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Research Article / Araştırma Makalesi

Evaluation of digital solutions for passenger attitudes towards health measures at Dalaman airport during COVID-19 period / COVID-19 döneminde Dalaman havalimanında sağlık önlemlerine yönelik yolcu tutumları için dijital çözümlerin değerlendirilmesi

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Yolcu memnuniyeti
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ABSTRACT

During the COVID-19 pandemic, the Ministry of Transport and Infrastructure and airline companies implemented various measures to prevent the spread of the virus and reduce the risk of transmission. Among the various measures implemented, those utilizing digital technologies to minimize contact between passengers at airport terminals and ground services personnel have been particularly noteworthy. Self-service technologies not only enhance time and space efficiency but also minimize interpersonal contact. This research aims to evaluate the positive impact of COVID-19 measures implemented at Dalaman Airport on passenger satisfaction and to examine the role of digital technologies in this effect. To this end, face-to-face surveys were conducted with at least 415 passengers at Dalaman Airport between October and November 2023. The data obtained were analyzed using the SPSS program to determine the effects of COVID-19 measures and digital technologies on passenger satisfaction. The research factor analysis, reliability analysis, correlation, and regression analyses to examine the relationships between satisfaction, digitization, and measures reducing discomfort, revealing significantly positive relationships. As a result, this research recommends airport management to realign technology investments and customer service policies centered on passenger satisfaction. Digitalisation efforts can facilitate passengers to better adapt to new norms and provide a safer and more comfortable travel experience. The research also highlights that future studies with generalized findings across a wider range of airports and passenger demographics will develop a more comprehensive understanding of how digital technologies can be used more effectively in the aviation sector.

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ÖZET

COVID-19 salgını sırasında Ulaştırma ve Altyapı Bakanlığı ve havayolu şirketleri virüsün yayılmasını önlemek ve bulaşma riskini azaltmak için çeşitli önlemler aldı. Uygulanan çeşitli önlemler arasında, havalimanı terminallerinde yolcular ve yer hizmetleri personeli arasındaki teması en aza indirmek için dijital teknolojilerden yararlananlar özellikle dikkat çekiciydi. Self-servis teknolojileri sadece zaman ve mekân verimliliğini artırmakla kalmıyor, aynı zamanda kişiler arası teması da en aza indiriyor. Bu araştırma, Dalaman Havalimanı'nda uygulanan COVID-19 tedbirlerinin yolcu memnuniyeti üzerindeki olumlu etkisini değerlendirmeyi ve dijital teknolojilerin bu etkideki rolünü incelemeyi amaçlamaktadır. Bu amaçla, Ekim ve Kasım 2023 tarihleri arasında Dalaman Havalimanı'nda en az 415 yolcuyla yüz yüze anketler gerçekleştirilmiştir. Elde edilen veriler, COVID-19 ölçümlerinin ve dijital teknolojilerin yolcu memnuniyeti üzerindeki etkilerini belirlemek için SPSS programı kullanılarak analiz edilmiştir. Araştırma, memnuniyet, dijitalleşme ve rahatsızlığı azaltan önlemler arasındaki ilişkileri incelemek için faktör analizi, güvenilirlik analizi, korelasyon ve regresyon analizleri, önemli ölçüde pozitif ilişkiler ortaya koymaktadır. Sonuç olarak bu araştırma, havalimanı yönetimine teknoloji yatırımlarını ve müşteri hizmetleri politikalarını yolcu memnuniyetini merkeze alarak yeniden düzenlemesini önermektedir. Dijitalleşme çabaları, yolcuların yeni normlara daha iyi uyum sağlamasını kolaylaştırabilir ve daha güvenli ve konforlu bir seyahat deneyimi sağlayabilir. Araştırma ayrıca, daha geniş bir havalimanı ve yolcu demografisi yelpazesinde genelleştirilmiş bulgulara sahip gelecekteki çalışmaların, dijital teknolojilerin havacılık sektöründe nasıl daha etkili bir şekilde kullanılabileceğine dair daha kapsamlı bir anlayış geliştireceğini vurgulamaktadır.

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1. Introduction

COVID-19 has significantly impacted the aviation and tourism sectors on a global scale. As of April 2020, the International Air Transport Association (IATA) reported an 80% decrease in air traffic compared to the previous year [1]. This decline was further exacerbated by global quarantine measures, drastically reducing the demand for air travel [2]. By March 2020, the effects were felt globally, with passenger revenues exceeding the expected loss of $252 billion [3]. Global passenger traffic decreased by 52.9%, and available seat kilometers dropped by 36.2% [4]. Additionally, demand in international and domestic markets fell by 55.8% and 47.8%, respectively [5].

Major players like the European Air Transport Network were forced to undergo structural changes [6]. Airports, while responding with government support and technological innovations, transformed airport experiences through contactless procedures and increased hygiene measures [7]. Measures taken to control the spread of COVID-19 included airport closures, restrictions on essential flight operations, ventilation control, and enhanced hygiene [8]. Facing decreased revenues and operational changes, the aviation sector emphasized safety management systems and risk reduction strategies to ensure flight safety [9].

The pandemic has left profound and diverse effects on the aviation sector. Academic studies have extensively examined the impacts of the pandemic on aviation and the measures taken. The study by Ceyhan Günay and Maral [10] analyzed the marketing strategies of Turkish aviation companies before and during the pandemic using a

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semi-structured qualitative research technique, proposing adaptations and strategic changes. Şen and Bütün [11] systematically examined for the first time the potential of the gig economy as a solution in the aviation sector post-COVID-19. Annaç Göv and Erbay [12] highlighted potential pandemic effects such as profit loss, reduction in employee numbers, and economic stagnation, emphasizing the importance of innovative fleet planning and the prioritization of cargo transportation. Genç and Işıktaş [13] assessed the effects of the pandemic from employee and customer perspectives using SWOT analysis, identifying challenges such as mask usage and communication issues. Aydın [14] quantitatively assessed the impacts on passenger and cargo transportation using the ARIMA model, showing that passenger transport was significantly more affected than cargo transport. Akkanat [15] analyzed the impacts of the pandemic on Turkish airports using flight statistics and examined whether the impacts varied according to the type of airport ownership. Kurt [16] studied the measures taken in air transportation and the effects of health measures on passengers and staff. Finally, Pehlivanoğlu and others [17] analyzed the impact of the pandemic on international air transport and the tourism sectors using data from 38 countries with the Threshold Autoregressive (TAR) model, identifying changes in flights based on case and death counts. These studies comprehensively address the challenges, measures, and exit strategies of the aviation sector during the pandemic, shedding light on the sector's transformation and potential future steps.

This study aims to examine the effects of COVID-19 measures on passengers and the role of digitalisation in passenger satisfaction. It specifically addresses the health and safety measures implemented at Dalaman Airport and passenger responses. The focus of the research is to thoroughly investigate the impact of digital transformation and health safety practices at the airport on passenger experience and attitudes towards the pandemic. The study aims to document how these innovative digital solutions have altered passenger experiences and the positive changes in attitudes towards health measures. Additionally, it intends for the findings to guide airport managers, policymakers, and the aviation industry. In this way, it aims to contribute to defining practical steps to improve passenger experience during global health crises.

2. Digitalisation in the Aviation Sector

The COVID-19 pandemic has accelerated the digital transformation within the aviation industry, compelling airlines to embrace technology to meet increasing consumer demands and ensure passenger safety [18]. During this period, airlines adopted strategic measures including technological innovations, government support, and passenger cooperation. The pandemic-induced operational downturns at airports necessitated a review of operational processes and resilience strategies [19]. Furthermore, there was a need to enhance security measures, offer contactless experiences, and improve service quality during the pandemic [20].

Digitalisation efforts in the airline industry include various strategies aimed at enhancing efficiency, cost-effectiveness, flexibility, and security performance [21]. IATA introduced the concept of "Digital Airline" for 2025, incorporating digital applications such as mobile applications, online services, loyalty programs, and big data technologies [22]. As seen in the case of Istanbul Airport, there has been an emphasis on promoting digital transformation in airport operations and the development of "smart airports" [23]. The COVID-19 outbreak has particularly accelerated digitalisation in pre-flight and in-flight services, especially in airline catering [24]. Although the sector is still in the early stages of digital readiness, it has begun digitalizing aircraft maintenance processes to improve safety, quality, and cost efficiency [25].

Self-service technologies in the aviation sector are continually evolving to enhance flight safety, efficiency, and service quality. These technologies have become an integral part of the aviation industry and are expected to play an increasingly important role in the future. Particularly, kiosk devices at airports represent widespread tools for service automation. These devices enable passengers to independently perform various services such as online check-in, ticket sales, ticket printing, baggage drop-off, and hotel and car rentals, thereby reducing long queues

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and expediting processes to make travel experiences more accessible and efficient. These technologies also allow airlines to reduce operating costs and enhance service quality [26-31].

Passenger service technology platforms are divided into three main sections: access, service, and presentation. These platforms focus on five main service channels: web, mobile, self-service (kiosk), SMS/MMS, and IVR (Interactive Voice Response). Self-service technologies offer significant advantages in aviation, including reducing labor costs, saving time, and preventing ticket counter queues. These applications cover services such as check-in, baggage drop-off, rebooking, contactless boarding, and reporting baggage losses [32-34].

In the aviation sector, kiosks have created significant impacts on digitalisation, efficiency, security, and sustainability. Automation of business processes and data analytics enhances efficiency, while predictive aircraft maintenance systems increase flight safety and reduce costs. Technologies such as augmented and virtual reality provide accuracy and efficiency in aircraft maintenance. Digitalisation also supports advancements in the industry from pilot training to passenger experience, contributing to a more sustainable future by reducing environmental impacts [22].

3. Method

Research model has been developed to address the negative impact of long waiting times at the airport on passenger satisfaction levels, as presented in Figure 1. Quantitative data collection methods were used in the research, with both face-to-face and online survey techniques planned to be employed. The survey was developed considering the measures implemented at Dalaman Airport. Scale expressions were derived by reviewing consumer satisfaction studies in the literature, examining measures taken by airlines, and investigating airlines' digitalisation efforts during the pandemic period. Basic information about the data collection tools was developed by the research academic advisor. A total of 415 passengers who used Dalaman Airport at least once participated in the survey.

The survey used in the research consists of two sections. The first section consists of questions aimed at determining the participants' demographic characteristics (The same sentences have been repeated above) and includes three questions. The second section consists of statements measuring the variables constituting the research model. It comprises a total of 13 questions: 4 questions aimed at measuring discomfort arising from measures, 4 questions aimed at measuring digitalisation, and 5 questions aimed at measuring passenger satisfaction. The survey includes response options in a five-point Likert scale format: '1=Strongly Disagree', '2=Disagree', '3=Undecided', '4=Agree', and '5=Strongly Agree'.

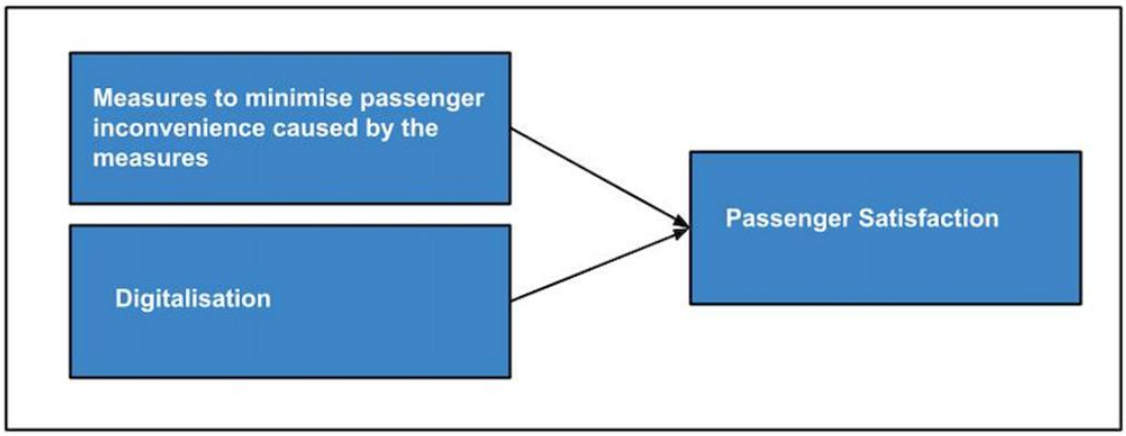

Fig. 1. Research model

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Hypotheses formulated in line with the research model are as follows:
H1: Reducing dissatisfaction among passengers within the terminal building positively changes passenger attitudes.
H2: Digitalisation positively influences passenger attitudes.

4. Results and Discussion

4.1. Factor and reliability analyses

Before conducting factor analysis, the adequacy of the sample size and the suitability of variables belonging to the model were examined using Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity. A KMO value above 0.6 is required for factor analysis [35]. The KMO test indicated that the variables were suitable for factor analysis (0.806). Bartlett's test in the study calculated $p < 0.001$ and indicated the presence of a relationship among the variables to be analyzed (Table 1).

Table 1. KMO Test and Barlett's Test of Sphericity results

KMO Test	0.806	
Barlett's Test of Sphericity	**Chi-Square Value**	3023.631
	Degrees of Freedom	78
	Significance Level	0.00

After it was understood that the variables were suitable for factor analysis, factor analysis was performed, and the findings are presented in Table 2.

Table 2. Explanatory factor analysis results

	1	2	3
	Satisfaction		
M1	0.851		
M2	0.841		
M3	0.829		
M4	0.787		
M5	0.758		
	Digitalisation		
D1		0.872	
D2		0.825	
D3		0.806	
D4		0.695	
	Measures to Reduce Discomfort		
R1			0.851
R2			0.828
R3			0.791
R4			0.752
Core Value	26.882	21.635	20.959
Explained Variance (%)	4.066	3.198	3.222
Total Explained Variance (%)		69.476	

When examining the findings of the factor analysis, it is observed that the variables of satisfaction, digitalisation, and measures to reduce discomfort are appropriately separated and the statements are grouped under the relevant factors as desired. Moreover, the factor loadings of the statements and the explained variance value (69.476%) have been calculated above the critical threshold considered in the literature, which is 0.60 [36].

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Following the factor analysis, Cronbach's Alpha analysis was conducted to determine the reliability of the statements related to the variables constituting the model. The findings of the analysis are provided in Table 3. The Cronbach's Alpha analysis values of the statements have been calculated above the critical threshold (0.70). Furthermore, when all statements were analyzed together, the Cronbach's Alpha coefficient was calculated as 0.833 [37].

Table 3. Reliability analysis findings and correlation analysis results

Dimensions		**Number of Statements**	**Cronbach's Alpha Coefficient**	**1**	**2**
Satisfaction	r	5	0.892		
Digitalisation	r	4	0.827	0.279**	
Discomfort Reducing Measures	r	4	0.840	0.359**	0.215**
*Correlation is significant at 0.05 level **Correlation is significant at 0.01 level					

Correlation analyses were performed for the variables of the study and the findings are presented in Table 3. In the correlation analysis where the strength and direction of the relationship between the variables are examined, a value between -1 and +1 emerges. While this value expresses the strength of the relationship, the positive or negative value indicates the direction of the relationship. When the findings of the analysis are analysed, it is understood that there is a positive and significant relationship between the variables [38].

4.2. Testing hypotheses

The research model was tested with the help of SPSS 22.0 package programme.

Table 4. The effect of mitigation measures on satisfaction

Dependent Variable	**Independent Variable**	**Beta**	**t**	**P**
Satisfaction	Reducing Measures	0.247	5.643	0.001
R^2=0.129 F=63.058 p=0.001				

According to the results of the regression analysis, R^2=0.129 (Table 4). Accordingly, it is understood that measures to minimize discomfort have a positive and statistically significant effect on satisfaction ($p<0.001$). According to these findings, hypothesis H1 is supported.

Dependent Variable	**Independent Variable**	**Beta**	**t**	**P**
Satisfaction	Digitalisation	0.279	6.004	0.001
R^2=0.078 F=36.044 p=0.001				

When analyzing the findings in Table 5, R^2=0.078 was calculated. This result indicates that digitalisation has a positive and statistically significant effect on satisfaction ($p<0.001$). Therefore, Hypothesis 2 is supported.

5. Conclusion

This study thoroughly examines the effects of digitalisation and discomfort reduction measures on passenger satisfaction at airports. The data obtained indicate that these two factors positively influence passenger satisfaction and that these effects are statistically significant. The limited work in the literature on digitalisation and customer satisfaction at airports highlights the originality of this research. Previous studies have indicated that digitalisation

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holds the potential to enhance passenger satisfaction as well as operational efficiency and security standards at airports [39]. The research findings suggest that airport managements need to reconfigure their technology investments and customer service policies to center around passenger satisfaction. This recommendation has been articulated in similar studies conducted in various sectors [6]. Post-pandemic, the efforts of airports towards digitalisation have enabled passengers and airlines to adapt to the new normal, indicating that investments in smart solutions provide contactless and seamless experiences, thereby ensuring safety and comfort for passengers [40, 41].

This study provides strategic guidance that not only enhances passenger satisfaction but also improves operational efficiency and security standards at airports. It calls for airport managements to reshape their technology investments and customer service policies with a focus on passenger satisfaction. Particularly in the post-pandemic period, airports can facilitate passengers' adaptation to new normal and offer a safer, more comfortable travel experience through such digitalisation efforts. This research serves as a valuable reference point for airport managements and contributes significantly to the development of future strategies. Future research could generalize these findings by examining a wider range of airports and passenger demographics, thereby advancing the understanding of digital adoption in aviation. This expanded perspective could develop a more comprehensive understanding of how digital technologies can be more effectively utilized in the aviation sector.

Authorship contribution statement for Contributor Roles Taxonomy

Şeyma Kaplan, *Inspection, Research, Investigation and Editing, Formal Analysis.* **Emine Seher Yener,** *Investigation, Visualization, Inspection*. **Zeynep Yılmaz,** *Visualization and Formal Analysis.* **Ozan Öztürk,** *Writing, Research, Auditing, Conceptualization, Methodology.*

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References

[1] IATA. IATA / UPU Warn of Air Capacity Shortage. https://www.iata.org/en/pressroom (4 May 2024)
[2] Heiets, I. and Xie, Y. 2021. The impact of the COVID-19 pandemic on the aviation industry. Journal of Aviation, 5(2), 111-126.
[3] IATA. Air Passenger Market Analysis. (n.d.). https://www.iata.org/en/publications/economics/ (4 May 2024)
[4] Sun, X., Zheng, C., Wandelt, S. and Zhang, A. 2023. Air transportation and COVID-19: A tale with three episodes. Transport Economics and Management, 1, 13-21.
[5] Filipiak, D., Matyjaszkiewicz, M. A., Zalewski, P. and Postek, J. 2023. Impact of the COVID-19 pandemic on air transport. Defence Sciences Review, 16, 1-15.
[6] KováČiková, K., Sedláčková, A. N., Novák, A. and Remencová, T. 2023. The quality of airport services in the wake of the COVID-19 pandemic. 2023 Smart City Symposium Prague (SCSP), 25-26 May, Prague, Czech Republic, 1-6.
[7] Mendonça de Moraes, C. The impact of the pandemic effect on the aviation in the environmental quality of the air transport and travelers, in: Ali, Z. A., Cvetković, D., Aeronautics - New Advances, IntechOpen, 2022.
[8] Kaya, M. and Ateş, S. S. Human resources in aviation in the COVID-19 era, in: Kurnaz, S., Rodrigues, A. A. B., Bowyer, M. D., Challenges and Opportunities for Aviation Stakeholders in a Post-Pandemic World, IGI Global, 2023, 64-83.

https://doi.org/10.55212/ijaa.1407733

[9] Blišťanová, M., Tirpáková, M. and Brůnová, Ľ. 2021. Overview of safety measures at selected airports during the COVID-19 pandemic. Sustainability, 13(15), 8499.
[10] Ceyhan Günay, A. and Maral, B. 2023. The impact of COVID-19 pandemic on the marketing strategies of Turkish airline companies. Nişantaşı Üniversitesi Sosyal Bilimler Dergisi, 11(1), 158-173.
[11] Şen, G. and Bütün, E. 2021. The impact of COVID-19 outbreak on the aviation sector: The alternative of the gig economy. Journal of Aviation Research, 3(1), 106-127.
[12] Annaç Göv, S. and Erbay, N. 2021. The effects of the COVID-19 pandemic on the aviation industry and strategies: Opinions of Turkish aviation academics. European Journal of Managerial Research (EUJMR), 5(9), 326-341.
[13] Genc, M. and Işıktaş, S. 2022. The effect of COVID-19 pandemic to workers and customers of Turkish aviation sector: Swot analysis. International Journal of Arts and Social Studies, 5(8), 44-65.
[14] Aydın, A. 2021. ARIMA modeli ile COVID-19 salgınının Türkiye hava taşımacılığı sektörü üzerindeki etkilerinin analizi. Ardahan Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 3(2), 118-127.
[15] Akkanat, F. 2021. 2020 yılında COVID-19'un Türkiye'deki havalimanları uçuş istatistiklerine etkisi ve bu etkinin havalimanı sahiplik durumuyla ilişkisi. Balıkesir Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 2(2), 129-143.
[16] Kurt, Y. 2020. COVID-19 crisis in air transportation: Passengers and human resources protection measures. Gaziantep University Journal of Social Sciences, 19(COVID-19 Special Issue), 191-211.
[17] Pehlivanoğlu, F., Emikönel, M. and İnce, M. R. 2023. First period effect of COVID-19 on international aviation tourism. Karamanoglu Mehmetbey University Journal of Social and Economic Research, 25(45), 808-825.
[18] Chutiphongdech, T., Apiluckserbsakul, N., Choktanasukarn, K. and Phengkona, J. 2023. Strategic responses for the airline business during the COVID-19 pandemic: A review of past crises. ABAC Journal, 43(3).
[19] Alsalous, O. and Hotle, S. 2023. Airport scheduling and operational performance: A clustering analysis of airport response to COVID-19. AIAA Aviation 2023 Forum, 12-16 June, San Diego, CA, USA.
[20] Wu, X., Fu, X., Lei, Z. and Wang, K. 2023. Impact of the COVID-19 pandemic on multi-airport systems worldwide. Journal of the Air Transport Research Society, 1(1), 117-135.
[21] Annaç Göv, S. Air transportation management and the effects of digital transformation strategies, in: Akkaya, B., Tabak, A., Two Faces of Digital Transformation, Emerald Publishing Limited, Leeds, 2023,141-155.
[22] Mızrak, F. and Akkartal, G. R. Strategic management of digital transformation processes in the aviation industry: Case of Istanbul Airport, in: Russ, M., Cases on Enhancing Business Sustainability Through Knowledge Management Systems, IGA Global, Hershey, PA, USA, 2023, 154-177.
[23] Yusriza, F. A. Digital advancements in airline catering sector, in: Hassan, A., Rahman, N.A.A., Technology Application in Aviation, Tourism and Hospitality, Springer, Singapore, 2023, 89-100.
[24] Alomar, I. and Yatskiv (Jackiva), I. 2023. Digitalization in aircraft maintenance processes. Aviation, 27(2), 86–94.
[25] Okuneye, B. A. and Ogunyomi-Oluyomi, O. O. 2022. The role of digitalization in the airline industry performance amid COVID-19: Evidence from Emirate Airline balanced scorecard performance. Izvestiya Journal of Varna University of Economics, 66 (1-2), 5-21.
[26] Brida, J. G., Moreno-Izquierdo, L. and Zapata-Aguirre, S. 2016. Customer perception of service quality: The role of Information and Communication Technologies (ICTs) at airport functional areas. Tourism Management Perspectives, 20, 209-216.
[27] Airport digital transformation handbook, Second edition, ACI, 2021.

https://doi.org/10.55212/ijaa.1407733

[28] Ku, E. C. S. and Chen, C-D. 2013. Fitting facilities to self-service technology usage: Evidence from kiosks in Taiwan Airport. Journal of Air Transport Management, 32, 87-94.
[29] Chang, H-L. and Yang, C-H. 2008. Do airline self-service check-in kiosks meet the needs of passengers? Tourism Management, 29(5), 980-993.
[30] Curran, J. M. and Meuter, M. L. 2005. Self-service technology adoption: Comparing three technologies. The Journal of Services Marketing, 19(2), 103-113.
[31] Jarrell, J. 2007. Self-service kiosks: Museum pieces or here to stay? Journal of Airport Management, 2(1), 23-29.
[32] Zhibing, X. and Xinming, W. 2012. The research of China's civil aviation passenger multi-channel service technology platform. Physics Procedia, 33, 417423.
[33] Lee, W., Castellanos, C. and Choi, H. S. C. 2012. The effect of technology readiness on customers' attitudes toward self-service technology and its adoption: The empirical study of U.S. airline self-service check-in kiosks. Journal of Travel & Tourism Marketing, 29(8), 731-743.
[34] Moon, H. G., Lho, H. L. and Han, H. 2021. Self-check-in kiosk quality and airline non-contact service maximization: How to win air traveler satisfaction and loyalty in the post-pandemic world? Journal of Travel & Tourism Marketing, 38(4), 383-398.
[35] Abay, Ş. and Akkılıç, M. E. 2020. The effect of perceived value on brand loyalty in online clothing shopping: A study. TUJOM, 5(2), 141-157.
[36] Nakip, M. Marketing Research Techniques and SPSS Supported Applications, Seçkin Yayıncılık, Ankara, 2006.
[37] İslamoğlu, A. H., and Alnıaçık, Ü. Research Methods in Social Sciences (SPSS Applied), Fifth edition, Beta Publications, Istanbul, 2016.
[38] İslamoğlu, A. H. Research Methods in Social Sciences, Beta Publications, Istanbul, 2009.
[39] Yıldırım, G. 2023. "The effect of the digitalization process in the banking sector on customer experience and service quality". Master thesis, Marmara University, Institute of Social Sciences, Istanbul, Turkey.
[40] Ramli, S., Wan Abdul Hamid, W. N. N. and Mohd Tan, A. 2023. Knowledge sharing behaviour is critical for business continuity in a pandemic. International Journal of Advanced Research in Economics and Finance, 5(2), 75-90.
[41] Muthahharah, T., Widiawati, W. and Baitillah, N. 2023. The post pandemic education: A blended learning approach for teaching and learning in higher education in new normal era. International Journal of Ethno-sciences and Education Research, 3(2), 99-108.

https://doi.org/10.55212/ijaa.1407733