Asean International Journal of Business

Vol.4, No.1, 2025
e-ISSN: 2809-6673
pp. 92-106

Mediating Effect of Internet Knowledge on The Relationship Between Perceived Usefulness And E-ticketing Adoption of Ethiopian Airlines in Nigeria

Maryam M.B Yusuf[1], Hamma Adama Yahaya[2], Adamu magaji Abubakar[3], Amina Usman Sabo Ago[4]

[1]Department of Business Administration, Faculty of Management Science, Federal University Dutse Jigawa State, Nig.
[2]Department of Business Administration, Faculty of Management Science, Adamawa State University Mubi, Nig.
[3]Department of Business Administration, Faculty of Management Science, Federal University Dutse Jigawa State, Nig.
[4]Department of Business Administration, Faculty of Management Science, Universiti Sultan Zainal Abidin Malaysia, Malaysia.
*Corresponding author email: Maryammaiha414@gmail.com

DOI: https://doi.org/10.54099/aijb.v4i1.1183

ARTICLE INFO

Research Paper

Article history:
Received: 15 December 2024
Revised: 16 January 2025
Accepted: 29 January 2025

Keys: perceived usefulness, internet knowledge, E-ticketing adaptation, Ethiopian Airlines

ABSTRACT

this study examined the mediating effect of internet knowledge on the relationship between perceived usefulness and e-ticketing adoption of Ethiopian Airlines in Nigeria. The data were collected through self-administered questionnaires using a random sampling technique from 360 Ethiopian Airlines customers in Nigeria. The questionnaire comprised of four sections measuring internet knowledge, perceived usefulness, and e-ticketing adoption. The proposed model and research hypotheses were tested using Path Analysis in Structural Equation Modelling (SEM). The findings of the study supported the four proposed hypotheses. In addition, the study discovered that internet knowledge partially mediates the relationship between perceived usefulness and e-ticketing adoption of Ethiopian Airlines in Nigeria. The result of this study contributed theoretically by providing some modifications and new measures for e-ticketing adoption, internet knowledge, and perceived usefulness. The findings also make contributions theoretically by suggesting the use of SEM this could be preserved as the new framework for linking perceived usefulness, internet knowledge, and e-ticketing adoption. These findings may help the passengers of Ethiopian Airlines in Nigeria understand the benefit of adopting Ethiopian Airlines e-ticketing and how the adoption brings ease of life to their daily activities. Since this study also highlights the factors that drive e-ticketing uptake, it will enable the stakeholders to create customized services that fit customers' requirements and aspirations. As a result, Ethiopian Airlines executives should consider the practical implications of these latent characteristics, which are critical in helping Nigeria's economy thrive and improve service quality.

1.0 Introduction

The Ethiopian government owns the Ethiopian airlines and is well-known as the Ethiopia's national carrier. International flights were added by EAL in 1951 after it was established on December 21, 1945,

and operations began on April 8, 1946. When Ethiopian Air Lines went public and converted to a shareholder-owned business in 1965, the airline changed its name from Ethiopian Air Lines to Ethiopian Airlines. Since 1959, the airline has been a member of AFRAA (African Airlines Association) and the International Air Transport Association (IATA). Ethiopian Airlines joined the Star Alliance in December 2011. the slogan is "The New Spirit of Africa." Ethiopian's main hub and corporate office are located in Addis Ababa, and from there, the airline offers flights to 125 passenger destinations, 20 of which are domestic, as well as 44 freighter destinations. The airline's secondary hubs are Togo and Malawi. The largest airline in Africa in terms of passengers flown and locations served is Ethiopian Air. In terms of the number of destinations it serves, Ethiopian is the fourth-largest airline in the world.

The implementation of e-ticketing has become one of the operational requirements for a given company to provide quality service. In line with this, every airline member of IATA has modified paper ticket issuance and replaced it with e-ticket (www.IATA.org). An e-ticketing model allows authorized travel agents to forward ticket information directly to the airline database, allowing passengers to check in and board the flight without showing a paper ticket. It replaces paper-based fight coupons with an electronic ticket image that is stored in the database of the airline (Iwasokun, 2023). With an electronic ticket passenger travel details are stored in an airline database and retrieved using a unique look-up code. This means that the passenger does not need to issue a physical ticket; instead, the code can be delivered via the internet or phone (OLUWALOGBON, 2023).

1.1 Problem Statement

Airline industries are one of the fastest growing industries in the world, and every day each airline industry is trying to expand its market, on-line marketing has become one of the media were airline tickets are being bought, and since the coming of online marketing. About 60% of Nigerian travelers choose to purchase their EAL ticket over the counter where hardcopy paper tickets will be printed out for them, they don't perceive the usefulness of adopting e-ticketing provided by the Ethiopian Airline (Permana, 2023). Recent research by Ajuonu (2023) reveals that 38.5% of travelers purchase their tickets online while 61.5% purchase them over the counter. However, there is a lack of internet knowledge which leads to many Nigerians not understanding the easy part of e-ticketing for adoption in this modern era- of technology Ifeanyichukwu et al., (2023) for which using e-tickets will reduce the cost for the airline industry and save money for revenue generation Essayas Taye (2010).

Most African countries have low internet knowledge, which will hinder them from perceiving the usefulness of e-ticketing and adopting it. "Macome and Mabota (2023), Omotayo and Okpako (2023) said airlines decided to bring about a significant change in customers' and market perception, whereby there is very strong competition and service quality is very expensive. Aderibigbe and Olajide, (2023) in their recent research realize that this brings heavy pressure in the airline business where competition becomes very high to the extent that an Airline can lose its market if it refuses to go along with the new innovation and new changes of technology. This is why the researcher will research the issues that comprise the following.

1.2 Objectives of the study

The main objective of this research was to identify those factors that affect the e-ticketing perspective at Kano state Nigeria office.

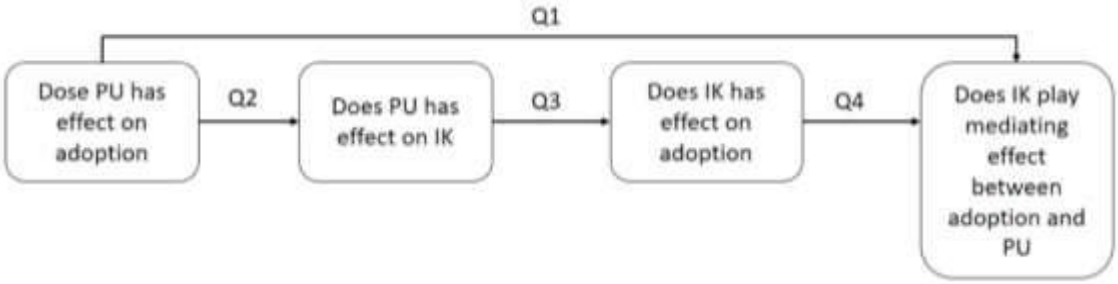
1. To determine the positive effect of perceived usefulness on adoption of e-ticketing.
2. To determine the positive effect of perceived usefulness on internet knowledge.
3. To determine the positive effect of internet knowledge on adoption of e-ticketing.

4. To determine the mediating effect of internet knowledge towards the. relationship between adoption of e-ticketing and perceived usefulness.

1.3 Research Question

1. Does perceived usefulness affect adoption?
2. Does perceived usefulness effect internet knowledge?
3. Does internet knowledge effect adoption?
4. Does internet knowledge play the mediating effect between adoption and perceived usefulness?

Flow of research question



1.4 Research Hypothesis

H1**:** Perceived usefulness has a positive effect on adoption

H2: perceived usefulness has a positive effect on internet knowledge.

H3: Internet knowledge has a positive effect on adoption

H4: Internet knowledge mediates the relationship between perceived usefulness and adoption

2.0 Literature review

2.1 Definition of E-Ticketing

In airline industries, customers can get different types of traveling tickets which are two types of tickets in the airline industry, named paper tickets and electronic tickets Farewell tickets are often known as travel without a ticket (Lakhan et al., 2024). While the paper tickets are called flight coupons. Paper tickets are parts of paper containing the same flight information as the airline industry these are classified as flight coupons and are included in the Paper form (Hinga et al., 2024). While the electronic ticket is called the electronic fare, in this type of ticket the information is kept inside the booking of the airline System and is indicated at check-in as an electronic ticket. The passenger who is flying will have a copy of their itinerary which carries the details which will be provided by the electronic ticket (Awodele et al., 2024). Possibly there are a hundred or more different ways to answer the question. According to Olokesusi and Aiyegbajeje, (2017) an e-ticket is just a record of a booking made using a valid credit card to pay the amount stored in the Airlines Server Database. E-tickets however do not use payment by credit card alone, but also, they make use of other Forms of payments such as checks and cash Overall. E-tickets merge issues with distribution of Single-service tickets and double-service tickets, (Abayomi-Alli et al., 2020). E-ticketing simplifies the company's operation Ezekiel et al., (2024) define e-ticketing as a Method for documenting sales, by using tracker for tracking passenger transport accounts Without requiring the issue of documents with the use of paper value. It can also be used to recover quick data, rather than reference paper files. Lakhan et al., (2024) describe the e-ticket by comparing it to Finance is known as e-ticketing as a contractual and monetary relationship Transportation operator and the provision of a ticket-linked service.

2.1.2 Importance of E-ticketing Practice

E-ticketing has a range of advantages according to (Majeed et al., 2024). It reduces the expense of printing papers, and prevents paper-ticket fraud. Improves check-in of passenger Options, prevents revenue leakage by automating management of check-in and ticket adjustments. Eliminates lost/stolen tickets and eliminates the need for prepaid, interracial tickets. Galileo Pakistan also listed the advantages of e-tickets According to the company the e-ticketing website (www.galilco.com) offers the following benefits:

1. Cost savings: - e-ticketing helps in Reduction of cost of printing and mailing tickets to the customers who are Purchasers of tickets. It also helps in eliminating the cost of ticket stock, envelopes, and all postage requirements.
2. Labor savings: - this helps in saving of the load of labor work which involved in ticket printing and mailing. E-ticketing also cuts down all the effort needed to get tickets to their pick-up order location (Ndu & Alaeto,2024).
3. Quick and safe: - this method makes tickets quick and stable and the Validation of barcodes removes the Possibility of duplicating and counterfeiting any tickets.
4. Real attendance monitoring: - in e-ticketing, it makes it faster to monitor and count the actual numbers of people who participated in the e-ticketing website and other airline events and their time of arrival (Malik, 2023).
5. Instant Delivery: - at the point of purchase Customers can immediately print their electronic tickets as they buy them. This makes it ideal for last minute purchase or last-minute e-tickets Determination (Aulia & Marsasi, 2024).
6. Additional Information: - the use of E-tickets helps in the provision of additional space for useful information, for example, street maps, and driving directions which other new customers in training must know (Ashour et al., 2021).
7. Advertisements: -it's very easy to advertise in e-ticketing because it provides unique advertising capability. Is also easy to Increase your scope Enterprise revenue by selling advertisement space on your web ticket (Daniel et al., 2002).

2.1.3 E-ticketing Issuance Process

The following steps show how to work with the CREDIT CARD in booking of e-ticket below are the procedures from applying to the issuance of receipt with the use of the EAL mobile App or EAL website
Step I: Passenger bookings;

Step 2: Display the passenger journey and mode of transportation the name of the departure airport and destination airport and whether it is a one-way, round trip, or multi-city. It also includes the date of departure and arrival, after entering the date this will enable the passenger to know if there is a flight on that given date or not, the next is the number of passengers adults, children, and infants the price is maintained in the booking(Shan et al., 2023).

Step 3: selecting inbound flight choosing your travel experience which is(Hair Jr et al., 2017) of two types economy semi flex in this class you will find the majority of the passengers in the airline and the cost of this class is the cheapest among all of them, cloud 9 deluxe this is an airline class which is classified because of its luxury seats and excellent service (Withrow et al., 2024). The Cloud 9 is well equipped, especially with seats that can be transformed into a completely flat bed and have comfortable leg space, those seats are as few as minimum as 30 and above seats in one airline. These give the passengers privacy from the large crowd Cloud 9 is more expensive and entertaining(Omotayo & Okpako, 2023).

Step 4: in this step, all the passengers' details full names, email addresses, date of birth, and then the status of the flight, this will also enable the passenger to know the expected time of departure (ETD) and expected time of arrival (ETA) the number of transits before arrival to the final destination and the

display of the total cost of the flight including admin charges and all the necessary charges(Kabir et al., 2024).

Step 5: stage five moves to the payment part showing all the necessary means of payment, they display 9 modes of payment the 10th one is book now and pay later. The passenger chooses the credit card he wants to use and proceeds(Sadasivam et al., 2023).

Step 6: the final step is where you put the credit card details, card holder's first name, last name, card number, month, and year of expiring. After completing the card details the customer clicks on the payment box to get the machine authorization note. Then the machine will be the one to fill the approval box using the approval code with the credit card and then print out the receipt (Aderibigbe & Olajide, 2023).

2.2 Definition of Perceived Usefulness

The degree to which a person believes using a particular device would increase its efficiency at work is known as perceived usefulness (Davis 1989). Consumer behavior in the online context is influenced by perceived benefits, according to Hinga et al.,(2024), he thinks that perceived usefulness is the primary element influencing intentions to shop online. In the world of electronic banking, the significance of perceived usefulness has long been acknowledged Majeed et al., (2024), according to them, perceived usefulness is the possibility that employing the technology would improve the user's capacity to do a given activity.

2.3 Definition of Internet Knowledge

Internet knowledge can be defined in various ways, there is no specific definition in an article by (Malik, 2023). This reveals that internet knowledge is the factors based on willingness which an individuals has towards web-survey, solicitations, and the score they got on web- based assessments (Ezekiel et al., 2024). According to research, clients who frequently use online platforms have greater experience in the relevant industry, which also aids in knowledge acquisition. The degree of internet knowledge is measured on a scale with four points, where one represents occasional use and four represents expert internet use. Another study also revealed elements that are influenced by online expertise, including frequency of use, e-mail information search, internet efficiency, and computer experience (Aderibigbe & Olajide, 2023).

Figure 2.1 The Conceptual framework

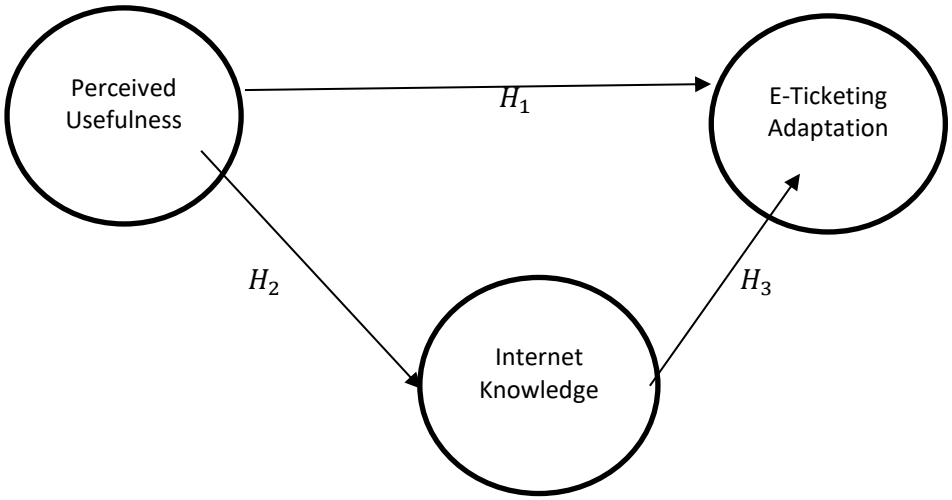


Table 2.1 Summary of the Hypothesis

NO	Research questions	Research objectives	Hypothesis
1.	Does perceived usefulness effect adoption?	To determine the positive effect of perceived usefulness on adoption	H1: perceived usefulness has a positive effect on adoption
2.	Does perceived usefulness effect internet knowledge?	To determine the positive effect of perceived usefulness on internet knowledge.	H2: Perceived usefulness has positive effect on internet knowledge
3.	Does internet knowledge effect adoption?	To determine the positive effect of internet knowledge on adoption.	H3: Internet knowledge has positive effect on Adoption
4.	Does internet knowledge play the mediating effect between adoption and perceived usefulness?	To determine the mediating effect of internet knowledge on relationship between internet adoption and perceived usefulness.	H4: internet knowledge mediates the relationship between adoption and perceived usefulness

3.0 Methodology

3.1 Reearch Design

The researcher will make use of questionnaire method of data collection the descriptive study designwas employed. And the main reason why this design was selected is because descriptive study design is a systematic method of knowledge gathering for a fairly small number of cases at a given time (Muhammad et al., 2022). And descriptive research is a quantitative research method that attempt to collect quantifiable information to be used for statistical analysis of the population sample(Yaro et al., 2022).

3.2 Sampling Procedures and Sampling Techniques

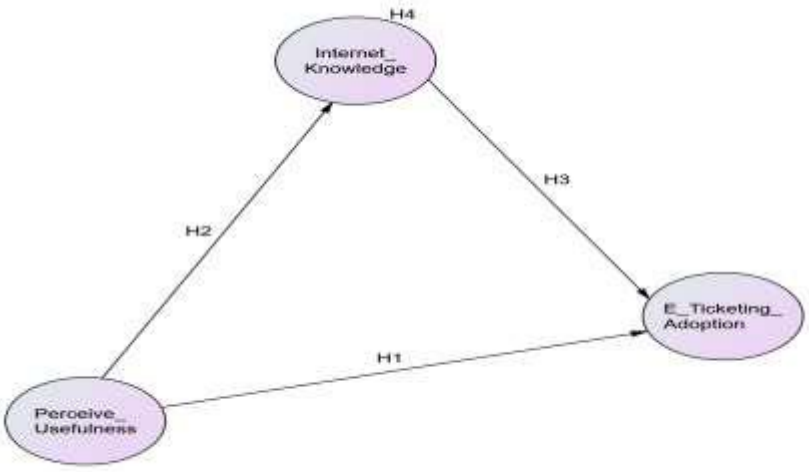
Probability sampling using simple random sampling techniques has been used to select the different information sources for the analysis (Anwar, & Abdullah, 2021; Levitt, 2021; Van Scoy, et al., 2021; Chepkemoi, & Wabala, 2022). The probability sampling was therefore used to pick regular routes. From 125 the researcher had picked 10 regular passenger flight routes for the EAL flight destinations from Nigeria. The advantage of using random sampling is to remove bias whereby giving every individual target an equal right to be chosen among the sample it would save research time and funding, and also create better chances since the question

3.3 Target population and sample size

The total number of Ethiopian airline world passengers reached 10.6 million annually as at August 2022. Probability Sampling method random sampling technique was used, the Passengers at Mallam Aminu Kano, International Airport terminal were the target audience who completed the questions at Check-in. A total number of 400 passengers of Ethiopian Airlines in Nigeria were given the form to fill in at the airport. In this research the researcher will make use of the formula by Hair et al. (2014) they believe that research that requires a factor analysis procedure to determine the dimensionality for the items employed, they believed samples should have more observation than variables and minimum absolute sample size should be minimum of 5 and maximum of 10 observations. This research has 30

items in the questionnaire. In the 30 items 10 are measures of perceived usefulness and 10 are measures of Adoption and then 10 are of internet knowledge. According to Hair et al. (2014), it is better if the study can obtain 30*5 = 150 or a maximum of 30*10= 300. The researcher will make use of 300 as the sample size in other to avoid a shortage of the required sample size and also to make provision for incomplete questionnaires, 20% of 300 is required which is 60 +300 = 360 questionnaires. Three constructs in total, the first exogenous construct, then the mediator construct, and the last endogenous construct were used in this study's model. Figure 3.1 depicts the theoretical foundation for this study as well as the path of interest along which the hypotheses in this study will be evaluated.

Figure 3.1 The conceptual framework and hypothesis



4.0 Analysis and Presentation

The data analysis and discussion of the research findings were presented in this chapter. The chapter began with a description of data entry and the assessment of missing data to ensure that the data was clean. the results of the field study data analysis were discussed. Next, the descriptive analyses for the respondents' demographic characteristics were reported. Furthermore, for all measurements, a pooled confirmatory factor analysis was given. The structural equation modelling was presented in the fifth place. Furthermore, the hypothesis was tested, and the study outcomes were discussed. Finally, the chapter's summary was delivered.

4.1 Analysing instruments

The actual study was the following stage after confirming the study's instrument through a data reduction technique utilizing the data from the pilot test. The 305 travellers provided the data for the analysis used in the actual study. A total of 360 questionnaires were distributed, but only 305 respondents returned them, yielding an 84.72 percent response rate.

Figure 4.1 Pooled CFA model and correlation

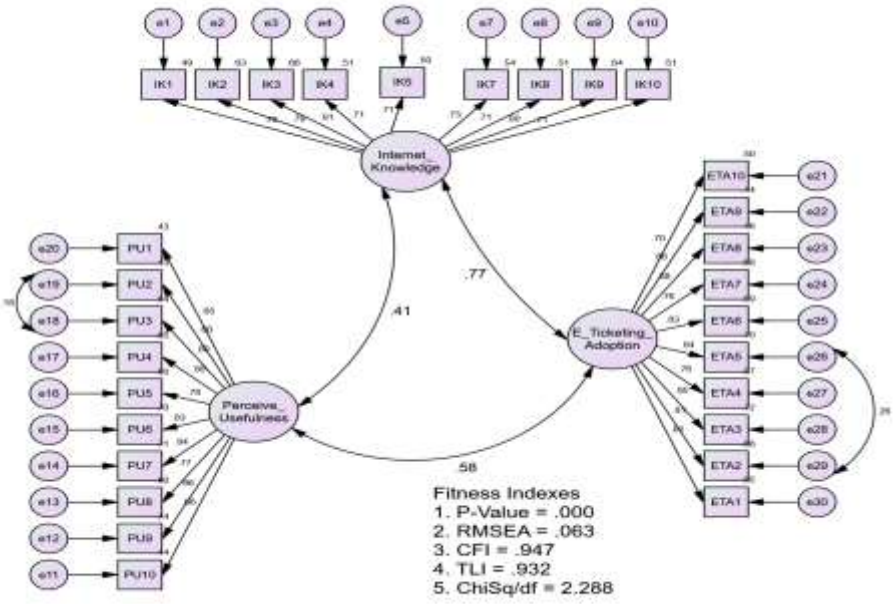


Figure 4.4 showed the results of the Pooled-CFA technique for the models described in Figure 4.3. The fitness indexes for all constructs in the model, the factor loading for each construct, and the correlation between the model's constructs were all displayed in the output. Table 4.2 showed the fitness indices and their threshold values. All the items should have at least 0.6 of factor loading, and the correlation coefficient between any two constructs should not exceed 0.85 le (Afthanorhan et al., 2021; Chowdhury et al., 2023; Khanam et al., 2022; Raza & Anwar, 2023). When the correlation between any two constructs surpasses 0.85, the issue of multi-collinearity occurs. There were no correlation values greater than 0.85 when looking at the correlation values (double-headed arrows). As a result, the multi-collinearity issue was avoided. IK6 was also removed due to the low factor loading. Any items with a factor loading of less than 0.6 should be eliminated, according to Awang et al., (2022).

4.2 Assessment for construct validity

Figure 4.2 shows the fitness indexes that met the threshold values. The absolute fit category (RMSEA) was 0.063, which fell below the threshold of 0.08, the incremental fit category (CFI) was 0.947, which fell below the threshold of 0.90, and the parsimonious fit category (ratio of Chisq) was 2.288, which fell below the threshold of 3.0. Overall, the measurement model for all latent constructs provided in Figure 4.3 met the construct validity condition . (Muhammad & Chelliah, 2023; Usman et al., 2022; Wakjira & Kant, 2023).

4.3 Assessment for convergent validity and composite reliability

The researcher is required to compute the average variance extracted to determine convergent validity (AVE). If the AVE of a construct surpasses the threshold value of 0.5, it is said to be convergent, le (Afthanorhan et al., 2021; Chowdhury et al., 2023; Khanam et al., 2022; Raza & Anwar, 2023) . To

evaluate composite reliability, the CR must be calculated, and its value must be more than 0.6. (Muhammad & Chelliah, 2023; Usman et al., 2022; Wakjira & Kant, 2023). In Table 4.4, the AVE and CR for all constructs are computed and shown.

4.4 Assessment of discriminant validity among constructs

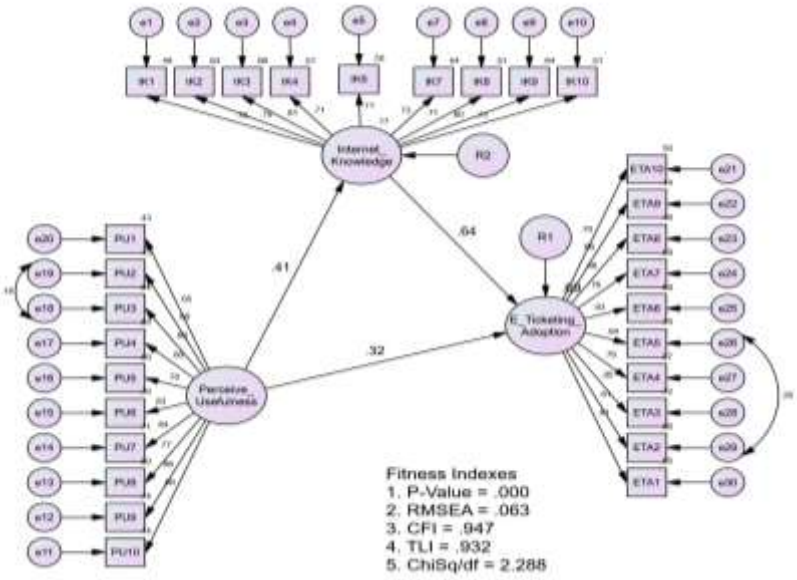
Discriminant validity was another sort of validity that the researcher needed to evaluate for the model. This evaluation ensures that the model does not contain any redundant constructs or that any pair of constructs in the model is significantly correlated. The discriminant validity index summary, as given in Table 4.1, must be established to measure discriminant validity. The square root of the AVE of the respective constructions is bolded on the diagonal, while other figures indicate the correlation coefficient between the pair of respective constructs.

Table 4.1 Discriminant Validity Index Summary for all Constructs

Construct	Internet Knowledge	Perceive Usefulness	E-Ticketing Adoption
Internet Knowledge	**0.744**		
Perceive Usefulness	0.409	**0.769**	
E-Ticketing Adoption	0.574	0.584	**0.772**

The diagonal value of a construct is obtained if the square root of its AVE surpasses its correlation value with other constructs in the model, as shown in Table (Afthanorhan et al., 2021; Chowdhury et al., 2023; Khanam et al., 2022; Raza & Anwar, 2023). In other words, the discriminant validity is obtained if the diagonal values (in bold) are higher than any other values in its row and column. Table 4.5 shows that the tabulated values meet the discriminant validity criteria, indicating that discriminant validity for all constructs has been attained (Afthanorhan et al., 2021).

Figure 4.2 Standardized regression path coefficient among the construct



The explanation regarding the performance of R^2 (coefficient of multiple determination) of the model as obtained from Figure 4.2 is explained in Table 4.4. The result of the regression analysis as shown in Table 4.3 showed the regression path coefficient (Beta) for the effects of every exogenous construct on the dependent construct extracted from Figure 4.2. The result of the analysis shows that perceived usefulness had a positively and statistically significant direct effect on E-ticketing adoption with a path coefficient (Beta) = 0.383, p = 0.000) and critical ratios (z-values) = 10.457. This outcome means that when Perceived Usefulness increased by one unit, E-ticketing Adoption also increased by 0.383. This result was consistent with the hypothesis model and supported Hypothesis 1, which states that "Perceived Usefulness has significant effects on E-ticketing Adoption". This outcome indicated that perceived usefulness directly affects the E-ticketing adoption of Ethiopian airline among customers in Nigeria.

The result as presented in Table 4.4 showed that it was statistically significant (P< 0.05), with a path coefficient (Beta) = 0.0.796, p = 0.000) and critical ratios (z-values) = 15.384. This result means that Internet Knowledge is a significant predictor of -ticketing Adoption. For every unit increase in Internet Knowledge, there would be a corresponding 0.796 increase in E-ticketing Adoption. Thus, Hypothesis 3 ("Internet Knowledge has a significant effect on E-ticketing Adoption" was also accepted. Therefore, based on this outcome, it can be deduced that Internet Knowledge has a direct effect on E-ticketing Adoption of Ethiopian airline among customers in Nigeria.

Table 4.2 R^2 and its Implications for this Study

Endogenous Construct	R^2	Conclusion
E-Ticketing Adoption	**0.68**	The Perceive Usefulness and Internet Knowledge as perceived by the respondents contribute to 68 per cent of E-Ticketing Adoption.
Internet Knowledge	**0.17**	The Perceive Usefulness contribute to 17 per cent of Internet Knowledge.

Figure 4.3 The Unstandardized regression coefficients for all independent constructs.

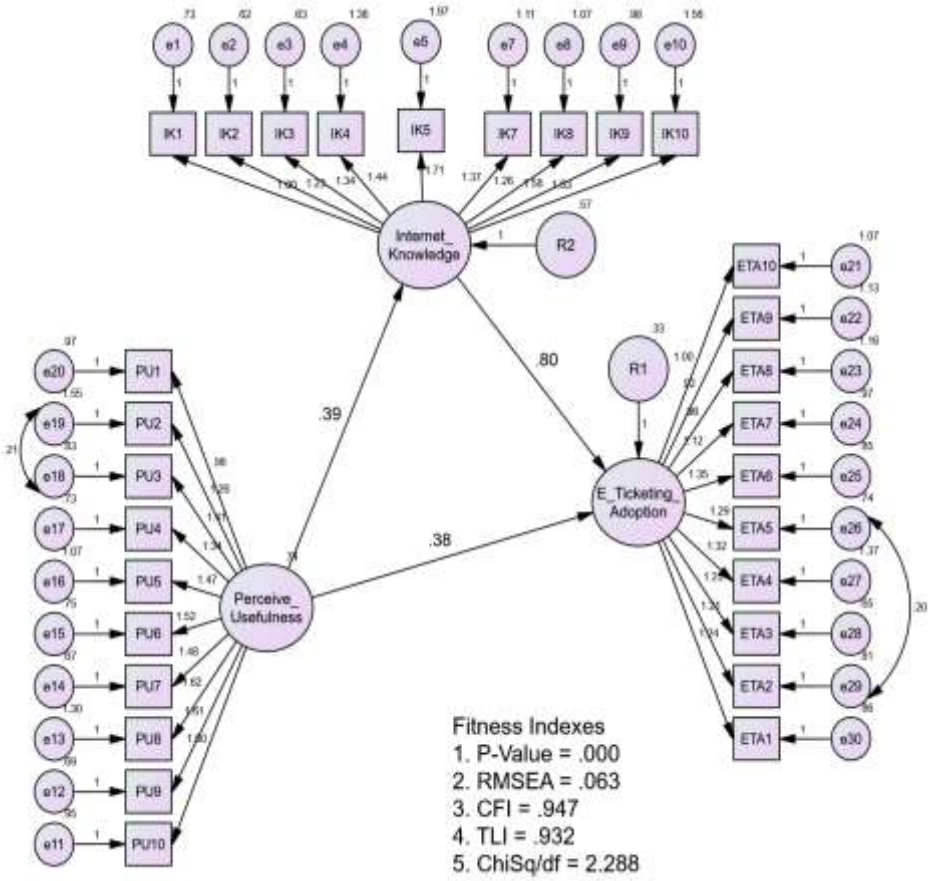


Table 4.3 Regression Path Coefficient Obtained from Figure 4.3

Exogenous	Endogenous	Beta	Explanation
Perceive Usefulness	E-Ticketing Adoption	**0.38**	When Perceive Usefulness goes up one unit, E-Ticketing Adoption goes up 0.38
Perceive Usefulness	Internet Knowledge	**0.39**	When Perceive Usefulness goes up one unit, Internet Knowledge goes up 0.39
Internet Knowledge	E-Ticketing Adoption	**0.08**	When Internet Knowledge goes up one-unit E-Ticketing Adoption goes up 0.80

Table 4.4 The Regression Path Coefficient and Significance

			Estimate	S.E.	C.R.	P	Result
E-Ticketing Adoption	<---	Perceive Usefulness	0.383	0.037	10.457	***	Significant
Internet Knowledge	<---	Perceive Usefulness	0.393	0.039	9.994	***	Significant

		Estimate	S.E.	C.R.	P	Result
E-Ticketing Adoption <---	Internet Knowledge	0.796	0.052	15.384	***	Significant

Table 4.4 contains the text output for each direct effect relationship in this investigation, as illustrated in Figure 4.3. The probability value (p-value) is used to decide whether or not to test the hypothesis in Table 4.5 If the P-value obtained is smaller than the type error value (alpha) 0.05, the hypothesis is significant.

Table 4.5 The Hypothesis Testing for Direct Effect on Hypothesis

	P-value	Result
H1: Perceive Usefulness Has Significant Effects on E-Ticketing Adoption	0.000	Supported
H2: Perceive Usefulness has significant effects on Internet Knowledge	0.000	Supported
H3: Internet Knowledge has significant effects on E-Ticketing Adoption	0.000	Supported

The hypothesis testing for mediation effects of a mediator construct in the model is carried out separately as shown in Table 4.12.

Table 4.6 Hypothesis Testing for Mediation Effects

H4: Internet Knowledge mediates the relationship between perceived usefulness and E-Ticketing Adoption

5.0 Discussion

With rising rivalry among businesses, e-ticketing adoption is becoming more important as a means of gaining a competitive edge. As a result of the increased competition, airlines must battle for consumers, employees, and management. In this context, it is critical for airlines to recognize the significant links between perceived usefulness, internet knowledge, and e-ticketing uptake, since those airlines that take steps to increase consumer happiness will be better prepared to confront the future. This study's findings highlight the significance of consumers' views of e-ticketing adoption at Ethiopian Airlines, which is a critical component of both internet knowledge and perceived usefulness. Despite the uniqueness of the process of delivering airline services, the association established in the literature between perceived utility, internet knowledge, and e-ticketing acceptance in the business environment may also be seen in the industrial sector.

5.1 Conclusion and Recommendation

The study's conclusion is presented in this chapter. The study's findings are summarised in the analysis and interpretation part. The second half of the chapter concludes with a conclusion based on the achievement of the research objectives. The recommendations were offered in part four of this chapter, and the limits and future research recommendations were highlighted in section five.

5.1 Limitations and Future Research

Considering its contributions, the research is not without drawbacks. This study has some limitations, which will be discussed below along with recommendations for future research. First and foremost, the current research focused on Ethiopian Airlines' operations in Nigeria. Due to the study's scope constraint, the findings cannot be extended to all sectors because the data was collected from a single travel agency (Ethiopian Airlines). It would be beneficial to reproduce this study model in other traveling agencies, such as Turkish Airlines, Qatar Airlines, Egypt Airlines, Saudi Airlines, and others, as well as other sectors such as banking and medical services, to increase the generality of the results. In addition, future studies should look into how the relationships between the research variables varies across different industries or organisational settings. Future research will look into whether there are any variances or similarities between service types.

5.2 Recommendations

The study's recommendation considers and directs the applicability and relevance of an action plan for Nigerian airline companies as a whole, in terms of both industrial commitment and practicality. As a result, the relevance of perceived usefulness, internet knowledge, and e-ticketing adoption in Ethiopian Airlines in Nigeria has been proven in this study.

REFERENCES:

Abayomi-Alli, O., Odusami, M., Chima, R., Misra, S., Ahuja, R., Damasevicius, R., & Maskeliunas, R. (2020). Smart ticketing for academic campus shuttle transportation system based on RFID. Advances in Data Sciences, Security and Applications: Proceedings of ICDSSA 2019,

Aderibigbe, O.-O., & Olajide, S. O. (2023). Users' Perception on Sustainability of Bus Rapid Transit (BRT) System in Lagos Metropolis Nigeria. *Srusti Management Review, 16*(1), 70-84.

Afthanorhan, A., Awang, Z., Abd Majid, N., Foziah, H., Ismail, I., Al Halbusi, H., & Tehseen, S. (2021). Gain more insight from common latent factor in structural equation modeling. Journal of Physics: Conference Series,

Ashour, L. M., Magatef, S. G., & Alzaghal, Q. K. (2021). The impact of E-ticketing on behavioral intention to use and the moderating role of information and communication technology tools. International Conference on Business and Technology,

Aulia, N. S., & Marsasi, E. G. (2024). The Role of Perceived Usefulness, Perceived Ease of Use, and Task Technology Fit to Increase Perceived Impact on Learning. *SENTRALISASI, 13*(1), 163-181.

Awodele, I. A., Mewomo, M. C., Municio, A. M. G., Chan, A. P., Darko, A., Taiwo, R., Olatunde, N. A., Eze, E. C., & Awodele, O. A. (2024). Awareness, adoption readiness and challenges of railway 4.0 technologies in a developing economy. *Heliyon, 10*(4).

Chowdhury, M. M. H., Quaddus, M., & Chowdhury, M. (2023). Managing relational practices for performance improvement in a complex supply chain network: the mediating roles of proactive and reactive resilience in apparel industry of Bangladesh. *The International Journal of Logistics Management, 34*(1), 34-59.

Daniel, E., Wilson, H., & Myers, A. (2002). Adoption of e-commerce by SMEs in the UK: towards a stage model. *International small business journal, 20*(3), 253-270.

Ezekiel, A. O., Tolulope, A. C., Abdulazeez, S. A., Akanbi, K. L., & Olugbenga, P. (2024). Revolutionizing Courier Services: The Holistic Impact of Digital Marketing Strategies on Fast Delivery in Nigeria. *Indonesian Journal of Business Analytics, 4*(3), 1077-1100.

Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis, 1*(2), 107-123.

Hinga, S. K., Imoize, A. L., Ajani, T. S., & Atayero, A. (2024). A Bird's Eye View of Near Field Communication Technology: Applications, Global Adoption, and Impact in Africa. *SN Computer Science, 5*(3), 290.

Iwasokun, G. B. (2023). Design of a Biometric-based E-Ticketing and Access Control Framework for Public Transportation.

Kabir, M. S., Rohan, S. M., Nayeem, M. M. H., Al Alvi, M., Tanvir, K., Haq, M. K., Nazera, F., & Raju, V. (2024). Streamlining Dhaka's Daily Journey: The E-Ticketing Revolution. *Journal of Reproducible Research, 2*(2).

Khanam, L., Sorwar, G., & Mahfuz, M. A. (2022). Antecedents of self-protective behavior during the COVID-19 pandemic in Bangladesh. *WHO South-East Asia Journal of Public Health, 11*(1), 32-41.

Lakhan, A., Rashid, A. N., Mohammed, M. A., Zebari, D. A., Deveci, M., Wang, L., Abdulkareem, K. H., Nedoma, J., & Martinek, R. (2024). Multi-agent reinforcement learning framework based on information fusion biometric ticketing data in different public transport modes. *Information Fusion, 110*, 102471.

Majeed, M., Charles, A., Jonas, Y., Arko-Cole, N., & Tijani, A. (2024). Influencing the Adoption of Online Shopping and Its Influence on Consumers' Intention to Shop Online: A Study of SMEs in Ghana. *Digital Transformation in African SMEs: Emerging Issues and Trends: Volume 2, 2*, 30.

Malik, M. S. (2023). Exploring the determinants of organisational e-commerce adoption: an analysis of e-readiness and technological and behavioural control factors using PLS-SEM and multinomial regression.

Muhammad, G., Ngatcha, A. D. P., Lv, Y., Xiong, W., El-Badry, Y. A., Asmatulu, E., Xu, J., & Alam, M. A. (2022). Enhanced biodiesel production from wet microalgae biomass optimized via response surface methodology and artificial neural network. *Renewable Energy, 184*, 753-764.

Muhammad, S. A., & Chelliah, S. (2023). Innovation, Competitive Advantage and Export Performance: A Study of Pakistani Manufacturing SMEs. *International Journal of Innovative Computing*, *13*(1), 69-75.

OLUWALOGBON, L. A. (2023). *E-GOVERNMENT IN THE FEDERAL ROAD SAFETY COMMISSION IN SOUTHWEST NIGERIA*

Omotayo, F. O., & Okpako, O. F. (2023). Predictors of online shopping satisfaction in the Ibadan Metropolis, Nigeria. *Journal of Management Research*, *23*(2), 114-135.

Permana, A. A. (2023). BAB 3 E-TICKET. *TEKNOLOGI DIGITAL DI ERA MODERN*, 23.

Raza, S. M. H., & Anwar, J. (2023). Organizational Resilience moderating Employees Psychological Traits and Entrepreneurial Orientation: Evidence from Tourism Sector of Pakistan. *Journal of Tourism, Hospitality, and Services Industries Research (JTHS)*, *3*(02), 73-99.

Sadasivam, S., Sturgill, R., Mallela, J., & Dadi, G. B. (2023). Documenting Effective e-Ticketing Implementation.

Shan, X., Zhang, Z., Ning, F., Li, S., & Dai, L. (2023). Application and realization of key technologies in China railway e-ticketing system. *Railway Sciences*, *2*(1), 140-156.

Usman, A., Abdullahi, S., Abdullahi, Z., Tukur, K., Muhammad, A., Alkassim, R., & Ibrahim, A. (2022). Numerical Analysis of Next-Generation Wireless Networks Using Modified PLS SEM Model. *International Journal of Digital Information and Wireless Communications*, *12*(1), NA-NA.

Wakjira, G. G., & Kant, S. (2023). Significance of Market Orientation on Business Performance with Mediating Role of Employee and Customer Satisfaction in Ethiopia Banks. *Journal of Entrepreneurship, Management, and Innovation*, *5*(1), 144-158.

Withrow, J., Dadi, G., Nassereddine, H., & Sturgill, R. (2024). Asphalt Material E-Ticketing Workflow: Qualitative and Quantitative Analysis. *Journal of Construction Engineering and Management*, *150*(3), 04023164.

Yaro, N. S. A., Sutanto, M. H., Habib, N. Z., Napiah, M., Usman, A., & Muhammad, A. (2022). Comparison of Response Surface Methodology and Artificial Neural Network approach in predicting the performance and properties of palm oil clinker fine modified asphalt mixtures. *Construction and Building Materials*, *324*, 126618.

