 0.07 which is lower than critical value of 0.1.

6 CONCLUSION AND FUTURE SUGGESTIONS

It is required to know that contingency theory is valid for each organization. The main reason is that many organizations has different structure, different internal environment and places where each organization try to survive is different in business world. Thus, all of them are managed with different management and leadership styles. Right leadership style is expected to increase efficiency of organizations. The problem is which leadership style is right.

Accordingly, we researched this problem optimum leadership style for Hasan Polatkan airport that has a unique structure among airports in the world in terms of that it is operated by cooperation of government and university and its operations are international. According to results obtained from study have showed that engaged leadership is optimal for Hasan Polatkan airport. It could be said that organization structure of Hasan Polatkan Airport needs to a leader who can motivate and coordinate staff of airport in terms of works and their wishes

in the most optimal way. Thus, airport will be managed as suitable for aviation among conflicts like bureaucracy in government, autonomy in the university and dynamism in aviation. This will provide using resources like human efficiently and productively as well. To develop this research, researchers can make a research on how much university and government one by one have effect management decisions of Hasan Polatkan Airport.

References

- [1] Anadolu Üniversitesi Havacılık ve Uzay Bilimleri Fakültesi, "Havaalanı", <http://ecas.anadolu.edu.tr/>, [Cit. 2015-09-16]
- [2] Aksaraylı, M. Fatih (2015), "Donusturucu Liderlik Ve Degisimde Donusturucu Liderlik Paradigmasi", Suleyman Demirel University The Journal Of Visionary, Cilt: 6, Sayı: 12, ss. 108-124.
- [3] Çetin, Sefa (2012), "Leadership In Public Sector: A Brief Appraisal", Dpujss, Cilt: 2, Sayı: 32, ss. 75-86.
- [4] Dozic, Slavica; Kaliv, Milica (2014), "An AHP Approach to Aircraft Selection Process", Transportation Research Procedia, Cilt: 3, ss. 165-174.
- [5] Ho, William (2008), "Integrated analytic hierarchy process and its applications – A literature review" European Journal of Operational Research, ss. 211-228.
- [6] Huang, Show-Hui. S.; Hsu, Wen Kai K. (2015), "Evaluating the Service Requirements of Combination Air Cargo Carriers", Asia Pacific Management Review, ss. 1-8.
- [7] Javidan, Mansour; Waldman, David A. (2003), "Exploring Charismatic Leadership in the Public Sector: Measurement and Consequences", Public Administration Review, Cilt: 63 sayı: 2, ss. 229-242.
- [8] Naralan, Abdullah; Yıldız, Ibrahim; KAHYA, Cem (2013), "Donuřturucu Liderlik Algisi Ile Bilgi Yonetimi Kabiliyetleri Arasındaki Iliřkiler: Kosgeb İşletmelerinde Örnek Bir Uygulama", Yonetim ve Ekonomi Arařtırmaları Dergisi, Cilt: 20, ss. 65-87.
- [9] Northouse, Peter G. (2014), *Introductuon to Leadership*, Sage Publications.
- [10] Park, Yonghwa; Choi, Jung Kyu; Zhang, Anming (2009), "Evaluating Competitiveness of Air Cargo Express Services", Transportation Research, Cilt: Part E 45, ss. 321-334
- [11] SHGM, "Eskiřehir Anadolu Üniversitesi Havaalanı işletme ruhsatı aldı" (2007), http://web.shgm.gov.tr/tr/haberler/644eskisehiranadoluuniversitesihavaalaniisletmeruh_satialdi, [Cit. 2015-09-16]
- [12] Subramanian, Nachiappan; Ramanathan, Ramaknishnan (2012), "A Review of Applications of Analytic Hierarchy Process in Operation Management" Int. J. Production Economics 138, ss. 215-241.
- [13] Young, Seth B.; Price, Mindy (2013), *ACRP Airport Leadership Development Program*, Washinton: Transport Research Board.
- [14] Zende, Alireza Bafandeh; Aali, Samad (2011), "An AHP Approach for Selecting the Suitable leadership Style", (I. Press, Dü.) Management and Economics, Cilt: 25.