



Saudi in-Flight Electronic Entertainment Library: A Field and Analytical Study

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Abstract:

The present study aims to identify the reality of utilizing Saudi in-flight electronic entertainment library, the extent of travelers' satisfaction with its services and contents, the difficulties encountered by travelers in the use of the in-flight library, and the suggestions to develop the services and contents of the electronic entertainment library. The sample comprised (427) travelers. A questionnaire was developed as a tool for data collection. The results showed that 58.3% of the participants used entertainment software on Saudi Arabian Airlines, 67.5% of them confirmed that they did not use the entertainment software on the Saudi Arabian Airlines due to the inappropriateness of its content, 67.7% affirmed their use of the entertainment software on Saudi Arabian Airlines due to the length of the flight, 93.9% of the participants used films to entertain on Saudi Arabian Airlines, while 87.1% of them used TV programs. The total score of the travelers' satisfaction with the services and contents of the electronic entertainment library was high. They also showed that the most prominent difficulties encountered while using the electronic entertainment library were the inefficient operation of the library throughout the flight, unavailable user guides, and the inappropriate content of the library. The study suggested the continuous update of the library's content, permanent internet connection, and availability of various and up-to-date audiobooks and short comic materials. Urgent solutions are recommended to reduce the financial and technical obstacles to the use of the electronic entertainment library on Saudi Arabian Airlines.

Keywords: Electronic library, entertainment library, Saudi in-flight electronic entertainment library.



المخلص

تهدف الدراسة الحالية إلى التعرف على واقع الاستفادة من مكتبة الترفيه الإلكترونية السعودية على متن الطائرة ، ومدى رضا المسافرين عن خدماتها ومحتوياتها ، والصعوبات التي يواجهها المسافرون في استخدام المكتبة على متن الطائرة ، ومقترحات تطويرها. خدمات ومحتويات مكتبة الترفيه الإلكترونية. وتكونت العينة من (427) مسافرا. تم تطوير استبيان كأداة لجمع البيانات. وأظهرت النتائج أن 58.3% من المشاركين استخدموا البرامج الترفيهية على الخطوط الجوية العربية السعودية ، وأكد 67.5% منهم عدم استخدامهم للبرامج الترفيهية على الخطوط الجوية العربية السعودية بسبب عدم ملاءمة محتواها ، بينما أكد 67.7% استخدامهم للبرنامج الترفيهي. البرامج الترفيهية على الخطوط الجوية العربية السعودية بسبب طول الرحلة ، استخدم 93.9% من المشاركين الأفلام للترفيه على الخطوط الجوية العربية السعودية ، بينما استخدم 87.1% منهم البرامج التلفزيونية. كانت النتيجة الإجمالية لرضا المسافرين عن خدمات ومحتويات مكتبة الترفيه الإلكترونية عالية. كما أوضحوا أن أبرز الصعوبات التي تمت مواجهتها أثناء استخدام مكتبة الترفيه الإلكترونية تمثلت في عدم كفاءة تشغيل المكتبة طوال الرحلة ، وعدم توفر أدلة المستخدم ، والمحتوى غير المناسب للمكتبة. اقترحت الدراسة التحديث المستمر لمحتوى المكتبة ، والاتصال الدائم بالإنترنت ، وتوافر الكتب الصوتية المتنوعة والحديثة والمواد المصورة القصيرة. يوصى بالحلول العاجلة لتقليل المعوقات المالية والتقنية لاستخدام مكتبة الترفيه الإلكترونية على الخطوط الجوية العربية السعودية.

الكلمات المفتاحية: مكتبة إلكترونية ، مكتبة ترفيهية ، مكتبة ترفيه إلكترونية سعودية على متن الطائرة.



Introduction

Technological progress in information sources has shifted the traditional library concept into a new one relying upon investing information technology in the form of an electronic library. As a result, new types of libraries have appeared, the most important of which are electronic libraries (Alhoush, 2017; Mehana, 2010; Mohamed, 2016). Electronic libraries are libraries of the material entity, which includes various contents of traditional information and runs automatically. They offer their services in two forms: Material and digital (Mola, 2019). An electronic library is defined as "a set of contents available on digital media to beneficiaries" (Alaaly, 2003, p. 278). According to Abu-Tabikh and Adhaher (2011), an electronic library provides several services for the community, such as making information sources available to display and reading, providing them with materials unavailable in a traditional library, being aware of modern sources of information recently added to the electronic library contents or available on the electronic publishing market, searching for information sources, and offering media services concerned with present events locally, nationally and globally. It also provides useful cultural, educational, and entertaining software.

Due to the importance of the electronic library, it was investigated in several studies, e.g. Aba-Alkhalil (2003), Alaaly (2003), Al-Faresi (2014), Alhoush (2017), Almalky (2003), Alqabaeily (2015), Fast (2010), Juma (2018), Maatiq (2014), Mohamed (2005), and Meheriq (2002) that stressed its importance. Alsabbahy (2005) identified the electronic library in terms of concept, objectives, functions, characteristics, its obstacles, and suggestions to overcome them. Belal (2007) revealed some drawbacks in the Sudanese electronic library's requirements and recommended development. Hasan (2007) showed that the electronic library supports electronic learning programs and cooperation aspects among university libraries. Mehana (2010) designed a model of an electronic academic library to meet information needs for the academic community. James (2010) explored the reasons for beneficiaries' satisfaction with the digital library and highlighted some gaps between their needs and electronic services. Moreover, Farag (2011) identified the causes of shift into electronic environments and libraries and recommended providing requirements for electronic libraries, such as computers, multiple media, modern software, and continuous maintenance.

Quadri (2012) identified the beneficiaries' abilities and skills of using electronic information sources and showed some obstacles, including problems of access to the Internet, the weak infrastructure of electronic sources, and the lack of necessary skills. Ali (2015) revealed good services of information at the electronic library of Al-Faisal Cultural Center and the lack of a national database including all facilities of electronic information exchange and recommended developing information services in the center electronic library and upgrading it to ensure continuous services. Mahmoud (2015) shed light on the role of electronic libraries in the learning process and confirmed the development of using the electronic library by postgraduate students at Damascus University. Mohamed (2016) found out that most Sudanese faculty members use the Internet as sources of the electronic library and use electronic libraries as a source of modern information for their studies and teaching. The study recommended improving the infrastructure of electronic libraries in Sudanese universities and allocating adequate budget for developing their services.



Mola (2019) introduced the electronic library concept and specified its qualities, advantages, material, and programming requirements. The study also investigated it through the Technological University Website. It showed that university dissertation abstracts are electronically uploaded through its electronic library and recommended applying this experience to other university libraries. Because culture and entertainment are main pillars of life quality for their vital role in shaping human awareness and enhancing values of tolerance and beauty, and out of Saudi Vision 2030 related to culture and entertainment industry among other fields of development for creating a culturally supportive environment, Saudi Arabia Airlines has announced increasing its air entertaining content on its plane board from 1200 to 1500 hours (25%). It has also improved its services offered to guests among other initiatives for its shift program. Establishing an electronic entertainment library has been one of these initiatives to include more attractive realistic and various electronic audiobooks and programs, which serve all categories of society (Saudi Vision 2030, 2016). Since there have been no previous studies in Saudi Arabia on analyzing Saudi in-flight electronic entertainment library, the present study attempts to bridge the gap in this regard. Thus, it investigates a model of electronic libraries through an analytical study of the Saudi in-flight electronic entertainment library as one of the first projects of electronic entertainment libraries in Saudi Arabia.

Statement of the Problem

The research problem lies in the fact that the level of services offered by the Saudi in-flight electronic entertainment library does not meet travelers' expectations and needs. This issue has motivated the authors to shed light on the Saudi in-flight electronic entertainment library in terms of concept, merits, travelers' satisfaction with services, obstacles, and development methods. Hence, the present study tries to answer the following questions:

1. What is the reality of travelers' use of the Saudi in-flight electronic entertainment library?
2. What is the extent of travelers' satisfaction with its services and contents?
3. What are the difficulties encountered by travelers in the use of the in-flight library?
4. What are the suggestions to develop the services and contents of the electronic entertainment library?

Objectives

The present research aims to identify the following aspects:

1. The reality of travelers' use of the Saudi in-flight electronic entertainment library.
2. The extent of travelers' satisfaction with its services and contents.
3. The difficulties encountered by travelers in the use of the in-flight library.
4. The suggestions to develop the services and contents of the electronic entertainment library.



Significance

1. The study is an objective response to experts' call for the necessary functioning of modern technology in libraries to shift from traditional to electronic services and procedures for strengthening globalization.
2. It is significant due to its topic; electronic libraries are an invaluable source for increasing information and knowledge. One can benefit from their great potentialities and technologies with respect to information relevance about the same topic via using the advantages of super texts and multiple media. This, in turn, enhances the level of services offered by Saudi Arabian Airlines.
3. It contributes to achieving some goals of Saudi Vision 2030, which regards entertainment as an important economic and social step for various resources in the Post-Petroleum Age. In Saudi society, entertainment is neither a secondary aspect nor a waste of time as sometimes described in the past. Rather, it has become one of the main components of society.
4. It sheds light on the effective impact of the electronic environment on the total services and procedures of different institutions. Therefore, libraries should benefit from modern technology and cope with technological progress and information revolution.
5. It addresses an important social category, i.e. travelers who are the beneficiaries of offering this service. Therefore, identifying the extent of their satisfaction with electronic entertainment library services and the difficulties they encounter shows its defects. In turn, it helps decision-makers develop and improve such services.
6. The results can help direct development policies of electronic libraries, in general, and electronic entertainment ones, in particular. Thus, it improves the efficiency of libraries.
7. The study is a scientific contribution that may upgrade electronic libraries, in general, and electronic entertainment ones, in particular.
8. It motivates authors to conduct similar future studies in the field of electronic libraries in different institutions.

Limitations

Spatial and human limitations: The study was applied to (427) travelers at King Khalid International Airport, Riyadh who have international trips via Saudi Arabia Airlines.

Temporal limitations: Data were collected during 2019 and 2020.

Subject limitations: An analytical study of the Saudi in-flight electronic entertainment library was conducted through identifying the reality of its actual use, the extent of travelers' satisfaction with its services and contents, the difficulties they encounter, and the improvement suggestions.



Definition of Terms

- Electronic library

The authors procedurally define the electronic library as a collection of information sources originally electronically produced or transformed into an electronic form available on computers, store media, or the Internet to enable travelers on Saudi Arabia Airlines to benefit from the available information easily.

- Entertainment

It is procedurally defined as one type of activity that the traveler personally does during the trip on Saudi Arabian Airlines to get entertainment and culture and develop personality, thus acquiring several physical moral, social, and cognitive values.

- Electronic entertainment library

It is procedurally as the systems of information, services, and activities based on multiple computers and smart program-based media for the sake of entertainment and having culture through a group of cultural entertaining digital sources, including texts, photos, videos, and audio-records so that the traveler on Saudi Arabian Airlines can easily access them.

Theoretical Framework & Literature Review

Generally, the electronic entertainment library is part and parcel of the electronic library connected to it. It has some independence to be developed for entertainment and cultural purposes. When talking about the electronic entertainment library, it cannot be separated from the electronic library itself.

- 1- Concept of electronic entertainment library

The authors think that the concept of electronic entertainment library is not different from that of the electronic library in general except for two aspects: The target category, i.e. the travelers on Saudi Arabian Airlines and the internal design of the library. Mehana (2010, p. 553) defines electronic library as "a modern form of library based on modern technology with its diverse forms, which changes information and data from papers into an electronic form to store, process, and share information to beneficiaries anywhere more effectively and efficiently". It offers its services in two forms: Material and digital.

- 2- Theoretical philosophy of research

The theory of uses and satisfaction is regarded as one of the most appropriate theories to identify the nature of the participant's use of electronic entertainment library and the extent of their satisfaction with its services and effects. It changes the main question "what effect do mass media (content and services of the electronic library) have on their beneficiaries?" into "what do beneficiaries do with mass media?". The beneficiary is the one who selects specific messages to satisfy specific needs. This theory has shifted the research field from the beneficiaries' negative concept into the positive one based on the idea that these beneficiaries are acting people selecting the contents and messages they prefer (Abdul-Majid, 2004; Alsafty, 2000).



According to Shoqeir (2009), the theory hypotheses can be summarized, as follows:

- The beneficiaries are active participants using means of communication to satisfy their needs.
- The beneficiaries are very aware of the needs to use mass media.
- The beneficiaries can specify the needs, motives, and media used to satisfy such needs.

According to Shoqeir (2009) and Said (2001), the main elements of the theory of uses and satisfaction are the following:

1. Active beneficiary: Old theories hypothesized that a beneficiary is a negative receiver until the concept of a positive stubborn receiver appeared. One searches for what s/he is exposed to and controls selecting the means that meet needs and the contents achieving self-satisfaction
2. Motives of beneficiary's exposition to mass media: Communication studies classify exposition motives into two categories:
 - Beneficial motives: They target self-knowledge, acquiring knowledge, information, experiences, and generally all forms of learning reflected in news bulletins and educational cultural programs.
 - Ritual motives: They target spending time, relaxation, friendship, familiarity with the means, and escape from problems. This category is reflected in entertaining cultural programs, such as serials, movies, and programs.
3. Satisfaction achieved by exposition to mass media: They are divided into two kinds:
 - Content satisfactions: They are due to exposition to the content of media messages more than the type of means used.
 - Satisfaction of the communication process: They are achieved by selecting a specific communication means. They are not directly connected with the means characteristics and are divided into quasi-directive and quasi-social ones.

3- Need to Electronic Entertainment Libraries

Abu-Tabikh and Adhaher (2011) and Qasem (2010) argue that the electronic library has a group of characteristics and features to have a significant position in the electronic system, such as:

- Meeting society needs information through the permanent availability of information sources.
- Availability of information sources to the biggest number of beneficiaries and reaching some new categories of the beneficiaries without traditional methods.
- Knowledge integration by comprehensive availability of all forms of information sources, fast and permanent awareness of modern intellectual production, and improvement of potentialities of its research and correction.
- Supporting plans and programs of cultural development.
- Bridging the digital gap dimensions and overcoming their reflections by providing information and training to beneficiaries on using modern technology for its retrieval.
- Supporting programs of eradicating information illiteracy.
- Availability of information sources to display and reading.
- Providing information sources that are not available for the traditional library.



- Current awareness of sources of modern information.
- Organizing sources of electronic information with methods used easily and comfortably to be easily updated, positively reflecting easiness of information retrieval by beneficiaries
- Encouraging beneficiaries and developing positive attitudes to benefit from the information and services to achieve self-development.

The authors think that technological and technical progress is one of the main causes of developing electronic entertainment libraries that provide beneficiaries with a huge amount of data and programs. Travelers on Saudi Arabian Airlines can benefit from electronic entertainment library potentialities while using its different software programs and available electronic media.

4- Merits and functions of the electronic entertainment library

Farag (2011) and Yousef (2000) report that electronic entertainment libraries are characterized by accurate and easy control of electronic information databases concerning the organization, storage, update, and easy retrieval. They have huge amounts of information via laserdiscs, access to information centers and libraries, investment of potentialities through text processing programming, machine translation and multiple media, online reading by a big number of beneficiaries at the same time, as well as the spread of digital awareness and easy access to information. Bruqy (2006) shows several functions of the electronic library, such as access to several patterns of information sources and providing a mechanism for beneficiaries to discover suitable sources. The authors add another important function in the case of electronic entertainment library: Selection and possession of information databases and programs according to the beneficiaries' needs.

5- Obstacles hindering electronic entertainment libraries' services

Alaaqla (2008), Alhoush (2002), Almalky (2003), and Yousef (2000) argue that electronic entertainment libraries face some challenges and obstacles.

a. Obstacles facing libraries

- Technological design problems

This design needs several components: A high speed communication network, a fast Internet, databases having diverse electronic forms, complete texts of studies showing information inputs and access, and various services, such as Web and FTP services.

- Problems relevant to the unique nature of materials and their digital forms in an electronic library, e.g. creation of digital groups of texts, photos, graphs, and sounds.
- Technical problems related to access to the relevant and available websites.
- Urgent need to classify and specify network websites to identify the amount, type, and topics of the available information and update the service.
- Low financial allocations to electronic libraries for providing, purchasing and maintaining equipment and sources of electronic information, as well as developing such services, etc.



b. Obstacles facing beneficiaries

- A beneficiary may not desire to use modern technology because of the lack of knowledge of its use and available services.
- Linguistic barriers may hinder the beneficiary from benefiting from materials available in the electronic library.
- A beneficiary may not be able to specify the key terms in documents.
- A beneficiary does not know the best research engines for the target topics available on the Internet.
- Inaccuracy in retrieving documents and topics needed by the beneficiary: Some electronic sources include bad information only published for propagation and publicity.

6- Future visions of the electronic entertainment libraries

Any information institution should focus on supporting the infrastructure of the electronic library (Alhoush, 2017; Farag, 2011; Mehana, 2010). To achieve this target, it should do the following:

- Supporting, developing information services of libraries by world electronic databases, and using world systems to store and retrieve information.
- Participating in a cooperative library network with counterpart libraries in the institution.
- Creating a database of information needed by beneficiaries in different fields and topics.
- Establishing an independent department or unit in Saudi Arabian Airlines responsible for electronic library aided by sufficient human qualified staff.
- Providing services of technical support and maintenance, such as updating and upgrading electronic entertainment library programs to modern versions and repairing their programming defects.

7- Electronic entertainment library in Saudi Arabian Airlines

Having an electronic entertainment library in Saudi Arabian Airlines is not a cultural luxury but an urgent need for facing future challenges. Entertainment and culture are considered of the most important products on plane boards and a competitive factor among airlines in different countries. Since issuing its ambitious program for the shift, Saudi Arabian Airlines has developed products on its modern plane boards, has continued excellence in this domain for promoting travelers' travel experience, and has secured broader entertainment options for their comfort through establishing an electronic library for spreading knowledge and culture by providing various books in religious, scientific, and economic fields, as well as children entertaining booklets. This library represents a specific shift in the air entertainment concept.



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A brief note on electronic entertainment library

The electronic entertainment library is one of the strong cornerstones of developing Saudi Arabian Airlines activities. It belongs to the Air Entertainment Administration at the main building of Jeddah Saudi Arabian Airlines. The library has collaborated with some databases, such as Al-Obiekan and Al-dad to provide the biggest possible number of electronic information sources. It offers its contents to travelers on Saudi Arabian Airlines. Algarbou, Vice-President of Marketing & Product Management shows that programs of developing entertainment content on the board of Saudia planes include a unique shift in the concept of entertainment through establishing an electronic library for disseminating knowledge and culture. Being available in July 2017, the library in its first stage provided more than 100 books in religious, scientific, and economic fields in addition to special books for children. By the end of 2017, the size of its entertainment content reached 3,000 hours with an increase of 150%. This step confirms the importance of the continuous development of the service. The number increased to 4,000 hours in 2018.

Library objectives

Knowledge, culture, and entertainment are the main reasons behind the electronic entertainment library. It aims at providing modern information and cultural entertaining programs quickly and efficiently to serve and entertain travelers on Saudi Arabian Airlines.

Library contents (automatic and information technology)

The following section is a detailed analysis of the situation of automatic and information technology in the electronic entertainment library. The air entertainment content on Saudia Airlines includes various programs, e.g. packages of Islamic programs (208 programs). Saudi Arabian Airlines is proud of offering the biggest library of Islamic materials: The Holy Qur'an recited by several sheiks, religious programs, some materials about how to perform Hajj (pilgrimage) and lesser pilgrimage (Umrah), and programs of the Two Holy Mosques. It includes a diverse package of Arab and world movies, more than 500 TV programs, more than 50 movies and programs for children, and 38 interesting games. It contains 4,000 hours of movies, TV series, programs, and songs for children. Besides, audio-descriptive movies through the air entertainment system for travelers suffering from weak sight and closed caption movies for guests suffering from weak hearing have been provided (Saudi Arabian Airlines, 2020).



Table 1: Contents of the electronic entertainment library

No.	Content	Number
1	Islamic programs	859
2	TV programs	1283
3	Children programs	428
4	Games	52
5	Arab and International movies	471
6	Audio material	1228
7	Electronic books	281

The library offers its contents in three languages: Arabic, English, and French. More than one traveler can go through its entertainment content at the same time. It provides modern technical guidelines. A traveler can also make a connection via Bluetooth between his/her smartphone and screen for enjoying audio-files content available via the air entertainment system in smartphones. In addition, all means of charging electronic sets and power supplies have been provided. A traveler can benefit from Plug & Play system via connecting USB set with his/her seat, follow works, and watch all personal files across the air entertainment system.

Saudi Arabian Airlines provides an entertainment system on its Airbus A330-300 and Airbus A330 planes for internal and regional flights. Guests benefit from this service by downloading Saudia SkyFi on smartphones via Google Play and Store Applications through the Internet network before taking off. Thus, guests can watch entertainment content onboard via their smartphones.

Methodology and Procedures

Method

The present study followed a descriptive-analytical method as the best qualitative and quantitative one. It described and analyzed the real situation of the Saudi in-flight electronic entertainment library based on its website and studied its beneficiaries. It covered travelers' identification of the extent of its use and types, the extent of satisfaction with the service, the obstacles encountered, and the suggestions for development.

Population and Sampling

The population comprised all travelers of international long trips via Saudi Arabia Airlines in 2019/2020. The sample was intentionally selected from its population since its size reached 427 travelers of international long trips via Saudi Arabia Airlines. They belonged to Knights' members (with golden, silver, and blue cards, traveling more than two international trips). Table(2) shows the sample.



Table 2: Specification of the sample

Variables	Frequency	Percentage	
Type of Knights' Membership	Golden Knights Level [ELITE PLUS]	60	14.1
	Silver Knights Level [ELITE]	73	17.1
	Blue category	156	36.5
	More than 2 flights per year	138	32.3
	Total	427	%100
Gender	Male	225	52.7
	Female	202	47.3
	Total	427	%100
Educational Level	Pre- secondary	14	3.3
	Secondary	36	8.4
	University	260	60.9
	Post-graduate studies	117	27.4
	Total	427	%100
Age	Less than 15 years	6	1.4
	16-25	38	8.9
	26-36	147	34.4
	37-48	137	32.1
	49-59	83	19.4
	More than 60 years	16	3.7
	Total	427	%100
Nationality	Saudi	412	96.5
	Non-Saudi	15	3.5
	Total	427	%100



Tool

- Questionnaire of the extent of electronic entertainment library use

The questionnaire aimed to identify the extent to which travelers on Saudi Arabian Airlines use the electronic entertainment library, the extent of their satisfaction with the services offered, the obstacles, and the suggestions for development. After reviewing the relevant literature, paying field visits to the population, and reviewing similar scales, the questionnaire was designed and developed in consistency with the research topic, objectives, questions, nature of data collected, and target findings according to the following criteria: Items should be clear, accurate and brief as possible; the content should measure its relevant domain including all the research questions in the form of domains; items were written in a closed-form to specify the probable response to each item using a five-point Likert scale, which allows the sample subjects to clarify their responses: “Agree” 3 points (2.34- 3), “Neutral” 2 points (1.67- 2.33), and “Disagree” 1 point (1- 1.66).

The final form of the questionnaire was divided into two parts:

Part I included the personal data of the research sample.

Part II included the research questions and questionnaire items to identify the research variables. It consisted of four domains: 4 items aiming to measure the actual reality of utilizing the electronic entertainment library, 7 ones reflecting the extent of travelers’ satisfaction with services, 5 items about the obstacles, and 7 items related to the most prominent suggestions for improvement.

- Validity
 - a. Reviewer validity: The questionnaire was initially distributed to four evaluators and experts in the field of information & libraries from several universities to judge the questionnaire items, their clearness, appropriateness, and relevance. The reviewers were asked to make modifications to be taken into consideration when redrafting the questionnaire to come up with its final version.
 - b. Internal consistency: To verify internal consistency, Pearson’s correlation coefficient was used to measure the correlation between each item and the total score of the questionnaire concerning those of the pilot sample (30), as shown in table (3).

Table 3: Number and correlation coefficients of items to the total score of the questionnaire

Question No.	1	2	3	4
Correlation Coefficient	**0.61	**0.58	**0.72	**0.74
Question No.	5	6	7	
Correlation Coefficient	**0.70	**0.88	**0.60	

(**) Significant at the level of 0.01



Table 3 reveals that the correlation coefficients between the score of each item point and the total score of the questionnaire ranged from 0.58 to 0.88. Thus, all correlation coefficients are statistically significant at the level of 0.01. This finding indicates the validity of all questionnaire items.

- Reliability: It was estimated using Cronbach’s alpha coefficient for the questionnaire items, as shown in table (4).

Table 4: Values of reliability

Research tool	Coefficient alpha
Q.1	**0.72
Q.2	**0.83
Q.3	**0.69
Q.4	**0.87
Q.5	**0.65
Q.6	**0.59
Q.7	**0.77

(**) Significant at the level of 0.01

Table 4 shows that the reliability coefficients of the questionnaire domains are statistically significant at the level of 0.01. This finding indicates the questionnaire's reliability, applicability, and validity.



Results and Discussion

1. To answer the research first question, frequencies and percentages of the responses to the questionnaire items were calculated (Table 5).

Table 5: Responses of the participants to the extent of travelers’ use of entertainment screen on Saudi Arabian Airlines

Alternatives	Sample	
	Frequency	Percentage
Yes	249	58.3%
Sometimes	138	%32.3
No	40	%9.4
Total	427	%100

Table 5 shows that “yes” was ranked first (58.3%), “sometimes” was ranked second (32.3%), and “No” was ranked third (9.4%). The authors think that this finding confirms travelers’ tendency to use the services of the Saudi in-flight electronic entertainment library. They attribute this finding to the travelers’ attraction to modern technical aids and their need at specific times to rest and enjoy watching cultural and entertaining programs.

The frequencies and percentages of the sample’s responses to the questionnaire items related to the second question about the reasons for not using the entertainment screen on Saudi Arabian Airlines were calculated (Table 6).

Table 6: Responses of the participants to travelers’ reasons for not using the entertainment screen on Saudi Arabian Airlines

Reasons	Sample	
	Percentage	Frequency
Inappropriate content	20	50%
Old content	13	%32.5
Desire to sleep	7	%17.5
Total	40	%100

Table 6 shows several reasons for not using entertainment on Saudi Arabia Airlines. “The inappropriate content” was ranked first (50%), “old content” was ranked second (32.5%), and “desire to sleep” was ranked third (17.5%). The authors attribute this finding to non-variety in the content and services of the electronic entertainment library, its unsuitability for all tendencies and ages, traditional content and service.



The frequencies and percentages of the participants' responses to the questionnaire items related to the third question about the causes of using the entertainment screen on Saudi Arabian Airlines were calculated (Table 7).

Table 7: Responses of the participants to travelers' use of the entertainment screen on Saudi Arabian Airlines

Reasons	Sample	
	Frequency	Percentage
Entertainment	233	60.2%
Education	53	%13.7
Long trip	101	%26.1
Total	387	%100

Table 7 shows that the reasons for travelers' use are “entertainment” (60.2%), “long trip” (26.1%), and “education” (26.1%). The authors argue that entertainment is very important for individuals since it achieves life quality, enhances beauty values, and overcomes boredom felt by travelers due to the long period of their trips.

The frequencies and percentages of the participants' responses to the questionnaire items related to the fourth question about the sources used by travelers on Saudi Arabia Airlines were calculated (Table 8).

Table 8: Responses of the participants to the sources used by travelers on Saudi Arabia Airlines

Sources	Sample	
	Frequency	Percentage
Islamic programs	181	42.4
Movies	398	93.2
TV programs	367	85.9
Children programs	107	25.1
Electronic books	42	9.8
Games	133	31.1
Audio material	121	28.3

(*) The participant can choose more than one answer.

Table 8 shows that travelers use various sources. While “movies” were ranked first (93.2%), “TV programs” were ranked first (85.9%), “electronic books” were ranked last (9.8%). The authors attribute this finding to being reasonable and consistent with the responses to the previous question, which indicates travelers' love and tendency to entertain more than to culture. Movies and TV programs belong more to entertainment programs, which got the highest responses by travelers.



The authors attribute the low responses concerning electronic books to travelers’ lack of fondness of cultural, cognitive, and scientific aspects, especially during travel time and trips. They may think that a book in its traditional form is better or they do not like using technology because they do not know how to use it. As for children's programs, the authors attribute it to the fact that the electronic entertainment library does not include programs suitable for young. Therefore, children get bored and hate them.

- To answer the second question, the frequencies and percentages of the participants' responses to the questionnaire items related to the second question in this regard were calculated. Table 9 shows these findings.

Table 9: Responses of the participants to travelers’ satisfaction with the services and contents of the Saudi in-flight electronic entertainment library

Items	Participants					
	Responses			Relative weight	Percentage	Ranking
	Agree	Neutral	Disagree			
The electronic library meets my need for knowledge and entertainment with its diverse sources.	184	191	52	986	76.97	4
I can access the electronic library contents easily.	267	119	41	1080	84.30	3
The electronic library guide is easy to use.	274	124	29	1099	85.79	1
The electronic library sources are modern and new.	120	228	79	895	69.86	7
I believe that digital library contents are selected by experts who have succeeded in providing a competitive entertainment experience of a Saudi flavor.	175	192	60	969	75.64	5
Accessories related to using the digital library are easy to use (sound headphone input, picture display input, storing unit, USB, and remote control).	265	129	33	1086	84.77	2
I think that Saudi in-flight electronic library content is the best compared with that of other airlines.	143	208	76	921	71.89	6
Total				7063	%78.76	



Table 9 shows that most of the participants are highly satisfied with the electronic library (78.76%). The questionnaire percentages ranged from 85.79% to 69.86%. While the item “the electronic library use guideline is easy to use” was ranked first, the item “the electronic library sources are modern and new” was ranked last. The authors argue that this finding is acceptable and consistent with the responses to the first question, which indicated that travelers greatly tend to use the Saudi in-flight electronic entertainment library. They attribute such travelers’ positive attitudes to the several services offered by the library to travelers.

3. To answer the third question, the frequencies and percentages of responses to the items related to the third question were calculated. Table 10 shows these findings.

Table 10: Responses of the participants to the obstacles encountered by travelers when using Saudi in-flight electronic entertainment library

Obstacles	Sample	
	Frequency	Percentage
The library does not work with the same efficiency during flight time.	387	90.6
Electronic library contents are randomly displayed.	76	17.7
The library content does not suit my interests.	357	83.6
Automatic machines used are old or have technical problems.	56	13.1
A traveler's guide is unavailable.	371	86.8

(*) The participant can choose more than one answer.

Table 10 shows that the most prominent obstacles encountered by travelers while using electronic entertainment library are “the library does not work efficiently during the trip” rated (90.6%), “a traveler's guide is unavailable” rated (86.8%), and “the library content does not suit my interests” rated (83.6%). The authors think that the findings indicate some sort of consensus among travelers, concerning the obstacles which hinder their use of the Saudi in-flight electronic entertainment library. Such obstacles are connected with the library's special technology in terms of its slowness and stop. All services offered by the library, including guidelines and variety of content may not be activated to suit all categories and ages.



4. To answer the fourth question, the frequencies and percentages of the responses to the items related to the fourth question were calculated. Table 11 shows these findings.

Table 11: Responses of the participants to the suggestions for developing the services and contents of the Saudi in-flight electronic entertainment library

Suggestions	Sample	
	Frequency	Percentage
Continuous update of library content	250	58.5
Adding various and modern audiobooks	110	25.7
Benefit from the experiences of other international airlines	57	13.3
Connecting the library to the Internet	113	26.4
Developing screens and seats	101	23.6
Adding short comic material and new books	111	25.9
Adding outputs to headphones	65	15.2

(*) The participant can choose more than one answer.

Table 11 shows that the most prominent suggestions for developing the electronic entertainment library of the Saudi Arabia Airlines are “continuous update of the library content” rated (58.5%), “connecting the library to the Internet” rated (26.4%) and “adding short comic materials and new books” rated (25.9%).

The authors adopted future visions to develop Saudi in-flight electronic entertainment library, arguing that the art library needs to restructure its services in a new form scientifically. To develop it to meet travelers’ needs easily, the authors make the following suggestions.

a. Main interface of the electronic library

Easy use and presentation of library content are of the most important criteria that should be available in electronic libraries. The content can be divided into different departments so that a traveler can enter, go through, and search any department to arouse personal interest.

b. Updating and developing library contents

Saudi Arabian Airlines is keen to distribute a questionnaire to its travelers to assess the extent of their satisfaction with its offered services. Some travelers do not care about answering this questionnaire or doing it randomly.



Thus, it can be added that electronic entertainment library records processes of reading, watching, and searching done by the traveler with a clear number of traveler's seat. Traveler's interests and suitability of the library content can be assessed. Accordingly, the library contents can be continuously updated and developed.

c. Provision of safety and security

A new characteristic can be added to the automatic system used in the electronic library: Limiting what a traveler can go through in case of being a child or under 18.

d. Library information content

Some topics attract many people and are neglected by the administration of art library, e.g. fashion programs and sporting matches. Like Islamic programs and movies, they can be displayed on the main screen since a big sector of travelers are interested in them. Besides, most women are fond of fashion shows and make-up programs.

e. Library budget

Since the library does not have a constant budget, there should be a new policy for supporting its requirements and making the best use of this budget. Some means can be introduced to develop the library contents and meet travelers' needs in the light of this specific budget. One of these procedures is that Saudi Arabian Airlines provides Wi-fi service for travelers to enjoy social media websites. It can also conclude agreements with some huge libraries in Saudi Arabia, such as King Fahd National Library to share its services and contents via having an access to an electronic link for research inside the library electronic contents. This service can be for availability only not for uploading. Accordingly, we develop the library contents through availability and meeting travelers' needs and exploit the library budget in developing its unavailable contents by partnership with great libraries.

Recommendations

1. Finding urgent solutions to overcome material and technical obstacles, which hinder the use of electronic entertainment library on Saudi Arabian Airlines.
2. Improving the infrastructure of electronic libraries existent on Saudi Arabian Airlines and allocating adequate budget for this purpose.
3. Providing technical support and maintenance services including updating electronic library software programs and overcoming their programming defects.
4. Conducting training programs and workshops on electronic library management.
5. Benefiting from world experiences in the domain of electronic library, in general, and electronic entertainment, in particular, by the Arab World and Saudi Arabia.
6. Having several objective specialists answering beneficiaries' questions so that the library can gain their trust and encourage them to benefit from its services.
7. Self-evaluation should be made by electronic entertainment library through recording and analyzing the inquiries of beneficiaries with all categories to identify their qualities and do statistics necessary for identifying the nature and number of the questions answered.
8. Developing the electronic entertainment library information services offered to beneficiaries on Saudi Arabian Airlines and upgrading them to the best to ensure service continuity.



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9. Issuing booklets and guidelines to use electronic entertainment library in addition to an item of its programs and websites.
10. Publishing an annual report showing the number of users of entertainment screen and the content achieving the greatest percentage of use by travelers.
11. Diversifying information sources available on electronic entertainment library to suit various age groups.

Conclusion

We live in a new documentary beautiful world; neither technology nor economic and financial capabilities nor even language will be an obstacle to the use of the electronic library. The future of electronic entertainment libraries and their development will focus on offering services for beneficiaries and used systems. Thus, the study attempted to identify the role of electronic entertainment library, taking the electronic entertainment library on Saudi Arabian Airlines as a model. Electronic entertainment library has a great importance for all beneficiaries since it clearly supports cognitive, intellectual, cultural and entertaining aspects. This support is reflected in society development and makes its existence very necessary. Therefore, the authors attempted to identify the reality of travelers' actual use of the Saudi in-flight electronic entertainment library, extent of their satisfaction with its services and contents, the obstacles encountered by the travelers while dealing with it, and the suggestions for development.

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