

IMPROVING VISITOR AWARENESS THROUGH MARKETING LITERACY DURING RIYADH SEASON EVENTS

Saud Abdulla Alsahli¹, Iyad A. Al-Nsour², Mahmoud Izzat Allahham³

¹College of Media and Communication, Imam Mohammad ibn Saud Islamic University (IMSIU), Riyadh, Saudi Arabia.

²College of Media and Communication, Imam Mohammad ibn Saud Islamic University (IMSIU), Riyadh, Saudi Arabia., Oricd.org/0000-0002-1364-5639

³Business Faculty, LTUC, Amman,11953, Jordan.

Saalsahli@imamu.edu.sa¹ Iaalnsour@imamu.edu.sa² m.allahham@aau.edu.jo

Corresponding Author: Iaalnsour@imamu.edu.sa²

Abstract: The study aimed to measure the impact of marketing literacy on the awareness of Riyadh Season visitors regarding deception and commercial fraud at a 0.05 significance level. The independent variable is marketing literacy, while the dependent variable, visitors' awareness, consists of three sub-variables: skills, knowledge, and situations. The population for this study includes all visitors to Riyadh Season 2025, which is expected to reach 16 million people. Data were collected using a purposive sampling technique, resulting in a sample size of 386 non-Saudi visitors. A five-point Likert scale was employed for the assessment. The results indicated that visitors' awareness is significantly influenced by marketing situations, more so than by marketing skills and knowledge. The study found that both pre-marketing and post-marketing conditions during the Riyadh Season have a strong impact on visitors' awareness of negative practices. Finally, the study offers several recommendations to enhance awareness among visitors, including educational market visits, strengthening supervision by authorities, activating the role of the Consumer Protection Association, and establishing a tourism court.

Key Words: Marketing, Awareness, Literacy, Knowledge, Skills, Behaviors, Visitors, Riyadh Season.

1. Introduction:

Illiteracy is a significant obstacle to economic growth and human development in many countries worldwide. The primary factor contributing to this issue is the increasing population size. As of 2025, the global literacy rate is approximately 86.3%, which means that around 13.7% of the population aged 15 and older is illiterate (UNESCO, 2004). Illiteracy is both a social and economic challenge. Its effects differ depending on the country. On a macroeconomic level, high illiteracy rates diminish a country's ability to address economic, health, environmental, and technological advancements. Furthermore, there is a strong positive correlation between literacy and economic growth. From an individual standpoint, illiteracy leads to economic recession and poor living conditions for those affected. It contributes to poverty, ignorance, and health issues, perpetuating a cycle of backwardness within communities. This cycle reinforces the relationship between poverty and unemployment (Pegkas, 2014)

The illiteracy discussed in our study goes beyond the basic inability to read and write; it relates more to how learners (or those who are not illiterate) acquire the necessary skills that enhance their everyday routines. Literacy is a vital component in the process of learning and knowledge acquisition. Research indicates that 70% of information is conveyed to individuals through reading. This statistic highlights that reading skills significantly enhance capabilities and improve overall knowledge (Kim et al., 2021). From a marketing perspective, a "literate"



individual can develop and improve their marketing knowledge and practices (Mueen et al., 2024). Other studies have introduced the concept of a "smart consumer," which refers to a consumer's understanding of marketing elements and incentives that elevate their thinking and awareness. This awareness helps consumers maximize personal benefits and allows them to share their accumulated knowledge with others, such as traders, markets, and fellow consumers. Moreover, the primary goal of consumers' perception is to optimize returns and enhance their understanding of essential information needed to become a smart consumer (www.ebay.com, 2025). For instance, the frequency of purchases and the number of visits to stores can enhance a consumer's ability to recall prices, suggesting that increased price knowledge is also likely (Anushree et al., 2021).

A study has revealed that sellers have increased prices by 20% without Saudi consumers' awareness, primarily due to a lack of consumer awareness. Commercial fraud in the Kingdom amounts to \$1 billion annually, attributed to a lack of market transparency and insufficient information. At the sector level, commercial fraud affects 70% of medicines, 19% of software, and 25% of car spare parts. Additionally, figures indicate that 56% of goods traded in the local market are not original, and 20% of the Saudi population is vulnerable to commercial fraud. The research underscores the significant role that media play in enhancing consumer literacy education (Livingstone, 2010). It highlights the power of mediato promote positive messages within local communities, helping to protect them from fraud and exploitation while ensuring consumer protection at points of sale. There is a pressing need for greater transparency in delivering precautionary information by business centers and for improved accountability as well. Therefore, marketing literacy in the media is crucial, as it empowers consumers to make rational choices, maximize the benefits of their purchases, and avoid marketing deception.

2. The Literature Review:

2.1 Marketing Literacy:

Literacy refers to the coding skills individuals use in their daily routines, particularly in the context of purchasing behavior. This means that a learner possesses a specific set of skills that enables them to make buying decisions efficiently and effectively, regardless of the time or place (Chanda et al., 2024). It encompasses the ability to navigate market negotiations and understand various messages within the market (Siagian et al., 2024). These competencies allow consumers to engage as learners in different situations, utilizing their coding skills to complete transactions and make deals (Ng et al., 2023). Literacy is also dependent on the consumer's ability to create and comprehend readable texts, which is essential for completing tasks related to purchasing behavior in the marketplace. Moreover, this knowledge reflects general behavior and is not confined to a specific category. Consequently, individuals with less education may need to exert additional time and effort during the search and evaluation stages for products they require (Utkarsh,2017).

Marketing literacy involves developing and understanding the knowledge, skills, and trust that shoppers need to enhance their evaluation processes, along with a comprehension of their rights and responsibilities. Essentially, literacy in this context is about seeking important information, consulting resources, receiving assistance, and making decisions based on the information gathered. The primary objectives are to enhance consumer protection, clarify consumer duties, promote interactive behaviors, and help avoid poor choices and behaviors resulting from incorrect purchases (Bruce, 2017). Local governments play a crucial role in



emphasizing consumers' rights and responsibilities by utilizing various media channels, including publications, websites, advertisements, and campaigns. Marketing awareness relies on employing the right tools to analyze consumer preferences and needs while linking these insights with financial benefits and product attributes. This approach can help reduce perceived risks associated with negative purchasing behaviors and foster a culture of complaints among consumers (Melewar et al., 2013).

There are numerous literacy programs in media-assisted schools designed for university students and adolescents to enhance their critical thinking skills, particularly in analyzing advertising messages (Tommasi et al., 2023). The adolescent market has been growing rapidly with 7% annually (Dinesh & 2Divyabharathi, 2023), and becoming one of the most targeted segments, with approximately 127.3 billion in 2025 (Market Research Report, 2025). American studies indicate that this demographic differs from others, as they primarily consider computers to be their main source of literacy. They have a tendency toward travel and entertainment and are increasingly interested in social and environmental issues. This emphasizes the urgent need to find effective ways to communicate, educate, and positively influence their behavior, particularly through internet platforms (Papplarado, 2012; Benjamin et al., 2018). The annual shopping rate for adolescents has surged, increasing 54 times, while their average visit duration has reached 95 minutes. In contrast, other groups average 39 visits and spend about 75 minutes per visit (Al-Nsour, 2018). These statistics reveal that friends and parents, along with advertising and television, are key sources of information for adolescents (Al-Nsour, 2018).

The study conducted by East, Hammond, Lomaxa, and Robinson (2005) demonstrated that word-of-mouth (WOM) significantly contributes to increased sales. They noted that WOM particularly influences male adolescents and individuals in the 20-30 age range. Rather than merely serving as a means of transferring information, WOM acts as a powerful tool that stimulates purchasing decisions (Al-Nsour,2017). Consequently, recommendations from friends and relatives have a strong impact on consumers' purchasing choices. This finding is supported by the research of Krol (1997) and Shim (1996). Additionally, statistics show that 21% of both male and female adolescents view university courses as a valuable source of consumer literacy, with many benefiting positively from these courses (Furlow, 2008). In contrast, only 13% of Saudi students have enrolled in at least one course related to marketing and consumer protection (Ministry of Education, 2022).

Research shows that economic conditions and the ideological backgrounds of individuals play a key role in social awareness, while the media has a limited impact on building such awareness within communities (Happer & Philo,2013). For instance, students' political awareness is often quite narrow, despite the political programs offered by the media. This finding is attributed to several factors, including a lack of programs designed to engage young people, low readership rates of newspapers and magazines, and a general disinterest in political issues among newspaper readers (Huang,2009). Hussein (2001) indicates that social awareness reflects the unique characteristics of Egyptian society, and television often creates contradictory awareness. While television can support positive values associated with awareness, it sometimes also promotes negative behaviors (Iftikhar et al., 2022).

Research focusing on Media Literacy Education (Livingstone, 2010) demonstrates that media significantly influence the dissemination of positive information to local communities. Such information helps protect consumers from fraud and commercialism, particularly at points of sale. Furthermore, transparency in delivering precautionary information from business centers



enhances the concept of accountability. In Jordan, for instance, television serves as a major source of accurate health information and is an effective tool for promoting health awareness (Safori et al., 2023).

2.2 Marketing Literacy and Visitors'Awareness:

Consumer protection aims to enhance market efficiency and create fairer, more harmonized market practices. It strengthens the role of consumers by imposing greater control and oversight over their daily routines and purchasing decisions. This makes consumer protection a coherent, systematic, organized, comprehensive, and sequential process aimed at educating and empowering customers. The goal is to help them develop their marketing and purchasing skills, leading to increased security, transparency, and efficiency in physical markets, while effectively meeting their needs (Consumer Financial Protection Bureau, 2014). The core concept of consumer protection is to improve the quality of life in the marketplace by fostering healthy relationships and interactions between consumers and various sellers, producers, and organizations. This allows consumers to obtain goods and services with minimal effort, while making more informed and accurate decisions (Al-Nsour, 2021).

Achieving such a goal requires a high level of commitment from sellers, producers, and organizers to their responsibilities and working conditions, which ensure consumer rights. This commitment is essential to prevent deception and fraud. Studies indicate that the lack of effective consumer protection is widespread and varies with technological advancements, information revolutions, and globalization, all of which significantly impact marketing practices across different individuals and societies. For instance, a study found that 3.2 million adolescent consumers in Britain experienced commercial fraud through phone calls and emails, resulting in annual costs exceeding £3.5 billion (Bowe, 2007). Recent consumer protection research suggests that individuals are increasingly leaning towards professionalism and the need for greater self-responsibility, rather than relying solely on organizations and institutions (Bowe, 2007). Educated consumers are better equipped to protect themselves and their families from issues related to the marketing environment, as well as commercial fraud and deception.

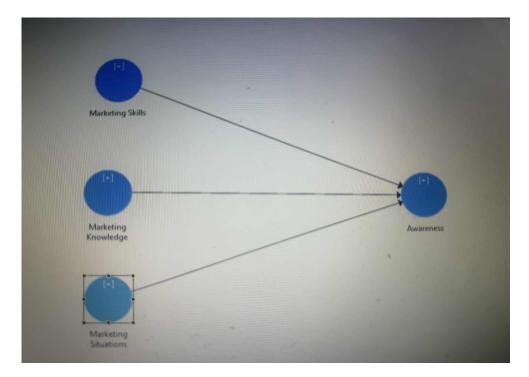
Many attempts have been made to establish a foundation for managing marketing and sales forces, as well as to identify the mechanisms, methods, and techniques that should be utilized. Attention has also been given to less educated groups, particularly older individuals (Hobbs, 2010). As a result, marketing illiteracy among older people in the UK decreased to less than 20% in 2006, indicating an improved ability to recognize and engage with appropriate marketing practices. Additionally, studies highlight that businesses have a strong interest in adolescent-oriented marketing, often perceiving this demographic as less experienced consumer who require more time and effort to become savvy purchasers (Furlow, 2008). Furthermore, females and low-income individuals typically have lower levels of education and experience in this area. In contrast, the most educated and high-income groups, particularly married individuals, demonstrate the highest levels of marketing literacy. This suggests that other demographics still need to develop the necessary skills to protect themselves against deceptive practices in the market. In conclusion, various media platforms have played a crucial role in safeguarding consumers. This protection is achieved by educating individuals on their rights, duties, and interests while advocating for these rights. Such initiatives are classified under social issues and responsibilities, with media programs aimed at addressing and understanding the sensitive issues within local communities. The goal is to enhance consumer literacy, making them more aware of their rights, obligations, responsibilities, and duties.



The results of the survey indicated that English is a second language for about 11 million Americans, with over 20% of this population being functionally illiterate. These individuals possess skills comparable to those of someone below the fourth-grade level in reading, basic math, document comprehension, and awareness. Additionally, 34% of the learners were classified as marginally literate, existing at the boundary between illiteracy and literacy. This classification is based on their ability to gather information and interpret simple symbols from readable texts (Al-Nsour, 2017). The National Adult Literacy Survey (NALS), which assessed 13,600 Americans, revealed that more than 50% performed below the sixth-grade level on cognitive competence tests (Kirsch et al., 2002). In conclusion, the data suggest a connection between cognitive abilities and the population's capacity to meet their purchasing needs. A low level of knowledge can lead to negative market practices (Appiah et al., 2022). Additionally, consumers with lower cognitive levels often select inappropriate or unsuitable products, indicating a struggle to comprehend available pricing information. Those with less education typically have less experience and face challenges in making successful and accurate transactions (Yogesh et al., 2023). Such consumers frequently rely on external sources—such as product information, advertisements, and packaging—to help them make successful purchases (Pan, 2024). Yongqing et al (2020) argued that it is challenging for these consumers to identify their needs, estimate product values, and navigate the physical marketplace. A study conducted by Huang (2022) revealed that less-educated consumers tend to seek out more information about products compared to their university-educated counterparts. Additionally, Jiyoung & Merlyn (2017) noted that less-informed consumers often view themselves as more intelligent and practical, believing that educated consumers primarily read textbooks. The research addresses and critiques the perception that less-educated consumers are victims of circumstance. This notion is portrayed as a form of ideological distortion that diminishes the value of individuals from poorer and less-educated backgrounds (Craig, 2009). Understanding awareness and knowledge of marketing literacy is essential to improving engagement and communication strategies. The results of Tuohy et al., (2022) indicates that there are gaps in awareness and knowledge among NMP visitors, as current engagement and communication strategies do not reach the goals outlined in the NMP management plan. While the majority of visitors were aware of the presence of a marine park in the area, they showed low levels of awareness of the underlying management bodies (Tuohy et al., 2022). According to above the main hypothesis may formulated as follow:

- It is Expected to be a Statistical Significance of Marketing Literacy on Awareness of Riyadh Season Visitors from Deception and Commercial Fraud at the 0.05 Level The following figure represents the model used in this study. It aims at determining the direction of the relationship between independent and dependent variables.





3. The Research Design:

- A. The Research Population: The population consists of all consumers and residents living in Riyadh city, Saudi Arabia. According to the General Entertainment Authority, the number of visitors to the Riyadh Season in 2025 reached 16 million, with attendees from various nationalities (General Entertainment Authority, 2025).
- B. The Sampling Technique and Size:For the sampling technique, data was collected using purposive sampling. The sample comprised 386 non-Saudi visitors attending the Riyadh Season in 2025, all of whom were over the age of 30. A total of 341 valid responses were received for final analysis. The unit of analysis includes visitors aged 30 and older.
- C. Measurement: A five-point Likert scale was used to capture the degree of response and the consistency between the statements and the respondents' opinions. In this scale, a value of 5 corresponds to "always," 4 to "often," 3 to "sometimes," 2 to "rarely," and 1 to "never." To analyze the research sample results, descriptive statistical analysis was conducted, calculating the arithmetic mean, standard deviation, and relative frequency. The components of marketing literacy were evaluated based on the arithmetic mean of the research sample. The evaluation criteria are as follows: a mean of more than 4.2 is categorized as very high; a mean from 4.2 to 3.4 is considered high; a mean from 3.4 to 2.6 is average (or moderate); a mean from 2.6 to 1.8 is regarded as weak; and any mean below 1.8 is categorized as very weak.

D. File of Respondents:

1) Marketing Skills: A study revealed six key marketing skills among consumers in Saudi Arabia. The findings indicate that these skills are generally rated highly, suggesting a strong level of marketing proficiency among the population. Specifically, 58.3% of respondents reported having a high degree of marketing skills, while 33.6% indicated that their skills were low.



Table 1: Frequencies, Percentages, Means, and Standard Deviations of Sub-Independent Variable (Marketing Skills)

			varia	Die (Mi	irkeiing	SKIIIS)				
N	The Items	F			Respo	nses De	egree	Mean	SD	Decision
		_	VH	Н	N	L	VL			
1	I can distinguish between	%	22.	38.	20.	16	2.8	3.616	1.086	High
	similar products based on		2	2	8			3.010 1	51	
	their quality.							1	31	
2	I can distinguish between	%	23.	34.	22.	15.	4.2	3.582	1.123	High
	similar products according		1	9	6	1		9	98	
	to price.							9	90	
3	I can differentiate between	%	25.	28.	20.	15.	9	3.459	1.269	High
	the brands purchased.		9	8	8	6		7	43	
4	I can distinguish between	%	24.	28.	20.	18.	8	3.431	1.260	High
	products purchased based		5	8	3	4		3.431	68	
	on their country of origin.							3	00	
5	I can differentiate between	%	25.	32.	22.	15.	3.8	3.606	1.138	High
	the different uses of the		9	5	2	6		5.000 6	82	
	products purchased.							U	02	
6	I can distinguish the	%	34.	30.	17.	14.	2.8			High
	physical specifications of		9	2	5	6		3.796	1.146	
	the products purchased, such							2	92	
	as colors and shape.									
	Overall the Dimension	%	26.	32.	17.	15.	13.	3.582	0.762	High
			1	2	4	9	7	1	44	

2) Marketing Knowledge: The assessment of marketing knowledge includes six components. Of these, five were rated as moderate, while the statement "I have information about consumers' rights in different purchasing situations" received a high rating. In Saudi Arabia, it was found that 39.7% of consumers possess the low marketing knowledge necessary for making effective purchasing decisions, whereas 35.5% have a high level of knowledge.

Table 2: Frequencies, Percentages, Means, and Standard Deviations of Sub-Independent Variable (Marketing Knowledge)

		V	ariabie	(Marke	ung Kn	owieag	e)			
N	The Item	F			Respo	nses De	egree	Mean	SD	Decision
		_	VH	Н	N	L	VL			
1	I have information about the	%	25.	37.	20.	10.	6.1			High
	consumers' rights in		9	3	3	4		3.668	1.160	
	different purchasing situations.							2	41	
2	I have information about the	%	5.2	17.	30.	25.	20.			Moderate
	duties of consumers in			9	7	9	3	2.620	1.162	
	different marketing practices.							9	24	
3	I have known the key issues	%	7.1	19.	33.	27.	12.	2.805	1.114	Moderate



	C: (1			2		4	7	7	0.1	
	facing the consumer in			3	5	4	/	/	91	
	different purchasing									
	situations.									
4	I know the methods that	%	9.4	23.	30.	25.	10.			Moderate
-	should be used when			6	2	9	8	2.947	1.143	
				U	4	,	O		-	
	problems occur during the							9	15	
	purchase process.									
5	I know the consumer	%	8.5	12.	26.	29.	23.	2.5.10	1 015	Moderate
	protection law in electronic			3	4	7	1	2.540	1.215	
	1			3	4	,	1	3	78	
	purchasing transactions.									
6	I know the parties	%	12.	16	25.	29.	16	2 000	1.260	Moderate
	responsible for marketing		7		9	2		2.800	1.260	
	1		,			_		9	46	
	problems.									
	Overall the Dimension	%	11.	21.	27.	24.	14.	2.897	0.927	Moderate
			5	1	8	7	9	3	67	

3) Marketing Situations: This variable focuses on behavioral situations and consists of 12 items. These items describe the actual practices of consumers in markets and stores during and after the purchasing process. The relative Likert scale indicates that these situations are moderated. It was found that 8 of the items were affected by moderation, while there was a notable lack of communication with consumer protection devices in problem situations, with 54.2% of respondents indicating this issue. Among the items, three stood out with significant responses: "I stop using the product in the event of any defect or mistake," "I share my positive experiences during the purchasing process with others," and "I share my negative experiences during the purchasing process with others."

Table 3: Frequencies, Percentages, Means, and Standard Deviations of Sub-Independent Variable (Marketing Situations)

N	The Items	F			Respo	nses D	egree	Mean	SD	Decision
		-	VH	Н	N	L	VL			
1	I read the contracts and	%	7.5	19.	25	25.	22.			Moderate
	guarantees for the product			3		5	6	2.64	1.240	
	before the purchase.									
2	I keep the purchase invoice	%	24.	25.	18.	21.	10.	3.30	1.325	Moderate
	and all related documents.		1	9	4	2	4	3.30	1.323	
3	I compare weights, lengths,	%	16.	25.	25.	18.	14.			Moderate
	and sizes of the product		5	5	5	4	2	3.10	1.293	
	when making a purchase.									
4	I stop using the product in	%	35.	25.	16.	17.	4.7			High
	the event of any defect or		8	5	5	5		3.71	1.253	
	mistake.									
5	I make sure that the prices	%	21.	29.	21.	15.	11.	3.33	1.296	Moderate
	are really discounted.		2	7	7	6	8	3.33	1.290	
6	I communicate with the	%	9.9	13.	22.	28.	25.	2.53	1.285	Weak
	consumer protection devices			2	6	3	9	4.55	1.203	



	in case of any problem.									
7	I check the safety and	%	22.	33.	22.	18.	3.8			Moderate
	quality of the product during		2	5	2	4		3.51	1.144	
	the purchasing process.									
8	I inform the store's staff of	%	17	27.	21.	19.	14.			Moderate
	comments, suggestions, and			8	2	8	2	3.11	1.312	
	complaints when necessary.									
9	I tell others about my	%	25.	36.	17.	13.	6.6			High
	positive experiences during		9	8	5	2		3.62	1.195	
	the purchase process.									
1	I tell others about my bad	%	25.	38.	17	11.	7.1			High
0	experiences during the		5	7		8		3.63	1.190	
	purchase process.									
1	I purchase in normal times	%	19.	34.	24.	15.	6.1	3.46	1.151	Moderate
1	(not fatigue or hunger).		8	4	5	1		5.10	1.101	
1	I make the planned purchase	%	12.	30.	26.	20.	10.			Moderate
2	(do not make an urgent		3	2	4	8	4	3.12	1.180	
	purchase).									
	Overall the Dimension	%	19.	25.	19.	18.	16	3.03	0.929	Moderate
			8	6	9	8		J.03	31	

4) Visitors' Awareness: The level of consumer protection is against negative market practices. The results show that Visitors' protection practices are high according to the arithmetic mean (3.5813). It shows that the consumer's knowledge of most of his rights was a high, while the other three of rights were moderated: "the right to health and safety when using the products normally" according to 53%, "the right to get compensation in case of conciliation is damaged" according to 51.2% and "the right to obtain details dealing between the supplier and exporters" according to 38.7%.

Table 4: Frequencies, Percentages, Means, and Standard Deviations of Sub-Independent Variable (Visitors' Awareness)

N	The Items	F			Respo	nses D	egree	Mean	SD	Decision
			VH	Н	N	L	\mathbf{VL}			
1	I know my right to health	%	17.	35.	21.	17.	8.1			Moderate
	and safety when using the		5	5	7	1		3.37	1.202	
	products normally.									
2	I have the right to obtain the	%	26.	30.	23	15.	4.6			High
	correct information and data		3	4		7		3.55	1.171	
	about the products							3.33	1.1/1	
	purchased.									
3	I have the right to freely	%	35	31.	14.	12	7.4			High
	choose between products			3	3			3.72	1.278	
	that meet the quality							3.72	1.276	
	requirements.									



4	I have the right to personal	%	49.	26.	7.8	11.	4.6			High
	dignity and respect for religious and cultural		8	3		5		4.02	1.225	C
	values.									
5	I have the right to bring	%	28.	30	15.	17.	9.2			High
	legal cases for injury and violation of my rights.		1		7	1		3.54	1.299	
6	I have the right to get	%	30	21.	19.	17.	11.			Moderate
	compensation in case of conciliation is damaged.			2	8	5	5	3.37	1.376	
7	I have the right to get the	%	41.	26.	14.	12	5.1			High
	documents, contracts, and invoices of the purchase.		9	3	7			3.85	1.235	
8	I have the right to obtain	%	18.	20.	18.	24.	18.			Moderate
	details of dealings between the supplier and exporters.		4	3	4	4	4	3.06	1.396	
9	I have the right to inform	%	31.	24	18.	15.	10.			High
	the government authorities about mistakes and abuses.		1		9	7	1	3.50	1.350	
1	I have the right to get the	%	39.	28.	15.	12.	4.1			High
0	full details of the purchase		2	6	7	4				
	process in installments, such as price, period, total cost, and number of installments.							3.82	1.196	
	Overall the Dimension	%	31.	27.	17	14.	9.3	3.581	1.272	High
			7	4		5	4	3	8	

4. Validity and Reliability:

- 1) Discriminant Validity: This concept refers to how distinct measure statements are from one another, as well as the extent of overlap between them (Hair et al., 2018). It involves a cross-loading test, which requires that the loading value of each item in a latent variable (independent variable and dependent variable) must be the highest among all other variables (Hair et al., 2018). As shown in Table 5, the cross-loading values for each statement in the latent variables are distinct and exceed those of other variables. Therefore, these statements are considered to be distinct, indicating an optimal positioning.
- 2) Convergent Validity: This concept assesses the degree of agreement among several statements measuring the same concept within a variable (Ringle et al., 2024). It includes three tests:
- A) Individual Item Validity: This test evaluates the consistency of responses to statements that assess the same phenomenon or concept. The acceptable benchmark for this measure is a value greater than 0.7. As indicated in Table 5, all statements exceed this threshold and are therefore statistically acceptable.
- B) Composite Alpha: According to the statistical guideline, the acceptability of a latent variable (whether independent or dependent) should be greater than 0.7. Table 5 confirms that both the independent and dependent variables exceed this value (Hair et al., 2021).



- C) Average Variance Extracted (AVE): The minimum acceptable threshold for AVE is 0.5. Results show that all study variables exceed this benchmark, confirming their statistical acceptability (Ringle et al., 2024).
- D) rho_A: The statistical guideline states that the test value should be higher than 0.7 (Fornell & Larcker, 1981). Results reveal that the peak test values for all variables are above 0.7, confirming that the constructs are reliable and acceptable for the present study.

Table 5: Cross Loading, CR, AVE, CR & VIF

Factor	Items	Cross	ig, CR, AVE, CR	AVE	Rho_A	
1 4001		Loading		1112	14110_11	
Marketing	MS1	0.983	0.993	0.937	0.993	
Skills	MS2	0.986				
	MS3	0.986				
	MS4	0.979				
	MS5	0.988				
	MS6	0.968				
Marketing	MK1	0.954				
Knowledge	MK2	0.970	0.990	0.940	0.988	
	MK3	0.981				
	MK4	0.975				
	MK5	0.961				
	MK6	0.977				
Marketing	MS1	0.959	0.995	0.938	0.994	
Situations	MS2	0.979				
	MS3	0.974				
	MS4	0.959				
	MS5	0.980				
	MS6	0.950				
	MS7	0.972				
	MS8	0.976				
	MS9	0.966				
	MS10	0.967				
	MS11	0.973				
	MS12	0.965				
Visitor	VA1	0.966	0.994	0.963	0.992	
Awareness	VA2	0.969				
	VA3	0.973				
	VA4	0.950				
	VA5	0.976				
	VA6	0.976				
	VA7	0.969				
	VA8	0.952				
	VA9	0.981				
	VA10	0.970				



3) Fornell-Larcker Test:

The test shows that the value of the latent variable—regardless of whether it is independent or dependent—explains the highest level of variance when compared to other latent variables (Fornell & Larcker, 1981). As indicated in Table 6, the variance values for the latent variables are greater than those of the other variables. This suggests that there is no significant relationship with the other latent variables, implying that the current state of the variable is more favorable.

Construct	Visitor Awareness	Marketing Skills	Marketing Knowledge	Marketing Situations
Visitor Awareness	0.968			
Marketing Skills	0.959	0.970		
Marketing	0.987	0.985	0.968	
Knowledge				
Marketing Situations	0.988	0.969	0.987	0.981

Table 6: Fornell-Larcker Criterion

5. Testing Hypothesis:

It is Expected to be a Statistical Significance of Marketing Literacy on Awareness of Riyadh Season Visitors from Deception and Commercial Fraud at the 0.05 Level

5.1 Path Analysis:

The path analysis reveals that various marketing factors significantly influence the attraction of medical tourists to Jordan. According to Table 7, the statistical significance of three correlation relationships falls below the acceptable margin of error (0.05). This supports the subhypotheses related to marketing skills, marketing knowledge, and marketing situations. More specifically, there is a strong positive correlation between marketing situations (0.899) and marketing skills (0.494), as they relate to visitor awareness during the Riyadh Season regarding deception and commercial fraud. Conversely, there is a significant negative correlation between marketing knowledge (0.401) and visitor awareness during the Riyadh Season. Despite this, all sub-hypotheses were proven, indicating a high level of significance, and a strong effect was observed of marketing literacy on the awareness of Riyadh Season visitors concerning deception and commercial fraud. The f² value is used to measure the effect of independent variables on dependent variables (Hair et al., 2021).

In this analysis, f² assesses the impact of marketing literacy (in terms of skills, knowledge, and situations) on the awareness of Riyadh Season visitors regarding deception and commercial fraud. According to statistical guidelines, an f² value above 0.35 indicates a high effect, while a value below 0.35 suggests a lower effect. As shown in Table 8, marketing literacy has a highly positive impact on the awareness of Riyadh Season visitors regarding deception and commercial fraud. Specifically, marketing situations show a high effect (0.748), while marketing skills and knowledge also have a high effect, though slightly less than marketing situations. The coefficient of determination, R², indicates the strength of the linear relationship between independent variables (IVs) and the dependent variable (DV) by measuring the variance in the DV caused by one or more IVs (Hair et al., 2018). According to statistical standards, an R² value below 0.02 is considered very small, between 0.02 and 0.13 is moderate, and a value above 0.26 reflects high variance.



The R² value in Table 8 shows that all components of marketing literacy (skills, knowledge, and situations) explain 98.7% of the variance in the awareness of Riyadh Season visitors regarding deception and commercial fraud. Notably, marketing situations have the strongest impact on visitor awareness. Finally, the predictive effectiveness of the model used in this study is evaluated through the predictive relevance Q². According to statistical guidelines, a model demonstrates predictive power if the Q² value is greater than 0.00 (Chin, 2010). Table 8 indicates a significant ability to analyze the variance in the awareness of Riyadh Season visitors concerning deception and commercial fraud, with a Q² value of 0.919. This suggests that the measurement model possesses strong predictive power to explain variations in the awareness of Riyadh Season visitors based on marketing literacy components.

Table 7: Direct Path Analysis

			7. 21						
H	Relationship	Std.	Std.	<i>T</i> -	P-	$\int f^2$	R^2	Q^2	Decision
		Beta	Dev.	Valu	Val				
				e	ue				
Н	Marketing → Skill	0.49	0.058	8.51	0.0	0.462	0.97	0.91	High Positive
11	Awareness	4		3	00		7	0	Effect
Н	Marketing Knowledge	-	0.060	6.61	0.0	0.357	0.92	0.85	High Negative
12	Awareness	0.40		5	00		1	6	Effect
		1							
Н	Marketing Situation	0.89	0.090	9.82	0.1	0.748	0.98	0.90	High Positive
13	Awareness	9		5	89		7	8	Effect
Н	Marketing Literacy	0.98	0.002	455.	0.0	35.45	0.98	0.91	High Positive
15	Awareness	6		9	02	1	7	9	Effect

Significant at P_0 * < 0.01. Significant at P_0 ** < 0.05.

5.2 Goodness of Fit (GoF):

This text evaluates the predictive power and performance of both the measurement model and the structural model, as discussed by Chin and Dibbern (2010). According to statistical decision rules, a Goodness of Fit (GoF) value of less than 0.1 indicates that the model is unsuitable. A GoF value between 0.1 and 0.25 suggests limited suitability, while a GoF value ranging from 0.25 to 0.36 indicates average suitability. A GoF value greater than 0.36 signifies a high fit. Table No. 8 presents the indicators used to assess the suitability of the research model, as outlined by Ringle et al. (2024). The model fit indicators include:

- Standardized Root Mean Square Residual (SRMR): This metric measures the average magnitude of differences between saturated and predicted correlations, serving as an absolute measure of model fit. According to Henseler et al. (2014), an acceptable SRMR value should be less than 0.08, with values up to 0.10 being considered a good fit. The estimated model currently has an SRMR value of 0.018, indicating negligible differences between the saturated and expected values, which suggests that the model is highly suitable.
- d_ULS and d_G: These two indicators assess the model's suitability based on the differences between saturated and expected values. The d_ULS represents the sum of the squares of the differences between values, while d_G is the square root of that sum. For the estimated and saturated models, the d_ULS values are both equal to 0.046, indicating a high model fit. Additionally, the d_G values for both models are also equal to 1.759, confirming a very high degree of fit in the estimated model.



- Chi-Square: This statistic measures how well the model aligns with observed data. The Chi-Square values for both the estimated and saturated models are identical, indicating no discrepancies between the two models.
- NFI (Normed Fit Index): This index assesses how much the estimated model improves upon the saturated model. The NFI is calculated as 1 minus the squared Chi-Square value of the proposed model divided by the squared Chi-Square value of the empty model. The resulting values range from 0 to 1, with values closer to 1 indicating a better fit. An NFI value above 0.9 is generally considered a good fit. In this case, the NFI for both models is 0.836.

Table 8: GOF Value

Variable	Saturated	Estimated	Q ² (=1-SSE/SSO)
	Model	Model	
SRMR	0.018	0.018	
d_ULS	0.046	0.046	0.919
d_G	1.759	1.759	
Chi-Square	766.488	766.488	
NFI	0.836	0.836	

6. Discussion and Recommendations:

Visitors to the Riyadh Season in Saudi Arabia demonstrate a high level of marketing skills, which they use to assess the negative practices of stores and salespeople. Research shows that various forms of media, including the Internet, television, newspapers, and magazines, play a significant role in developing these skills. Around 48.8% of marketing skills are acquired by consumers through advertising. It is important to recognize that these media serve not only as sources of information but also as tools for gathering and developing new marketing skills. The consumption of reading and visual media is divided into 40.5% and 59%, respectively, which aligns with literature indicating that 70% of information is obtained through reading. This trend can be attributed to advancements in technology and the information revolution, characterized by the rise of tablets and smartphones that combine reading and viewing technologies with entertainment. When identifying the Internet as a source of reading, the percentage of information consumed through reading increases to 98.9%. The limited influence of educational institutions, consumer protection agencies, and government entities on shaping consumer marketing knowledge in Saudi Arabia may explain the overall weakness in this area, which can lead to poor purchasing decisions. The findings suggest that marketing knowledge is shaped not only by social influences but also by individual behavior. Consequently, less educated consumers may put in additional effort, time, and money into product checking and inspection, which can hurt this demographic. Literacy initiatives aimed at supporting local communities—such as schools, universities, students, and adolescents—are crucial for fostering critical thinking skills through reading and understanding messages (Yasdin et al., 2021). However, other research suggests that the media plays a limited role in raising awareness (Jianxiong & Zhou, 2021). For instance, despite the political programs provided by the media, students' political awareness remains very limited (Ahmad et al., 2019). Refea (2024) further points out that social awareness in Egypt reflects the unique characteristics of its society



Marketing skills can be effective in certain circumstances or markets, but maintaining that success consistently is challenging without the support of relevant knowledge. This knowledge helps consumers make informed and rational purchasing decisions over time. This trend is highlighted by the fact that 47.2% of purchasing decisions in Saudi Arabia are unplanned. Mahmud et al. (2022) confirmed that a savvy consumer can perform decision-making behaviors efficiently and effectively. Additionally, a study by Isnaini et al. (2025) suggests that literacy involves effectively applying skills and navigating social contexts to interpret various marketing messages. Consequently, marketing knowledge, as a component of marketing literacy, increases the likelihood of rational and informed purchasing decisions and helps reduce commercial deception by stores and sales personnel. Research indicates that consumers in Saudi Arabia often utilize their accumulated marketing skills in unexpected purchasing situations. Our study differentiates between subjective situations, which reflect consumers' heightened awareness of specific marketing issues such as health and safety rights, the right to compensation for damages, the right to conciliation, and the right to receive detailed information about deals. This subjective level illustrates what consumers experience at sales points during and after their purchasing decisions. There are moderate concerns, such as difficulties in reading contracts and product guarantees before making a purchase, as well as limited communication with consumer protection agencies. However, the Consumer Protection Association and academic institutions have played significant roles in informing consumers about these behaviors, accounting for 18.7% and 11.7%, respectively, of the efforts. Notably, only 4.8% of marketing information came from the Consumer Protection Association, while 2.08% was provided by universities.

Many visitors to the Riyadh Season in Saudi Arabia report negative experiences at selling points, which leads to a higher prevalence of negative word-of-mouth (WOM) in the Saudi market. This finding contradicts Al-Nsour's assertion (2018) that negative WOM is less likely to occur than positive WOM. We support the idea that distinguishing between different types of WOM serves as an informative tool, educating consumers about behaviors and marketing practices in their environment. This, in turn, can influence purchasing decisions. Thus, WOM functions as a mechanism that can either accelerate or delay the purchasing process, rather than simply facilitating information exchange among consumers (Bhardwaj et al., 2024). Research has shown that 32% of information is shared through parents, relatives, and friends, aligning with Kamil et al.'s findings (2020). Albadri (2022) reported that 26.7% of information is obtained via the internet, while 13.5% and 10.9% come from commercial television, newspapers, and magazines, respectively. These results are consistent with Calvert's (2008) findings, which indicate that primary sources of information for American consumers include friends, relatives, advertisements, and television. Al-Quran (2022) categorized these sources as friends, parents, print media, and commercial television. In Jordan, television is recognized as a key source of accurate information and is effective in spreading health awareness (Al-Dmour et al., 2022). Research on Media Literacy Education emphasizes the importance of positive messages in the local community, aiming to raise awareness among Riyadh Season visitors about deception and commercial fraud. At the selling point, it is essential to promote transparency in delivering precautionary information published by businesses and to strengthen accountability (Al-Nsour, 2017). The three key components of marketing literacy—skills, knowledge, and situational awareness—play a crucial role in shaping visitors' awareness regarding deception and commercial fraud. Research indicates that the available sources of information significantly influence how visitors react in different situations. In Saudi Arabia, there is a high level of



awareness among Riyadh Season visitors regarding deception and commercial fraud, coupled with a strong understanding of certain rights, such as the right to personal dignity and respect during the purchasing process, as well as specific rights related to frequent purchases (Al-Nsour et al., 2021). When examining the relationship between the three components of marketing literacy and visitors' awareness in Saudi Arabia, it becomes clear that behavioral situations have a greater impact than the other components, alongside marketing skills in the marketplace. Notably, many shoppers in Saudi Arabia do not actively seek information during the purchasing stage; instead, they primarily rely on store shelves for information about prices and product quality. Some consumers also refer to store brochures. Interestingly, marketing knowledge has been found to negatively impact awareness of Riyadh Season visitors regarding deception and commercial fraud.

Research indicates that marketing literacy significantly impacted visitors' awareness of deceptive practices and commercial fraud in Saudi Arabia. This aligns with previous studies that highlighted the role of media in reducing informational illiteracy (Livingstone, 2010).By delivering positive messages to the community, it can protect visitors from fraud and exploitation, thereby enhancing visitors' awareness during sales interactions. It was found that university marketing courses have minimal influence on improving consumer protection or developing marketing literacy. Only 2.1% of marketing information in Saudi society comes from these courses, despite an illiteracy rate of less than 4%, with 13% of students enrolled in administrative sciences. This finding contradicts earlier research showing that 21% of American students took one or more undergraduate courses in consumer literacy, which contributed to improved marketing skills (Ceciley et al., 2025). Furthermore, the hospitality and tourism sector is one of the fastest-growing industries. However, in less developed economies, there is often low awareness of the importance of advertising products and services within the hospitality industry. The study of Oluwagbemi (2023) was conducted to investigate visitors' awareness and perception regarding the advertising of hotel services in Akure South, Owo, and Ikare Local Government Areas in Ondo State, Nigeria. The data collected revealed that 54.7% of the hotel visitors were male, and 46.7% fell within the age bracket of 26-33 years. All respondents were Nigerians, and 60.8% had attained tertiary education. Notably, 94% of the visitors were aware of marketing efforts in the hotels. The majority recognized various forms of promotion, including word-of-mouth publicity, TV and radio advertising, online and social media advertisements, billboards, and handbills. The marketing statements were evaluated based on their mean scores, which ranged from 4.54 to 4.01. The item "Marketing allows customers to be aware of new services offered" had the highest mean score of 4.54, while "Marketing costs the hotel a lot of money and time" received the lowest mean score of 4.01. There is a significant relationship between visitors' awareness of marketing and their perception. Additionally, an important relationship exists between the visitors' age, place of residence, education, and their awareness of marketing. The study findings of Andriany & Andini (2019) indicate that the main reason for the limited visitor turnout is the lack of an effective marketing strategy, which has relied solely on brochures for promotion. To improve visitor interest, the management of the Talaga Pancar Pine Forest has implemented a comprehensive marketing communication strategy. This strategy encompasses various elements, including advertising, direct marketing, interactive marketing, sales promotions, personal selling, public relations, events and experiences, and word-of-mouth marketing. Another study highlighted both direct and indirect effects of marketing strategies on visitor satisfaction, emphasizing the importance of personalized marketing approaches in



enhancing visitor experiences. By connecting marketing theory with cultural heritage management, this study offers valuable insights for park managers and marketers to improve visitor engagement and preserve cultural heritage (Luekveerawattana, 2025). Furthermore, it can be concluded that the brand of Pohsanten Tourist Village is well-recognized and popular among visitors, positioning it as a notable tourist village in Jembrana Regency (Arjana et al., 2022). The results of Aulia et al. (2023) concluded that the brand activation variables (identity, employee, product, service, and communication) significantly affected brand awareness at the Teras Komuji.

These results have agreed with Manurung & Astini (2020) shows that destination awareness and experience have a negative and significant impact on travel decisions, while destination image has a positive and significant influence on travel decisions. The author recommends that future studies may evaluate these variables in different cultures and tourism destinations and add additional variables that may affect travel decisions. Ashrafi-rizi et al. (2014) and Geraee et al. (2015), indicating that there is a low level of knowledge among students in the field of media literacy because of lack of educational programs in Iranian schools. Their study also highlighted the adolescents' need for a theory-based media literacy education program. In contrast, our current findings consistent with study of Kleemans and Eggink (2012), which decide that the contribution of media literacy programs is limited. Additionally, we found that the level of news in media literacy was moderate, with education and age significantly influencing students' media literacy levels. The study of Tully et al. (2021) confirms the importance of conceptualizing media literacy using the theoretical subcomponents introduced by Ashley and colleagues (2013). Our research utilized separate additional measures, such as selfperceived media literacy (SPML) and the value of media literacy for a democratic society (VML), as opposed to the original measures proposed by Ashley et al. (2013). Study of Al-Nsour (2019) emphasizes the positive statistical effect of financial perspective on planning of marketing communication activities, but the other three non-financial measures statistically failed.

Based on previous results and the feedback provided by the researcher, we recommend the following:

- Educational Market Visits: It is important to emphasize university and school visits to major markets in Saudi Arabia, as well as to institutions that are dedicated to visitor interests. These visits play a crucial role in promoting marketing literacy through practical learning and observation, moving beyond the theoretical content found in specialized courses and reference materials.
- Strengthening Supervision by Tourism-RelatedAuthorities: The supervisory role of the Ministry of Commerce and the Ministry of Tourism, along with the branches of local municipalities, needs to be reinforced. We suggest enhancing legislative power and increasing the authority granted to these bodies, not just relying on financial penalties and the revocation of licenses for businesses involved in fraud. A blacklist should be created for merchants proven to engage in deceptive practices.
- Activating the Role of the Consumer Protection Association: The legislative and supervisory roles of the Consumer Protection Association should be strengthened. The association should participate in inspection campaigns carried out by municipalities and official departments. Moreover, it should enhance its awareness outreach by providing more resources to establish a consumer television station, covering various types of stores and markets.



- Establishment of a Tourism Court: An independent court should be established to address major commercial disputes between traders and visitors. This court should aim to decrease the duration of administrative processes, expedite the resolution of disputed cases, and facilitate effective advertising across various media platforms. Additionally, it should enable electronic communication between consumers and online traders within the jurisdiction.

7. Limitations and Future Research:

It is highly beneficial to apply this study to various individual sectors to identify negative practices occurring within each, such as in the automotive industry, cosmetics, food products, healthcare facilities, and polyclinics. We also anticipate further research focused on strengthening the role of universities in consumer protection through their academic marketing departments. However, this study has certain limitations. It only considers individuals aged 18 and older, as this age group is capable of making purchasing decisions and, consequently, is more susceptible to deception and fraud by retailers and salespeople. The targeted demographic in this study includes individuals who may still be in school, have completed university studies, or are in the workforce. As a result, this group has the potential to develop effective and efficient smart buying decisions.

Conclusion:

The study aimed to determine the impact of media on the development of marketing literacy and its subsequent effect on consumer protection in Saudi Arabia. The findings indicate that, while there is no statistical evidence linking media to increased marketing literacy, there is a significant relationship between marketing literacy and consumer protection. Different forms of media play a key role in shaping literacy levels. Overall, the study shows that media has a limited role in raising awareness, but marketing literacy has a substantial impact on protecting consumers from deception and commercial fraud in Saudi Arabia. Additionally, the results reveal that educated individuals are more likely to utilize media to enhance their literacy. Age also plays a crucial role in the development of marketing literacy; as consumers grow older, their literacy and protection levels tend to increase. Moreover, education level significantly influences consumer protection, with higher levels of education correlating to better consumer protection. Interestingly, increases in income do not statistically contribute to enhanced consumer protection. Finally, the study highlights that elderly consumers (those over 60) and adolescents (under 20) are the least protected groups in Saudi Arabia. This finding may relate to the perception that more educated individuals have greater protection.

The References:

- 1. Ahmad, T., Alvi, A., & Ittefaq, M. (2019). The Use of Social Media on Political Participation Among University Students: An Analysis of Survey Results From Rural Pakistan. *SAGE Open*, *9*(3). https://doi.org/10.1177/2158244019864484 (Original work published 2019).
- 2. Albadri, A. H. (2023). The Convergence of Traditional Media to the Digital Communicative Environment The Reality and Gap. Information Sciences Letters, 12 (4). https://digitalcommons.aaru.edu.jo/isl/vol12/iss4/8



- 3. Al-Dmour, H., Masa'deh, R., Salman, A., Al-Dmour, R., & Abuhashesh, M. (2022). The Role of Mass Media Interventions on Promoting Public Health Knowledge and Behavioral Social Change Against the COVID-19 Pandemic in Jordan. *SAGE Open*, 12(1). https://doi.org/10.1177/21582440221082125 (Original work published 2022)
- 4. Al-Nsour, I, (2020). Effect of Brand Enhancement on Buying Behavior Towards the Sport Sponsorship Companies in Riyadh, KSA. International Journal of Business, Economics and Management, 7(2), 110-119.
- 5. Al-Nsour, I, A., Tarfoder, A, K., and Mhd Yusak, Nurul Aqilah. (2023). Impact of Social Media Marketing on the Buying Intention of Fashion Products. Res Militaris, 3 (13),617 632.
- 6. Al-Nsour, I. A. (2022). The Effect of Sports Sponsorship Activities on the Brand Equity: A Study on Sports Clubs and Their Fans in Jordan. Jordan Journal of Business Administration, 18(1), 123-144.
- 7. AL-Nsour, I. A., & Al-Sahli, S. A. (2022). Effects of Cash and Non-Cash Communications on Brand Awareness: An Empirical Evidence from Saudi Arabia. The Journal of Asian Finance, Economics and Business, 9(5), 507–518. https://doi.org/10.13106/JAFEB.2022.VOL9.NO5.0507.
- 8. Al-Nsour, I., (2019). The Role of Sports Sponsorship in Improving Brand Equity: A Study on the Saudi Fans in Riyadh. Science Arena Publications. International Journal of Business Management, 4 (4),97-113.
- 9. Al-Nsour, Iyad A. (2017). Effect of Applying the Marketing Intelligence on Enhancing Innovation: Comparative Study between Productive & Service Sectors in Jordan. Arab Journal of Administration, 37(2), 219-246.
- 10. Al-Nsour, Iyad A., Athaydi, Raed A., and Al Tamim, Mohammad J. (2023). The Effects of Sports Sponsorship on Buying Response for Jordanian Fans. Journal of Media & Management, 5(4), 1-9.
- 11. Al-Nsour, Iyad A., Mahmoud I. Allahham., Somili, Hassan M. (2021). Impact of Social Networks Safety on Marketing Information Quality in the COVID-19 Pandemic in Saudi Arabia. Journal of Asian Finance, Economics and Business, 8 (12), 223-231.
- 12. Al-Nsour, Iyad. (2019). Planning of Marketing Communication Activities in Jordanian Pharmaceutical Companies Using the Balanced Scorecard. New Media and Mass Communication, 77, 80.
- 13. Al-Nsour, Iyad., (2018). The Role of Media Literacy In Protecting The Consumer In Saudi Arabia. Saudi Journal of Humanities and Social Sciences (SJHSS), 3(8), 1026-1042.
- 14. Al-Quran, M. W. M. (2022). Traditional media versus social media: challenges and opportunities. *Technium: Romanian Journal of Applied Sciences and Technology*, 4(10), 145–160. https://doi.org/10.47577/technium.v4i10.8012.
- 15. Andriany, Dian., Andini, Intan. (2019). Tourism Marketing Strategy to Enhance the Visitors' Interest. Proceedings of the International Symposium on Social Sciences, Humanities Education, and (ISSEH 2018). Humanities Advances in Social Science, Education and Research. 10.2991/isseh-18.2019.61.
- 16. Anushree Tandon, Puneet Kaur, Yogesh Bhatt, Matti Mäntymäki, Amandeep Dhi. (2021). Why do people purchase from food delivery apps? A consumer value perspective,



- Journal of Retailing and Consumer Services, 63 (1). https://doi.org/10.1016/j.jretconser.2021.102667.
- 17. Appiah Kusi, G., Rumki, M. Z. A., Quarcoo, F. H., Otchere, E., & Fu, and G. (2022). The Role of Information Overload on Consumers' Online Shopping Behavior. *Journal of Business and Management Studies*, 4(4), 162-178. https://doi.org/10.32996/jbms.2022.4.4.16.
- 18. Arjana, I. W. B., Ernawati, N. M., I Putu Budiarta, & Voda, M. (2022). Visitors' brand awareness toward Pohsanten Tourist Village. International Journal of Green Tourism Research and Applications, 4(1), 23–29.
- 19. Ashrafi-rizi, Hasan; Khorasgani, Zahra Ghazavi; Zarmehr, Fateme¹; Kazempour, Zahra (2014). A survey on the rate of media literacy among Isfahan University of Medical Sciences' students using Iranian media literacy questionnaire. Journal of Education and Health Promotion 3(1). DOI: 10.4103/2277-9531.131939.
- 20. Aulia, Anas., Gitasiswara., and Sudono, Agus. (2023). The Effect of Brand Activation on Brand Awareness (Survey of Visitors to Teras Komuji Coffee Shop Bandung). Journal of Economics Review (JOER), 3 (1), 57 64. DOI https://doi.org/10.55098/joer.3.1.57-64.
- 21. Benjamin K. Sovacool, Jonn Axsen, Steve Sorrell. (2018). Promoting novelty, rigor, and style in energy social science: Towards codes of practice for appropriate methods and research design. Energy Research & Social Science, 45 (1),12-42.
- 22. Bhardwaj, S., Kumar, N., Gupta, R., Baber, H., & Venkatesh, A. (2024). How Social Media Influencers Impact Consumer Behaviour? Systematic Literature Review. *Vision*, 0(0). https://doi.org/10.1177/09722629241237394
- 23. Bowe, C (Feb 2009). What is Consumer Literacy and why does it matter? http://www.ofcomconsumerpanel.org.uk.
- 24. Bruce A. Huhmann. (2017). Literacy matters in marketing. *International Journal of Bank Marketing*, 35 (5): 750–760. https://doi.org/10.1108/IJBM-12-2016-0188.
- 25. Calvert, S.L. (2008). Children as Consumers: Advertising and Marketing. *The Future of Children 18*(1), 205-234. https://dx.doi.org/10.1353/foc.0.0001.
- 26. Ceciley (Xinyi) Zhang, Laurent H. Wang, Ronald E. Rice. (2025). U.S. college students' acceptability and educational benefits of ChatGPT from a digital divide perspective. Computers and Education: Artificial Intelligence, 8 (1). https://doi.org/10.1016/j.caeai.2025.100385.
- 27. Chanda Chansa Thelma., Zohaib Hassan Sain., Yusuf Olayinka Shogbesan., Edwin Vinandi Phiri., and Wisdom Matthew Akpan. (2024). Digital Literacy in Education: Preparing Students for the Future Workforce, International Journal of Research (IJR), 11(8), 328-344.
- 28. Chin, W. W., & Dibbern, J. (2010). An Introduction to a Permutation Based Procedure for Multi-Group PLS Analysis: Results of Tests of Differences on Simulated Data and a Cross Cultural Analysis of the Sourcing of Information System Services between Germany and the USA. In Handbook of Partial Least Squares (pp. 171-193). Berlin: Springer.https://doi.org/10.1007/978-3-540-32827-8_8.
- 29. Chin, W.W. (2010) How to Write Up and Report PLS Analyses. In: Esposito Vinzi, V., Chin, W.W., Henseler, J. and Wang, H., Eds., Handbook of Partial Least Squares: Concepts, Methods and Applications, Springer, Heidelberg, Dordrecht, London, New



York, 655-690. https://doi.org/10.1007/978-3-540-32827-8 29.

- 30. Craig D. Crossley. (2009). Emotional and behavioral reactions to social undermining: A closer look at perceived offender motives. Organizational Behavior and Human Decision Processes, 108 (1), 14-24. https://doi.org/10.1016/j.obhdp.2008.06.001.
- 31. Dinesh G.P., and 2Divyabharathi. (2023). Youth as Target Market Based On Their Media and Buying Habits: A Case Study of Millennial's in India. IRJEMS International Research Journal of Economics and Management Studies, 2(1), 277-282. Doi: 10. 56472/25835238/IRJEMS-V2I1P135.
- 32. Fornell, C., & Larcker, D. F. (1981). Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. Journal of Marketing Research, 18, 382-388. http://dx.doi.org/10.2307/3150980.
- 33. Furlow, N. (2008). BeyondBuyer Beware: A Need for Marketing Literacy. *The Journal of Applied Business and Economics* 8(2): pp. 19-22. ABI/INFORM Global, ProQuest.
- 34. General Department of Statistics (2022), published data. Riyadh.
- 35. Geraee, N., Kaveh, M., Shojaeizadeh, D., and Tabatabaee, H. (Jan 2015). Impact of media literacy education on knowledge and behavioral intention of adolescents in dealing with media messages according to Stages of Change. *Journal of advertising un Medical Education and professionalism*, 3(1).
- 36. Hair Jr., J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., Ray, S. et al. (2021). Evaluation of Reflective Measurement Models. In Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R. Classroom Companion: Business (pp. 75-90). Springer. https://doi.org/10.1007/978-3-030-80519-7_4.
- 37. Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2018). Advanced Issues in Partial Least Squares Structural Equation Modeling (PLS-SEM). Thousand Oaks, CA: Sage.https://doi.org/10.3926/oss.37.
- 38. Happer*Catherine., and Philo, Greg. (2013). The Role of the Media in the Construction of Public Belief and Social Change. The *Journal of Social and Political Psychology* (JSPP), 1(1), 321-336.https://doi.org/10.5964/jspp.v1i1.96.
- 39. Henseler, J., Ringle, C. M., & Sarstedt, M. (2014). A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modeling. Journal of the Academy of Marketing Science, 43, 115-135. https://doi.org/10.1007/s11747-014-0403-8.
- 40. Hobbs, R. (2010). Digital and Media Literacy: A Plan of Action. White Paper on the Digital and Media Literacy Recommendations of the Knight Commission on the Information Needs of Communities in a Democracy. A project of the Aspen Institute Communications and Society Program and the John S. and James L. Knight Foundation.
- 41. https://worldpopulationreview.com/2025.
- 42. Huang Q, Wei L. (2022). Explaining education-based difference in systematic processing of COVID-19 information: Insights into global recovery from infodemic. Inf Process Manag.59(4). doi: 10.1016/j.ipm.2022.102989.



- 43. Huang, E. (2009). The Causes of Youths' Low News Consumption and Strategies for Making Youths Happy News Consumers. *Convergence*, 15(1), 105-122. https://doi.org/10.1177/1354856508097021 (Original work published 2009).
- 44. Iftikhar, Muhammad Hassan., Naeem, Muhammad Waqar., and Fatima, Iram . (2022).Impacts of Television Educational Campaigns on Motivational Levels of Children and Their Families: A brief Literature Review. DOI: dx.doi.org/10.55966/sjarr, 59-94.
- 45. Isnaini, Tiflatun, Nasyiriyah., Novita, Aulia Istighfari., Susilatur, Rohmah. (2025). The Role of Digital Literacy in Social Media. *Mimesis*, 6(1). DOI: https://doi.org/10.12928/mms.v6i1.12242.
- 46. Jianxiong Wang, Yonghong Zhou. (2021). Impact of mass media on public awareness: The "Under the Dome" effect in China. Technological Forecasting and Social Change, 173 (1). https://doi.org/10.1016/j.techfore.2021.121145.
- 47. Jiyoung Hwang, Merlyn A. Griffiths. (2017). Share more, drive less: Millennials value perception and behavioral intent in using collaborative consumption services. *Journal of Consumer Marketing*, 34 (2), 132–146. https://doi.org/10.1108/JCM-10-2015-1560.
- 48. Kamil Kopecky, Rene Szotkowski, Inmaculada Aznar-Díaz, José-María Romero-Rodríguez. (2020). The phenomenon of sharenting and its risks in the online environment. Experiences from the Czech Republic and Spain. Children and Youth Services Review, 110 (1). https://doi.org/10.1016/j.childyouth.2020.104812.
- 49. Kim, J. S., Burkhauser, M. A., Mesite, L. M., Asher, C. A., Relyea, J. E., Fitzgerald, J., & Elmore, J. (2021). Improving reading comprehension, science domain knowledge, and reading engagement through a first-grade content literacy intervention. *Journal of Educational Psychology*, 113(1), 3–26. https://doi.org/10.1037/edu0000465
- 50. Kirsch, Irwin ., Jungeblut, Ann., Jenkins Lynn ., and Kolstad , Andrew . (2002). Adult Literacy in America. A First Look at the Findings of the National Adult Literacy Survey, Third Edition. U.S. Department of Education Office of Educational Research and Improvement.
- 51. Kleemans, M., and Eggink, G. (2012). Understanding news: the impact of media literacy education on teenagers' news literacy. *Journalism Education*, 5(1).
- 52. Livingstone, S. (2010). Media literacy and the challenge of new information and communication technologies. The Communication Review, 7, 3–14
- 53. Luekveerawattana, R. (2025). Enhancing visitor experiences: a quantitative analysis of marketing strategies at historical and cultural national parks. *Cogent Social Sciences*, 11(1). https://doi.org/10.1080/23311886.2025.2458066.
- 54. Mahmud, Hassan., Islam Najmul AKM., Ahmed, Sayed Ishtiaque., Smolander, Kari. (2022). What influences algorithmic decision-making? A systematic literature review on algorithm aversion. Technological Forecasting and Social Change, 175 (1). https://doi.org/10.1016/j.techfore.2021.121390.
- 55. Manurung, Hafferson Happy., and Astini, Rina. (2020). The Influence of Destination Awareness, Destination Image and Destination Experience on Travel Decision to Baduy Cultural Tourist Destination, Banten.Saudi Journal of Business and Management Studies, 5(10), 512-516.
- 56. Melewar, T.C., Alwi, Sharifah., Lin, Matthew Tingchi., Brock, James L., Shi, Gui Cheng., Chu, Rongwei., Tseng, Ting-Hsiang., (2013). Perceived benefits, perceived risk,



- and trust: Influences on consumers' group buying behaviour. *Asia Pacific Journal of Marketing and Logistics*, 25 (2),225–248. https://doi.org/10.1108/13555851311314031.
- 57. Ministry of Education (2022), Indicators of Higher Education in Saudi Arabia, Observatory of Higher Education, Riyadh.
- 58. Mueen Ghazi Elmobayed, Hamood Mohammed Al-Hattami, Mohammed A. Al-Hakimi, Walaa Salama Mraish, Ahmad Samed Al-Adwan. (2024). Effect of marketing literacy on the success of entrepreneurial projects. *Arab Gulf Journal of Scientific Research*, 42 (4): 1590–1608. https://doi.org/10.1108/AGJSR-06-2023-0266.
- 59. Ng, D.T.K., Leung, J.K.L., Su, J. et al. (2023). Teachers' AI digital competencies and twenty-first century skills in the post-pandemic world. Education Tech Research Dev 71, 137–161. https://doi.org/10.1007/s11423-023-10203-6
- 60. Pan, Y. (2024). Research on the Influence of Advertising Content on Consumer Purchasing Behavior Based on Elaboration Likelihood Model (ELM). Journal of Education, Humanities and Social Sciences, 27, 439-444. https://doi.org/10.54097/mk0f1454.
- 61. Papplarado, Janis. (2012). Product Literacy and The Economics of Consumer Protection Policy, The Journal of Consumer Affairs, 46(2).
- 62. Pegkas, P. (2014). The Link between Educational Levels and Economic Growth: A Neoclassical Approach for the Case of Greece, International Journal of Applied Economics, 11(2), pp. 38-54.
- 63. Qhuwagbemi, Eunice, (2023). Visitor's Awareness and Perception of Marketing In Selected Hotels in ONDO State, Nigeria. Ethiopian Journal of Environmental Studies and Management 16(6), 733-744
- 64. Refea, Alia Redah. (2024). Egypt's Cultural Identity and Its Humanitarian Mission in the 21St Century. EKB Journal Management System, 2 (4), 26-38.
- 65. Ringle, C. M., Wende, S., & Becker, J. M. (2024). SmartPLS 4. SmartPLS. https://www.smartpls.com.
- 66. Safori, Amjad; Youssef, Enaam; W. Attar, Razaz; Tahat, Othman; N. Al Adwan, Muhammad; and Habes, Mohammad (2023). New Media and Crisis Management in Jordan: COVID 19 Perspective. Information Sciences Letters, 12(7). https://digitalcommons.aaru.edu.jo/isl/vol12/iss7/40.
- 67. Shim, S. (1996). Adolescent Consumer Decision-Making Styles: The Consumer Socialization Perspective. Psychology and Marketing (13), pp. 547-569.
- 68. Siagian, E. I., Nurkarim, M. C., & Maharani, N. (2024). Persuasive Communication in Business Negotiations: Strategies and Techniques. Ilomata International Journal of Social Science, 5(2), 428-443. https://doi.org/10.61194/ijss.v5i2.1165.
- 69. Tommasi, F., Ceschi, A., Bollarino, S., Belotto, S., Genero, S., & Sartori, R. (2023). Enhancing Critical Thinking Skills and Media Literacy in Initial VET Students: A Mixed Methods Study on a Cross-Country Training Program. International Journal for Research in Vocational Education and Training, 10(2), 239–257. https://doi.org/10.13152/IJRVET.10.2.5.
- 70. Alhawamdeh, H., Al-Saad, S. A., Almasarweh, M. S., Al-Hamad, A. A.-S. A., Bani Ahmad, A. Y. A. B., & Ayasrah, F. T. M. (2023). The Role of Energy Management Practices in Sustainable Tourism Development: A Case Study of Jerash, Jordan.



- International Journal of Energy Economics and Policy, 13(6), 321–333. https://doi.org/10.32479/ijeep.14724
- 71. Allahham, M., & Ahmad, A. (2024). AI-induced anxiety in the assessment of factors influencing the adoption of mobile payment services in supply chain firms: A mental accounting perspective. International Journal of Data and Network Science, 8(1), 505-514.
- 72. Y. A. B. Ahmad, S. S. Kumari, M. S, S. K. Guha, A. Gehlot and B. Pant, "Blockchain Implementation in Financial Sector and Cyber Security System," 2023 International Conference on Artificial Intelligence and Smart Communication (AISC), Greater Noida, India, 2023, pp. 586-590, https://doi.org/10.1109/AISC56616.2023.10085045
- 73. Ahmad, A. Y. B., Atta, A. A. B., Shehadeh, M. A. H. A., Baniata, H. M. A., & Hani, L. Y. B. (2023). Fund family performance: Evidence from emerging countries. WSEAS Trans. Bus. Econ, 20, 951-964.
- 74. Alhawamdeh, H. M., & Alsmairat, M. A. (2019). Strategic decision making and organization performance: A literature review. International review of management and marketing, 9(4), 95.
- 75. Alhawamdeh, H., Al-Saad, S. A., Almasarweh, M. S., Al-Hamad, A. A. S., Ahmad, A. Y., & Ayasrah, F. T. M. (2023). The role of energy management practices in sustainable tourism development: a case study of Jerash, Jordan. International Journal of Energy Economics and Policy, 13(6), 321-333.
- 76. Alkhawaldeh, B., Alhawamdeh, H., Al-Afeef, M., Al-Smadi, A., Almarshad, M., Fraihat, B., ... & Alaa, A. (2023). The effect of financial technology on financial performance in Jordanian SMEs: The role of financial satisfaction. Uncertain Supply Chain Management, 11(3), 1019-1030.
- 77. Ali, O., Al-Duleemi, K., Al-Afeef, D. J., & Al-hawamdah, D. H. (2019). The Impact of the Decisions of the COBIT 5 Committee on the Effectiveness of the Internal Control Systems in the Jordanian Industrial Joint Stock Companies. The Journal of Social Sciences Research, 5(11), 1587-1599.
- 78. Al-Hawamdeh, H. M. (2020). The Intermediate Role of Organizational Flexibility in the Impact of Using Information Technology on the Efficiency of the Application of IT Governance in Jordanian Industrial Companies. Modern Applied Science, 14.(7)
- 79. Al-Afeef, M., Fraihat, B., Alhawamdeh, H., Hijazi, H., AL-Afeef, M., Nawasr, M., & Rabi, A. (2023). Factors affecting middle eastern countries' intention to use financial technology. International Journal of Data and Network Science, 7(3), 1179-1192.
- 80. Alkhawaldeh, B. Y. S., Alhawamdeh, H., Almarshad, M., Fraihat, B. A. M., Abu-Alhija, S. M. M., Alhawamdeh, A. M., & Ismaeel, B. (2023). The effect of macroeconomic policy uncertainty on environmental quality in Jordan: Evidence from the novel dynamic simulations approach. Jordan Journal of Economic Sciences, 10(2), 116-131.among Faculty Members in Public and Private Universities in Jordan
- 81. Badawi, M., Alofan, F., Allahham, M., Sabra, S., Abubaker, N. M., & Ahmad, A. Y. B. (2024). The Impact of Supply Chain Agility on Operationalizing Sustainable Procurement the Mediating Role of System and Process Integration in the Pharmaceutical Sector in Saudi Arabia. EVOLUTIONARY STUDIES IN IMAGINATIVE CULTURE, 1632-1650.



- 82. Allahham, M. A. H. M. O. U. D., Sharabati, A. A. A., Hatamlah, H. E. B. A., Ahmad, A. Y. B., Sabra, S., & Daoud, M. K. (2023). Big data analytics and AI for green supply chain integration and sustainability in hospitals. WSEAS Transactions on Environment and Development, 19, 1218-1230
- 83. Alkhawaldeh, A., Al-Shaer, B., Aleissa, T. Y. A., Abubaker, J. Y., Alwahshat, Z. M., Bani Ahmad, A. Y., & Dahbour, S. A. (2024). The Role of the Belt and Road Initiative in Increasing China's Influence in the World (2013-2023). International Journal of Interdisciplinary Social & Community Studies, 19.(2)
- 84. Almestarihi, R., Ahmad, A. Y. A. B., Frangieh, R., Abu-AlSondos, I., Nser, K., & Ziani, A. (2024). Measuring the ROI of paid advertising campaigns in digital marketing and its effect on business profitability. Uncertain Supply Chain Management, 12(2), 1275-1284.
- 85. Fraihat, B. A. M., Alhawamdeh, H., Younis, B., Alkhawaldeh, A. M. A., & Al Shaban, A. (2023). The Effect of Organizational Structure on Employee Creativity: The Moderating Role of Communication Flow: A Survey Study
- 86. Selvasundaram, K., Jayaraman, S., Chinthamani, S. A. M., Nethravathi, K., Ahmad, A. Y. B., & Ravichand, M. (2024). Evaluating the Use of Blockchain in Property Management for Security and Transparency. In Recent Technological Advances in Engineering and Management (pp. 193-197). CRC Press.
- 87. Ramadan, A., Maali, B., Morshed, A., Baker, A. A. R., Dahbour, S., & Ahmad, A. B. (2024). Optimizing working capital management strategies for enhanced profitability in the UK furniture industry: Evidence and implications. Journal of Infrastructure, Policy and Development, 8(9), 6302.
- 88. Fouzdar, A. S., Yamini, S., Biswas, R., Jindal, G., Ahmad, A. Y. B., & Dawar, R. (2024). Considering the Use of Blockchain for Supply Chain Authentication Management in a Secure and Transparent Way. In Recent Technological Advances in Engineering and Management (pp. 259-264). CRC Press.
- 89. Feng, Y., Ahmad, S. F., Chen, W., Al-Razgan, M., Awwad, E. M., Ayassrah, A. Y. B. A., & Chi, F. (2024). Design, analysis, and environmental assessment of an innovative municipal solid waste-based multigeneration system integrating LNG cold utilization and seawater desalination. Desalination, 117848.
- 90. Zhang, L., Ahmad, S. F., Cui, Z., Al Razgan, M., Awwad, E. M., Ayassrah, A. Y. B. A., & Shi, K. (2024). Energy, exergy, hermoeconomic analysis of a novel multi-generation system based on geothermal, kalina, double effect absorption chiller, and LNG regasification. Desalination, 117830.
- 91. Iqbal, S., Tian, H., Muneer, S., Tripathi, A., & Ahmad, A. Y. B. (2024). Mineral resource rents, fintech technological innovation, digital transformation, and environmental quality in BRI countries: An insight using panel NL-ARDL. Resources Policy, 93, 105074.
- 92. Geetha, B. T., Gnanaprasuna, E., Ahmad, A. Y. B., Rai, S. K., Rana, P., & Kapila, N. (2024, March). Novel Metrics Introduced to Quantify the Level of Circularity in Business Models Enabled by Open Innovation. In 2024 International Conference on Trends in Quantum Computing and Emerging Business Technologies (pp. 1-6). IEEE.
- 93. Geetha, B. T., Kafila, K., Ram, S. T., Narkhede, A. P., Ahmad, A. Y. B., & Tiwari, M. (2024, March). Creating Resilient Digital Asset Management Frameworks in Financial Operations Using Blockchain Technology. In 2024 International Conference on Trends in Quantum Computing and Emerging Business Technologies (pp. 1-7). IEEE.



- 94. Naved, M., Kole, I. B., Bhope, A., Gautam, C. S., Ahmad, A. Y. B., & Lourens, M. (2024, March). Managing Financial Operations in the Blockchain Revolution to Enhance Precision and Safety. In 2024 International Conference on Trends in Quantum Computing and Emerging Business Technologies (pp. 1-6). IEEE.
- 95. Y. A. B. Ahmad, N. Verma, N. M. Sarhan, E. M. Awwad, A. Arora and V. O. Nyangaresi, "An IoT and Blockchain-Based Secure and Transparent Supply Chain Management Framework in Smart Cities Using Optimal Queue Model," in IEEE Access, vol. 12, pp. 51752-51771, 2024, doi:10.1109/ACCESS.2024.3376605
- 96. Bani Ahmad, A. Y., Fraihat, B. A. M., Hamdan, M. N., Ayasrah, F. T. M., Alhawamdeh, M. M., & Al-Shakri, K. S. (2024). Examining the mediating role of organizational trust in the relationship between organizational learning and innovation performance: A study of information systems and computer science service firms.
- 97. Almarshad, M. N., Alwaely, S. A., Alkhawaldeh, B. Y., Al Qaryouti, M. Q. H., & Bani Ahmad, A. Y. (2024). The Mediating Role of Energy Efficiency Measures in Enhancing Organizational Performance: Evidence from the Manufacturing Sector in Jordan.
- 98. AlKhawaldeh, B. Y. S., Al-Smadi, A. W., Ahmad, A. Y., El-Dalahmeh, S. M., Alsuwais, N., & Almarshad, M. N. (2024). Macroeconomic determinants of renewable energy production in Jordan. International Journal of Energy Economics and Policy, 14(3), 473-481.
- 99. Ahmad, A. Y., Jain, V., Verma, C., Chauhan, A., Singh, A., Gupta, A., & Pramanik, S. (2024). CSR Objectives and Public Institute Management in the Republic of Slovenia. In Ethical Quandaries in Business Practices: Exploring Morality and Social Responsibility (pp. 183-202). IGI Global
- 100. Mahafzah, A. H., & Abusaimeh, H. (2018). Optimizing power-based indoor tracking system for wireless sensor networks using ZigBee. International Journal of Advanced Computer Science and Applications, 9.(12)
- 101. Bani Atta, A. A., Ali Mustafa, J., Al-Qudah, S. S., Massad, E., & Ahmad, A. B. (2023). The effect of macroprudential regulation on banks' profitability during financial crises [Specialissue]. Corporate Governance and Organizational Behavior Review, 7(2), 245-258.
- 102. Cheng, Congbin, Sayed Fayaz Ahmad, Muhammad Irshad, Ghadeer Alsanie, Yasser Khan, Ahmad Y. A. Bani Ahmad (Ayassrah), and Abdu Rahman Aleemi. 2023. "Impact of Green Process Innovation and Productivity on Sustainability: The Moderating Role of Environmental Awareness" Sustainability 15, no. 17: 12945. https://doi.org/10.3390/su151712945
- 103. Atta, A., Baniata, H., Othman, O., Ali, B., Abughaush, S., Aljundi, N., & Ahmad, A. (2024). The impact of computer assisted auditing techniques in the audit process: an assessment of performance and effort expectancy. International Journal of Data and Network Science, 8(2), 977-988.
- 104. ALLAHHAM, M., SHARABATI, A. A. A., HATAMLAH, H., AHMAD, A. Y. B., SABRA, S., & DAOUD, M. K. Big Data Analytics and AI for Green Supply Chain Integration and Sustainability in Hospitals.Magboul, I., Jebreel, M., Dweiri, M., Qabajeh, M., Al-Shorafa, A., & Ahmad, A. (2024). Antecedents and outcomes of green information technology Adoption: Insights from an oil industry. International Journal of Data and Network Science, 8(2), 921-934.



- 105. Daoud, M. K., Al-Qeed, M., Ahmad, A. Y. B., & Al-Gasawneh, J. A. (2023). Mobile Marketing: Exploring the Efficacy of User-Centric Strategies for Enhanced Consumer Engagement and Conversion Rates. International Journal of Membrane Science and Technology, 10(2), 1252-1262.
- 106. Daoud, M., Taha, S., Al-Qeed, M., Alsafadi, Y., Ahmad, A., & Allahham, M. (2024). EcoConnect: Guiding environmental awareness via digital marketing approaches. International Journal of Data and Network Science, 8(1), 235-242.
- 107. Fraihat, B. A. M., Ahmad, A. Y. B., Alaa, A. A., Alhawamdeh, A. M., Soumadi, M. M., Aln'emi, E. A. S., & Alkhawaldeh, B. Y. S. (2023). Evaluating Technology Improvement in Sustainable Development Goals by Analysing Financial Development and Energy Consumption in Jordan. International Journal of Energy Economics and Policy, 13(4), 348
- 108. Al-Dweiri, M., Ramadan, B., Rawshdeh, A., Nassoura, A., Al-Hamad, A., & Ahmad, A. (2024). The mediating role of lean operations on the relationship between supply chain integration and operational performance. Uncertain Supply Chain Management, 12(2), 1163-1174.
- 109. Lin, C., Ahmad, S. F., Ayassrah, A. Y. B. A., Irshad, M., Telba, A. A., Awwad, E. M., & Majid, M. I. (2023). Green production and green technology for sustainability: The mediating role of waste reduction and energy use. Heliyon, e22496.
- 110. K. Daoud, D. . Alqudah, M. . Al-Qeed, B. A. . Al Qaied, and A. Y. A. B. . Ahmad, "The Relationship Between Mobile Marketing and Customer Perceptions in Jordanian Commercial Banks: The Electronic Quality as A Mediator Variable", ijmst, vol. 10, no. 2, pp. 1360-1371, Jun. 2023
- Mohammad Jebreel, Mohammad Alnaimat, Amjad Al-Shorafa, Majed Qabajeh, Mohammad Alqsass, & Ahmad Bani Ahmad. (2023). The Impact of Activity Ratios on Change in Earnings (Case Study:Based on Jordanian Food Companies). Kurdish Studies, 11(2), 4551–4560. Retrieved from https://kurdishstudies.net/menu-script/index.php/KS/article/view/1044
- 112. Mohammad Alqsass, Munir Al-Hakim, Qais Al Kilani, Lina Warrad, Majed Qabajeh, Ahmad Y. A.Bani Ahmad, & Adnan qubbaja. (2023). The Impact of Operating Cash Flow on Earnings Per Share (Case Study Based on Jordanian Banks). Kurdish Studies, 11(2), 2718–2729. Retrieved from https://kurdishstudies.net/menuscript/index.php/KS/article/view/831
- 113. Mohammad Alqsass, Munir Al-Haki, Mohammad Dweiri, Majed Qabajeh, Dmaithan almajali, Ahmad Bani Ahmad, & Adnan Qubbaja. (2023). The Impact of Current Ratio on Net Profit Margin (Case Study: Based on Jordanian Banks). Kurdish Studies, 11(2), 2894–2903. Retrieved from https://kurdishstudies.net/menuscript/index.php/KS/article/view/834
- 114. Mustafa, J. A., ATTA, A. A. B., AHMAD, A. Y. B., SHEHADEH, M., & Agustina, R. (2023). Spillover Effect in Islamic and Conventional Fund Family: Evidence from Emerging Countries. WSEAS Transactions on Business and Economics, 20, 1042-1058.
- 115. Mohsin, H. J., Hani, L. Y. B., Atta, A. A. B., Al-Alawnh, N. A. K., Ahmad, A. B., & Samara, H. H. (2023). THE IMPACT OF DIGITAL FINANCIAL TECHNOLOGIES



- ON THE DEVELOPMENT OF ENTREPRENEURSHIP: EVIDENCE FROM COMMERCIAL BANKS IN THE EMERGING MARKETS.
- 116. Ni, L., Ahmad, S. F., Alshammari, T. O., Liang, H., Alsanie, G., Irshad, M., ... & Ayassrah, A. Y. B. A. (2023). The role of environmental regulation and green human capital towards sustainable development: The mediating role of green innovation and industry upgradation. Journal of Cleaner Production, 138497.
- 117. Peng, Yixuan, Sayed Fayaz Ahmad, Ahmad Y. A. Bani Ahmad, Mustafa S. Al Shaikh, Mohammad Khalaf Daoud, and Fuad Mohammed Hussein Alhamdi. 2023. "Riding the Waves of Artificial Intelligence in Advancing Accounting and Its Implications for Sustainable Development Goals" Sustainability 15, no. 19: 14165. https://doi.org/10.3390/su151914165
- 118. Peiran Liang, Yulu Guo, Sohaib Tahir Chauhdary, Manoj Kumar Agrawal, Sayed Fayaz Ahmad, Ahmad Yahiya Ahmad Bani Ahmad, Ahmad A. Ifseisi, Tiancheng Ji,2024,"Sustainable development and multi-aspect analysis of a novel polygeneration system using biogas upgrading and LNG regasification processes, producing power, heating, fresh water and liquid CO2,"Process Safety and Environmental Protection,
- 119. Peiran Liang, Yulu Guo, Tirumala Uday Kumar Nutakki, Manoj Kumar Agrawal, Taseer Muhammad, Sayed Fayaz Ahmad, Ahmad Yahiya Ahmad Bani Ahmad, Muxing Qin, 2024. "Comprehensive assessment and sustainability improvement of a natural gas power plant utilizing an environmentally friendly combined cooling heating and power-desalination arrangement", Journal of Cleaner Production, Volume 436, 140387,
- 120. A. Y. A. Bani Ahmad, Y. M. A. Tarshany, F. T. M. Ayasrah, F. S. Mohamad, S. I. A. Saany and B. Pandey, "The Role of Cybersecurity in E-Commerce to Achieve the Maqasid of Money," 2023 International Conference on Computer Science and Emerging Technologies (CSET), Bangalore, India, 2023, pp. 1-8, doi: 10.1109/CSET58993.2023.10346972.
- 121. Rumman, G., Alkhazali, A., Barnat, S., Alzoubi, S., AlZagheer, H., Dalbouh, M., ... & Darawsheh, S. (2024). The contemporary management accounting practices adoption in the public industry: Evidence from Jordan. International Journal of Data and Network Science, 8(2), 1237-1246.
- 122. Singh, R., Gupta, N. R., & Ahmad, A. Y. (2024). An Empirical Study on Challenges of Working From Home During COVID-19 on Work-Life Domains in the Education Sector in Bengaluru. In S. Singh, S. Rajest, S. Hadoussa, A. Obaid, & R. Regin (Eds.), Data-Driven Intelligent Business Sustainability (pp. 111-121). IGI Global. https://doi.org/10.4018/979-8-3693-0049-7.ch008
- 123. William, P., Ahmad, A. Y. B., Deepak, A., Gupta, R., Bajaj, K. K., & Deshmukh, R. (2024). Sustainable Implementation of Artificial Intelligence Based Decision Support System for Irrigation Projects in the Development of Rural Settlements. International Journal of Intelligent Systems and Applications in Engineering, 12(3s), 48-56.
- 124. Wang, C., Ahmad, S. F., Ayassrah, A. Y. B. A., Awwad, E. M., Irshad, M., Ali, Y. A., ... & Han, H. (2023). An empirical evaluation of technology acceptance model for Artificial Intelligence in E-commerce. Heliyon, 9.(8)
- 125. Yahiya Ahmad Bani Ahmad (Ayassrah), Ahmad; Ahmad Mahmoud Bani Atta, Anas; Ali Alawawdeh, Hanan; Abdallah Aljundi, Nawaf; Morshed, Amer; and Amin Dahbour, Saleh (2023) "The Effect of System Quality and User Quality of Information



- Technology on Internal Audit Effectiveness in Jordan, And the Moderating Effect of Management Support," Applied Mathematics & Information Sciences: Vol. 17: Iss. 5, Article 12.
- 126. DOI: https://dx.doi.org/10.18576/amis/170512
- 127. Zhan, Y., Ahmad, S. F., Irshad, M., Al-Razgan, M., Awwad, E. M., Ali, Y. A., & Ayassrah, A. Y. B. A. (2024). Investigating the role of Cybersecurity's perceived threats in the adoption of health information systems. Heliyon, 10.(1)
- 128. Raza, A., Al Nasar, M. R., Hanandeh, E. S., Zitar, R. A., Nasereddin, A. Y., & Abualigah, L. (2023). A Novel Methodology for Human Kinematics Motion Detection Based on Smartphones Sensor Data Using
- 129. Wu, J., Ahmad, S. F., Ali, Y. A., Al-Razgan, M., Awwad, E. M., & Ayassrah, A. Y. B. A. (2024). Investigating the role of green behavior and perceived benefits in shaping green car buying behavior with environmental awareness as a moderator. Heliyon, 10.(9)
- 130. Yahiya, A., & Ahmad, B. (2024). Automated debt recovery systems: Harnessing AI for enhanced performance. Journal of Infrastructure, Policy and Development, 8(7), 4893.
- 131. Al-Waely, D., Fraihat, B. A. M., Al Hawamdeh, H., Al-Taee, H., & Al-Kadhimi, A. M. M. N. (2021). Competitive Intelligence Dimensions as a Tool for Reducing the Business Environment Gaps: An Empirical Study on the Travel Agencies in Jordan. Journal of Hunan University Natural Sciences, 48.(11)
- 132. Zhao, T., Ahmad, S. F., Agrawal, M. K., Ahmad, A. Y. A. B., Ghfar, A. A., Valsalan, P., ... & Gao, X. (2024). Design and thermo-enviro-economic analyses of a novel thermal design process for a CCHP-desalination application using LNG regasification integrated with a gas turbine power plant. Energy, 295, 131003.
 133.
- 134. Tully, M., Maksl, A., Ashley, S., Vraga, E. K., & Craft, S. (2021). Defining and conceptualizing news literacy. *Journalism*, *23*(8), 1589-1606. https://doi.org/10.1177/14648849211005888 (Original work published 2022)
- 135. Tuohy, P., Cvitanovic, C., and Shellock, R.J. (2022). Understanding visitor awareness and knowledge of marine parks: Insights from the Ningaloo Coast, Australia. Ocean & Coastal Management, 227, https://doi.org/10.1016/j.ocecoaman.2022.106282.
- 136. UNESCO Institute for Statistics, 2024.
- 137. Utkarsh . (2017) . Individual differences in consumer information search for services: A multiple mediation study. Journal of Retailing and Consumer Services, 37 (1), 33-42. https://doi.org/10.1016/j.jretconser.2017.02.015.
- 138. Üzülmez, M., Ercan İştin, A., & Barakazı, E. (2023). Environmental Awareness, Ecotourism Awareness and Ecotourism Perception of Tourist Guides. *Sustainability*, *15*(16), 12616. https://doi.org/10.3390/su151612616.
- 139. Yasdin, Y.., Yahya, M.., Yusuf, A. Z., Musa, M. I., Sakaria, S.., & Yusri, Y. (2021). The role of new literacy and critical thinking in students' vocational development. *Cypriot Journal of Educational Sciences*, *16*(4), 1395–1406. https://doi.org/10.18844/cjes.v16i4.5991.
- 140. Yogesh K., et al. (2023). So what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational



AI for research, practice, and policy. International Journal of Information Management, 71 (1). https://doi.org/10.1016/j.ijinfomgt.2023.102642.

141. Yongqing Yang, Yeming Gong, Lesley Pek Wee Land, Thomas Chesney. (2020). Understanding the effects of physical experience and information integration on consumer use of online to offline commerce. International Journal of Information Management, 51 (1). https://doi.org/10.1016/j.ijinfomgt.2019.102046.