

Determinants of Environmental Management and Customer Satisfaction: Insights from the Umm Qais Heritage Site, Jordan

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Abstract

In the Heritage sites, the most common ways to take care of the environment are to focus on managing trash, recycling, and saving energy. They also follow environmental laws and rules as much as possible. However, judging the performance of heritage sites often does not involve these dimensions. In fact, heritage site managers frequently detest environmental assessments. However, this is a serious issue confronting the management of heritage sites for tourism. Within this context, this paper focuses on customer satisfaction which is determined on the impact of customer relationships and customer retention, customer intake, customer relationship development, and customer confidence in relation to environmental management. This paper examines this issue. It does so by looking at the Umm Qais heritage site. motels.

This research re-evaluated the factors that are commonly found in tourist development literature that ascertain customer satisfaction. Employing a user evaluation survey, it studied the Variance Inflation Factor (VIF) for this purpose. At the Umm Qais heritage site, the VIF values were less than the crucial value (10) found in most studies, indicating no multi-co-linearity among the independent factors. These variables were assessed using a 5-point Likert scale ranging from 1 to 5 to examine the impact of customer relationships on customer acquisition, retention, relationship growth, and trust. Apart from the independent and dependent variables, descriptive analysis was also used to describe the sample and the respondents' characteristics who responded to a questionnaire.

Keywords: Umm Qais heritage site, perceived advantages of environmental management, organizational environmental values, Environmental system practices, Environmental technical practices.

Introduction

Environmental management encompasses many actions intended to help companies reduce their negative environmental impacts. These methods may be split into "organizational or software" and "operational or hardware". Regulatory enforcement of environmental issues in developing countries may be a significant challenge for the heritage sites sector because of the industry's high fragmentation and the dominance of small-to-medium-sized independent operators.

Management of organizational structures of heritage sites may vary drastically depending on the size, features, and purpose of the heritage site or resort. Most small heritage sites have a limited number of executives in critical management positions to supervise day-to-day operations. Nevertheless, Environmental marketing strategies and the successes of the businesses impact the product success and market share (Hambrick & Mason, 1984; Hambrick, 2007). Indeed, using this tool can help get a better understanding of knowledge management (Alananzeh et al.,2023; Jahmani et al.,2020; Jawabreh,2021; Jawabreh et al,2020).

In the Heritage sites, the most common ways to take care of the environment are to focus on managing trash, recycling, and saving energy. The fact that heritage sites follow environmental laws and rules is another area that hasn't got as much attention as it should have when making metrics for judging heritage sites performance. Moreover, heritage sites managers also frequently detest environmental assessments because they are discretionary (Saleh et al.,2023; Al Fahmawee and Jawabreh,2022b; Stabler & Goldall, 1997).

In this context, heritage sites and resorts around the world implement voluntary environmental management systems, including certification schemes and other voluntary programs to improve resource efficiency, reduce operating costs, increase staff involvement, and gain international recognition in the travel and tourism marketplace. They use the 'pollution haven hypothesis,' in contrast to the claim that global firms are more environmentally conscious. They also claim that multinational corporations respond to increasing regulatory and social pressures for environmental performance by relocating to areas with fewer regulations, implying that the claim that global corporations are more environmentally conscious is false. (Walter, 1982).

For example, tourism in under-developed countries like Ghana appears provide 'safe havens.' Since it is the environmental authorities of global consumers who matter, even big international corporations in lesser-developed countries are not subject to strict local environmental laws. (Ingram et al.,1997; Al Fahmawee & Jawabreh,2023). However, the use of heritage sites may have an impact on environmental efficiency in terms of resource utilization and pollution. In this connection, a study on five-star heritage sites in Umm Qais heritage site has revealed that utilization rate was favorably linked with energy consumption in such places. There is also a link between managerial socio-demographic traits and corporate and environmental success. Managers with a favorable environmental mindset are supposed to become more involved in pro-environmental actions in the situation outlined above, which results in improved environmental performance.

In this study, single respondents have had more pro-environmental actions than married respondents because the married had limited time to engage in such activities due to their marital responsibilities. Jahmani et al. (2023) and Scott & Willits (1994) also show that pro-environmental views and behavior are linked to a person's wealth, since environmental quality is seen as a luxury item, and individuals will engage in environmentalism only if their basic needs are fulfilled. They have been found to be less environmentally conscious (Schultz, Zelezny, & Dalrymple, 2000). As a consequence, the heritage tourism industry must use complex environmental management methods in order to promote sustainable tourism.

This study aims to answer this question by examining the factors that affect environmental performance of a site in Jordon together with customer satisfaction and retention. It thus looks into the Umm Qais heritage site, and evaluates how demographic factors and organizational characteristics, in such a small heritage site in a developing country like Jordan, influence environmental performance of the sites and subsequent customer satisfaction.

Research Approach

Numerous hospitality management companies have utilized research to explore issues affecting environmental responsibility in their marketing strategies (El Dief & Font, 2010; Jawabreh et al.,2023a; Jawabreh et al.,2023b; Masadeh et al., 2019; Al Fahmawee and Jawabreh,2022c). This research uses repeated different samples of industry executives, with varied responsibilities, and alternative units of analysis. Environmental values are dependent variables in which individual preferences and contextual elements are both included to better represent the experience. The following instrument design is listed and the components used have been made available for researchers to examine in their own facilities.

Among such research, ecological methods have received much academic attention. Most studies of existing literature generate contested theories and unclear findings, while biased thinking seems to be used in different environments. This study will provide a new way of seeing companies in developing countries by creating a new model that includes both individual and organizational levels of analysis.

Indeed, this heritage site is different from other heritage sites in that it demonstrates better environmental awareness. It uses a conceptual model test in which heritage sites in Umm Qais heritage site are placed. This study furthers research on environmental management, adding to existing research that also looks at personal and organizational values and assesses a model drawn from western literature in a developing country context.

It tests the hypothesis that organizational altruism plays a critical role in different types of environmental management methods, suggesting no need for institutional restrictions. The study is founded on the notion that environmental management methods that seem to increase financial profit only account for managers' personal views and organizational competitiveness. In order for the heritage sites and investors to make up for any competitive benefits they may be missing out on, heritage sites and investors must be made aware of the additional environmental advantages they might be enjoying if they are more proactive about environmental management.

As the more talented players affect the strategy and decision-making activities of the company, they are able to exercise managerial discretion (Hambrick & Finkelstein,1987). Academics in the past have adopted this idea in order to explore various commercial solutions to environmental issues (Banerjee et al., 2003; Ramus & Steger, 2000). A connection between company's voluntary pro-environment attitude and top managers' views of environmental issues have been found by Sharma (2000). This means that the perspective held by the top executives influences corporate environmental management activities.

In this connection, Kaiser, Wolfing, and Fuhrer (1999) have compiled an edition of the clinical guidelines. An attitude towards the environment is known as “a mix of ideas, attitudes, and behavioral intentions a person has toward activities or issues that are intertwined with the environment and frequently used to predict behavior in that context (Schultz, Shriver, Tabanico, & Khazian, 2004).



Fig.3: Umm Qais’s buildings reflect the communities inherited knowledge of the local environment.

Source: Author

Research Methodology

This research examines a case study: the Umm Qais heritage site. Umm Qais was not always such a little community and as little-known as it is now. Once upon a time, the city was called Gadara and was rather enormous, with marketplaces, hot springs, churches, fountains, mosaics, homes, courtyards, and a lot more. The Greeks, the Ptolemaic dynasty of Egypt, the Seleucid Empire of Macedonia, the Romans, the Byzantines, and the Ottomans were among the several dynasties that controlled this significant metropolis. In fact, the ancient city is replete with examples of each empire's influence: Greek theaters and baths, Roman water systems, Byzantine Christian adaptations, Ottoman namesake, and more. The town was named Umm Qais due to the Turkish word Mkeis, which means taxation. Gadara initially occurs in historical records soon after Alexander the Great's army conquered the area in 333 BC.



Fig.1: Ancient city
Source: Author

Along the Yarmouk Valley boundary, the Ptolemies, Alexander's successors in Egypt, had re-established Gadara as a military colony alongside its enduring adversaries, the Seleucids, Alexander's successors, who were headquartered in Antioch, north Syria. In 63 BC, the Roman commander Pompey overthrew the Hasmonaeans and freed Gadara and other Hellenistic cities in northern Jordan. Pompey also captured the territory of south Syria. According to Josephus, Pompey rebuilt the city after it was damaged during the siege in order to appease Demetrius the Gadarene, a prominent figure in the late Roman Republic's history and one of his favorite freedmen. A colossal theater honoring Pompey was constructed on the Campus Martius at Rome between 61 and 54 BC, and there were rumors in Rome that Demetrius the Gadarene was the one who started and funded the project.

Following 63 BC, a self-governing Gadara began producing its own currency and changed to a calendar based on the Pompeian era. It was one of the principal towns of the Decapolis, also known as the "ten cities" in Greek. The Decapolis was a loose confederation of ten or more Greco-Roman cities in south Syria and north Jordan, including Philadelphia (Amman), Gerasa (modern-day Jerash), Pella (Tabaqat Fahl), Scythopolis (Beisan), and Abila (Qweilbeh).



Fig.2: Traditional village of Umm Qais

This region had several significant engagements, such as the Battle of Yarmouk, which pitted Muslim Arab armies from the Rashidun Caliphate against Byzantine Empire forces. Leading the Arab troops was Khalid Ibn Al-Walid, a close friend of the Prophet Mohammed and a highly accomplished military strategist. This military commander, who battled in the Levant, the Hijaz, and lower Mesopotamia, is today honored with the name of this area (Al-Hussein et al.,2023; AlMasr, and Abdelkader,2021; Al-Rawashdeh et al.,2023; Al Fahmawee, Jawabreh,2022a).

Research Design

The components of this study are founded on prior writing, either analytically or experimentally. Indeed, factors prevalent in tourist development literature were used in this research. Figure 4 depicts the study model, which shows the independent factors, the dependent variable, and the suggested connection between them.

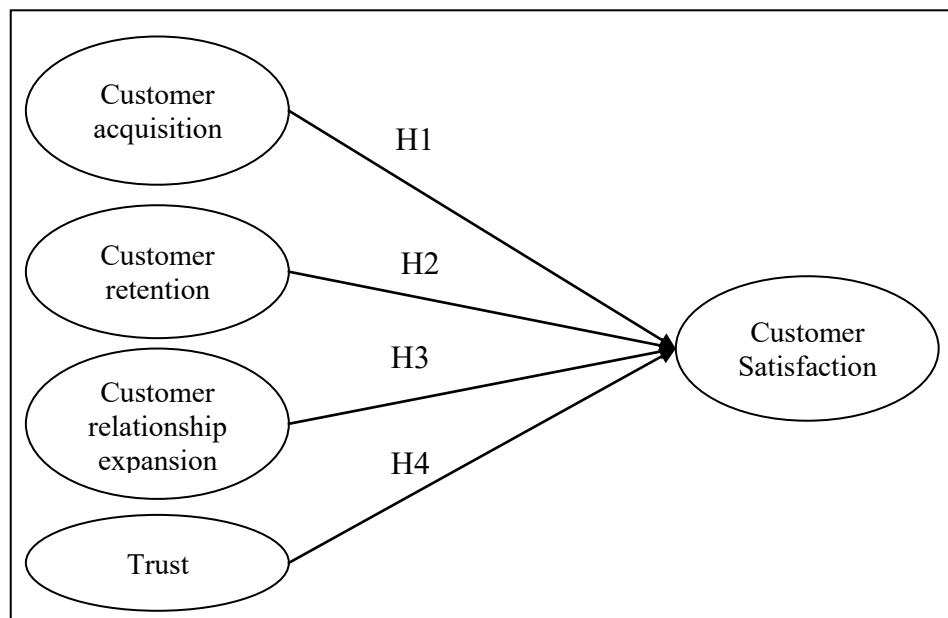


Figure 4: Research Model
Source: Author

Definitions of Operations

This study adapted the theoretical articulations of Sunghyup and Richard's (2017). It also takes into account the four independent variables within the construct of Customer relationship as articulated by Tauseef et al. (2012): Customer acquisition, Customer retention, Customer

relationship expansion, and Trust). They were measured through a research questionnaire through fourteen, ten, fourteen, and seven items, respectively; one dependent variable (i.e. Customer satisfaction) that is adapted from (Tauseef et al., 2012); and measured through ten items.

Hypotheses of the Research

The study hypothesizes the following in order to evaluate the research model:

- H1: A substantial connection exists between customer growth and customer satisfaction
- H2: A substantial connection exists between customer attritions and customer satisfaction
- H3: A substantial connection exists customer connection growth and customer satisfaction
- H4: A substantial connection exists between trust and customer satisfaction.

Sample Size and Population

The research group included people from all walks of life who were engaged in tourism at the Umm Qais heritage site (from 18 to 40 years and above). 1000 surveys were disseminated and 600 of them were returned and accepted for statistical analysis. Thus the response rate was 60% which is high for the population of the Umm Qais heritage site.

Data Analysis and Results

In order to investigate the impact of customer relationships on customer acquisition, retention, relationship expansion, and trust toward customer satisfaction, these variables were measured using a 5-point Likert scale ranging from strongly disagree =1 to strongly agree =5. In addition to the independent and dependent factors, reliability and validity studies were performed; descriptive analysis was used to characterize the characteristics of the population and the respondents to the surveys. To evaluate the study assumptions, multiple regression analysis was used.

Reliability and Validity

Validity and dependability are two essential criteria for determining the quality and utility of original material. Validity is concerned with accuracy and whether the instrument measures what it is supposed to measure, whereas reliability is concerned with precision and is used to assess the continuity and stability of the questionnaire. Indeed, the researchers relied on measures and objects that were earlier created and used by other academics with comparable interest. A draft of the questionnaire was also created, and it was reviewed by five academic lecturers with sufficient knowledge and experience in this field to ensure that each item measures what is intended to be measured and to avoid ambiguity and complexity in question phrasing. The Cronbach's alpha value was used to assess the instrument's dependability. Furthermore, some academics (Bagozzi & Yi, 1988) have advocated for all markers or dimensional scales to be greater than the advised value of 0.60. Cronbach's alpha values for the independent and dependent factors are shown in Table 1. Cronbach's alpha values for all evaluated factors are greater than 0.60, indicating that the aggregate measure is trustworthy.

Table 1: The Cronbach's alpha coefficient of study variables

Variables	Number of items	Cronbach alpha
Customer acquisition	14	0.894
Customer retention	10	0.906
Customer relationship expansion	14	0.925
Trust	7	0.874
Customer satisfaction	10	0.877

Demographic Profile of the Respondents

According to Table (2), the general description of the interviewees for this research revealed that they are mostly females, between the ages of 20 and 40, have undergraduate degrees, and earn between 300 and 500 JD per month.

Table 2: Description of the respondents' demographic profiles

Category	Category	Frequency	Percentage%
Gender	Males	34	34.0
	Females	64	64.0
	Total	100	100.0
Age	Less than 20	5	5.0
	20 years - less than 30	37	37.0
	30 years - less than 40	20	20.0
	40 years - less than 50	21	21.0
	50 years - less than 60	12	12.0
	More than 60 years old	5	5.0
	Total	100	100.0
Monthly income	Less than 300 JD	18	18.0
	300 JD - less than 400 JD	26	26.0
	400 JD - less than 500 JD	25	25.0
	More than 500 JD	31	31.0
	Total	100	100.0
Education	High School	26	26.0
	Bachelor's degree	49	49.0
	Master's degree	21	21.0
	PhD	4	4.0
	Total	100	100.0

Descriptive Analysis

The mean and standard deviation were calculated to characterize the answers and thus the mindset of the respondents toward each topic posed in the poll. While the mean represents the data's center trend, the standard deviation tracks dispersion and provides an indicator of the data's spread or diversity. (Sekaran & Bougie, 2013). In other words, a small standard deviation for a group of numbers indicates that they are concentrated tightly around or near the mean; a high standard deviation indicates the reverse. The level of each item was determined by the following formula: (highest point in Likert scale - lowest point in Likert scale) / the number of levels used = $(5-1) / 5 = 0.80$, where 1-1.80 represented "very low," 1.81-2.60 represented "low," 2.61-3.40 represented "moderate," 3.41-4.20 represented "high," and 4.21-5 represented "very high." The products were then arranged based on their affordability. The findings are shown in Tables (3) and (4).

Table 3: Overall mean and standard deviation of the study's variables

Type of Variable	Variables	Mean	Standard Deviation	Level	Order
Independent Variables	Customer acquisition	3.9693	0.47416	High	2
	Customer retention	4.0170	0.58258	High	1
	Customer relationship expansion	3.9629	0.57784	High	3
	Trust	3.8800	0.60600	High	4
Dependent Variable	Customer satisfaction	4.0550	0.52501	High	

According to the data analysis shown in the Table (3), client satisfaction at Umm Qais heritage site is high, with a mean score of 4.05. Customer retention, customer acquisition,

customer relationship growth, and confidence are also high, with mean values of 4.01, 3.969, 3.962, and 3.88, respectively. Table (4) displays the mean, standard deviations, level, and ranking values for each variable's client connection toward customer satisfaction.

Table 4: Mean and standard deviation of the study's variables

Customer Experience	Mean	SD	Level	Order
My first opinion of the heritage sites was that it was welcoming.	4.22	.704	Very high	1
The advertising communication from the motel urged my first visit/purchase.	3.97	.577	High	4
My first visit/purchase was influenced by the heritage sites 's price reduction.	4.02	.681	High	3
I received a decent bargain on my first lodging buy.	3.95	.770	High	6
My first opinion of the facility was positive.	3.89	.852	High	9
Before my first visit, I had seen the heritage sites 's poster.	3.90	.759	High	8
When I first arrived, it was simple to locate the heritage sites 's contact information.	3.93	.714	High	7
The first reservation/purchase with the motel was simple.	4.03	.784	High	2
My first encounter with a motel staffer was pleasant.	3.97	.674	High	4
The advertising correspondence from the motel urged my first visit/purchase.	3.96	.710	High	5
Celebrity endorsers for the heritage sites (e.g., stars and performers in ads) urged my first visit/purchase.	3.97	.674	High	4
My first excursion to/purchase from the motel was satisfactory.	3.86	.752	High	11
My first excursion to/purchase from the motel was satisfactory.	3.88	.729	High	10
Before my first stay, I had heard good things about the motel from others.	4.02	.804	High	3
Customer retention	Mean	SD	Level	Order
This heritage sites /restaurant is my first option when I travel/eat out.	3.93	.807	High	8
I will continue to visit this heritage sites /restaurant as long as the current care is maintained.	3.99	.745	High	5
I enjoy going to the heritage sites /restaurant.	3.98	.853	High	6
I want to maintain my connection with the establishment for the rest of my life.	3.95	.914	High	7
I keep going to the heritage sites /restaurant because I enjoy being affiliated with them.	4.22	.675	High	1
I rarely go to other eateries or lodgings.	4.16	.631	High	2
I attend this heritage sites /restaurant more than other heritage sites/restaurants.	4.00	.816	High	4
This heritage sites /restaurant charges me more money than other heritage sites/restaurants.	3.91	.780	High	9
I take advantage of the heritage sites /restaurant's mileage/point scheme.	3.98	.876	High	6
This is probably my favourite heritage site /restaurant.	4.05	.783	High	3
Customer relationship expansion	Mean	SD	Level	Order
I am pleased to inform others that I frequent this heritage site /restaurant.	4.06	.789	High	1
I am ready to speak highly of the heritage sites /restaurant.	3.96	.840	High	5
I want to bring my friends/relatives/other individuals with me to the heritage sites /restaurant.	3.96	.828	High	5
I would recommend the heritage sites /restaurant to my friends/family.	3.94	.897	High	6

I'd like to sample the heritage sites 's luxury offering. (e.g. suite room, high price menu).	3.93	.795	High	7
I recommend this heritage sites /restaurant to folks more than any other.	3.91	.793	High	8
I'd like to sample some of the heritage sites 's other services/products.	3.96	.803	High	5
I'd like to go to a new branch/store of the motel.	3.90	.823	High	9
I frequently recommend this heritage sites /restaurant to others.	3.93	.807	High	7
I only have positive things to say about this heritage sites /restaurant.	3.98	.853	High	4
When I inform others about this heritage sites /restaurant, I prefer to go into great depth about it.	4.04	.875	High	2
It's difficult for me to stop raving about this heritage sites /restaurant once I start.	3.94	.814	High	6
I will promote the heritage sites /restaurant on the Internet page. (e.g. blog).	4.03	.717	High	3
I am ready to support the establishment if someone says something bad about it.	3.94	.708	High	6
Trust	Mean	SD	Level	Order
I'd like to return to the heritage sites /restaurant more frequently.	3.89	.815	High	2
Employees at Umm Qais heritage site. heritage sites are knowledgeable.	3.84	.849	High	5
You are comfortable interacting with the Umm Qais heritage site. motel.	4.02	.778	High	1
Employees at Umm Qais heritage site. heritage sites are trustworthy.	3.86	.766	High	4
The information provided by the establishment is correct.	3.88	.782	High	3
The motel always makes an attempt to keep its pledges.	3.79	.756	High	6
As anticipated, the motel keeps its pledges.	3.88	.868	High	3
Customer satisfaction	Mean	SD	Level	Order
All of your interactions are extremely secure.	4.01	.689	High	8
The motel regularly offers high-quality service.	4.04	.737	High	6
The Umm Qais heritage site. motel honors its responsibilities to you.	3.97	.771	High	10
The motel always offers what you require.	4.06	.750	High	5
Umm Qais heritage site. lodging gives you with the necessary details on schedule.	3.98	.752	High	9
Employees at the Umm Qais heritage site. motel give you particular care.	4.08	.849	High	3
Employees at the Umm Qais heritage site. motel are eager to meet your every need.	4.02	.816	High	7
The duties of the Umm Qais heritage site. motel to its clients are honored.	4.13	.720	High	2
You will not stay in another motel.	4.07	.769	High	4
You are pleased with the Umm Qais heritage site. accommodation.	4.19	.761	High	1

Results of Hypotheses Testing

The goal of this study is to find out how customer relationships affect how many customers stay, how many new customers come in, how customer relationships grow, and how sure people are that customers are happy in Jordanian motels in the Umm Qais heritage site. Thus, the theories employees in this research were judged using the multiple regression method. The significance level (-level) was set at 0.05, and the likelihood value (p-value) from the statistical hypotheses test is used as the judging criteria for rejecting the null hypotheses. (Creswell, 2009). If the p-value is less than or equal to 1, the null hypothesis is denied and the alternative

hypothesis is confirmed. If the p-value exceeds the level, the null hypothesis cannot be denied and the alternative hypothesis cannot be sustained. Furthermore, the independent variables' normality and the lack of a multi-co-linearity issue (an instance of multiple regression in which the independent variables are strongly linked) were verified. According to Pallant (2005), the majority of the numbers should be within the acceptable normalcy limits (i.e., -1.0 to +1.0). Skewness and the Variance Inflation Factor (VIF) were studied for this purpose; the findings are shown in Table 5.

Table 5: Skewness and VIF for the independent variables

Variables	Tolerance	VIF	Skewness
Customer acquisition	0.173	5.791	0.515
Customer retention	0.176	5.675	0.485
Customer relationship expansion	0.218	4.583	0.370
Trust	0.534	1.873	0.596

Table 5 shows that the skewness values were within the normal range (-1.0 to +1.0), which means that the data for the independent variables is normal. The VIF values were lower than the most important value (10) found in most studies, which showed that there was no problem with the independent factors being related to each other. Table 1 shows the findings of evaluating the four theories on the effect of excellence in meal delivery on customer satisfaction (6).

Table 6: Result for the study model (b)

Variable	R	R ²	F	Sig (f)	B	t	Sig (t)
Customer acquisition	0.744	0.553	29.433	0.000a	0.310	1.975	0.004
Customer retention					0.168	1.027	0.307
Customer relationship expansion					0.034	0.230	0.819
Trust					0.422	4.495	0.000

- a. Predictors: (Constant), Customer acquisition, Customer retention, Customer relationship expansion, Trust
 b. Dependent variable: Customer satisfaction

According to the Table (6), the multiple correlation coefficient $R = 0.744$ shows a favorable connection between the independent factors (customer intake, customer retention, customer relationship growth, trust) and customer happiness. The R^2 value showed the model's generalizability. It enables us to extrapolate the findings obtained from the interviewees to the entire community. In this instance, it is 0.553. The F-ratio for these values was found to be 29.433, which is statistically significant at $p=0.05$. As a result, we infer that the independent factors have a statistically significant effect on consumer happiness. If all other variables are kept fixed, the unique input of each predictor (independent variable) to the model is revealed. The normalized values for each independent variable are shown in Table 6; Trust, customer growth, customer retention, and customer relationship development all have values of 0.422, 0.310, 0.168, and 0.034, respectively. The degree of impact of these factors is determined by their value; the higher the value, the greater the effect on the dependent variable. Based on the beta numbers, we can conclude that the variable with the greatest impact in the model is trust, followed by customer retention.

Discussion and the Conclusions

The purpose of this research is to determine the impact of customer relationships on customer retention, customer intake, customer relationship development, and customer confidence in the direction of customer satisfaction at the Umm Qais heritage site in Jordan in the process of environmental management. As a result, the multiple regression technique was

used to assess the assumptions created for this study. The significance level (0.05) was also chosen, and the likelihood value (p-value) generated by the statistical hypotheses test is used as the judgment factor for dismissing null hypotheses. (Creswell, 2009). If the p-value is less than or equal to the null hypothesis threshold, the null hypothesis is denied and the alternative hypothesis is adopted.

A larger p-value indicates that the null hypothesis is more likely to be denied, whereas a lower p-value indicates that the alternative hypothesis is more likely to be accepted. Aside from that, the independent variables' normalcy and the absence of a multi-co-linearity problem (a scenario of multiple regression in which the independent variables are closely connected with one another) were investigated. According to Pallant (2005), to be deemed normal, the bulk of the findings should lie within the proper limits for normality (i.e., -1.0 to +1.0). For this reason, skewness and the variance inflation factor (VIF) were investigated; the results are shown in Table 5.

Following the results, inferences were drawn about the approved theories (H1 and H4) and those denied (H2 and H3), as shown in the chart below. (6). In this study, the multiple correlation coefficient ($R = 0.293$) shows a positive relationship between environmental management and the independent variables (perceived benefits of environmental management, organizational environmental values, participation in environmental system practices, and participation in environmental technical practices). The R^2 number demonstrated the model's generalizability. It allows us to generalize the results from the interviewees to the entire community. In this case, it is equivalent to 0.086. The F-ratio for these data values was found to be 2.214, which is statistically negligible at the 0.05 threshold of significance. As a result, we conclude that the autonomous variables have no statistically meaningful impact on environmental management. Before, we used this model to study the factors that affect how responsible Red Sea management companies are when it comes to the environment in their marketing practices (El Dief & Font, 2010).

In this study, the analysis is repeated on a different sample of industry executives with varying responsibilities in order to reach a more conclusive conclusion about the nature of the relationships identified in our previous research by employing a different unit of analysis, that is, the individual heritage sites, as discussed later. Personal environmental values (PEVs) and organizational environmental values (OEVs) are independent factors, with dependent variables comprising of the heritage sites 's EMPs as well as personal and social variables, which are included to influence the result variables. The apparatus design is detailed in greater depth and the real items used in the study are accessible for academics to inspect in their own labs at their leisure.

References

- Al-Hussein, M. A.H. A., Alabdallat, W. I. M., Abu, M. A., Rumman, O. J. & Ali, B. J. (2023) Impact of E-Government Applications on Reducing Administrative Burden in Delivering Public Service. *Information Sciences Letters*, 12(3), 1663-1671, [doi:http://dx.doi.org/10.18576/isl/120350](http://dx.doi.org/10.18576/isl/120350)
- AlMasri, Reem, and Abdelkader Ababneh. (2021) "Heritage Management: Analytical Study of Tourism Impacts on the Archaeological Site of Umm Qais—Jordan" *Heritage* 4, no. 3: 2449-2469. <https://doi.org/10.3390/heritage4030138>.
- Al-Rawashdeh, O. M., Jawabreh, O. & Ali, B. J. (2023) Supply Chain Management and Organizational Performance: The Moderating Effect of Supply Chain Complexity. *Information Sciences Letters*, 12(3), 1673-1684. [doi:http://dx.doi.org/10.18576/isl/120351](http://dx.doi.org/10.18576/isl/120351).
- Al Fahmawee, A. & Jawabreh, O. (2022c) Adaptive Reuse of Old Structures into Heritage Hotel Buildings: A Post-Occupancy Evaluation in Jordan, Amman, *ISVS e-journal*, Vol. 9, no.5,
- Al Fahmawee, A. & Jawabreh, O. (2022a) A Study Architectural and Intangible Environment Affecting Occupancy Rate of Five Stars Business Hotels in Amman. *Journal Of Environmental Management And Tourism*, 13(2), 530-545. [doi:10.14505/jemt.v13.2\(58\).22](https://doi.org/10.14505/jemt.v13.2(58).22).

- Al Fahmawee, E. & Jawabreh, O. (2022b) Narrative Architectural Interior Design as a New Trend to Enhance the Occupancy Rate of Low-Class Heritage Hotel. *New Design Ideas*, 6(2), 207-228.
- Al Fahmawee, E.A.D. & Jawabreh, O. (2023) Sustainability of Green Tourism by International Tourists and its Impact on Green Environmental Achievement: petra heritage, jordan. *GeoJournal of Tourism and Geosites*, 46(1), 20–30. <https://doi.org/10.30892/gtg.46101-99x>.
- Alananzeh, O. A., Almuhaissen, F., Jawabreh, O., Fahmawee, E. A. D. A., Ali, B. J. & Ali, A. (2023) The Impact of Job Stability, Work Environment, Administration, Salary and Incentives, Functional Justice, and Employee Expectation on the Security Staff's Desire to Continue Working at the Hotel . *Journal of Statistics Applications & Probability*, 12(2), 425-439. [doi:http://dx.doi.org/10.18576/jsap/120209](http://dx.doi.org/10.18576/jsap/120209).
- Bantel (1993) Top management team turnover as an adaptation mechanism: The role of the environment. *Strategic Management Journal*, 14,485-504.
- Bagozzi, (1988) On the Evaluation of Structural Evaluation Models. *Journal of the Academy of Marketing Science*, 16 (1), 74-94.
- Bohdanowicz (2007) and affiliation to multinationals (Bohdanowicz, 2005b; Rivera ,2004).
- Creswell,. (2009) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. (3rd edition), Thousand Oaks: Sage Publications.
- Corraliza. (2000) Environmental values, beliefs, and actions: A situational approach. *Environment and Behavior*, 32, 832–848.
- Deng. (2006) A comparison of environmental values and attitudes between Chinese in Canada and Anglo-Canadians. *Environment and Behavior*, 38(1),
- Deng,. (2008) The new environmental paradigm and nature-based tourism motivation. *Journal of Travel Research*, 46, 392-402.
- Fineman, (1997) Environment management, as understood in this Hotel, is usually an additional responsibility for the engineering and maintenance departments.
- Fuhrer. (1999) Environmental attitude and ecological behavior. *Journal of Environmental Psychology*, 19, 1-19.
- Gonzalez-(2006) review of determinant factors of environment proactively. *Business Strategy and the Environment*, 15, 87-102.
- Hoffman (1999). Institutional evolution and change: Environmentalism and the U.S. chemical industry. *Academy of Management Journal*, 42, 351-371.
- Hunter (1995)Tourism and the environment, a sustainable relationship New York:Routledge Routhledge reflection of its top managers. *Academy of Management Review*, 9, 193-206.
- Jahmani, A., Jawabreh, O., Abokhoza, R. & Alrabei, A.M. (2023) The Impact of Marketing Mix Elements on Tourist's Satisfaction towards Five Stars Heritage sites Services in Dubai during COVID-19. *Journal of Environmental Management and Tourism*, (Volume XIV, Spring), 2(66): 335 - 346. [DOI:10.14505/jemt.v14.2\(66\).04](https://doi.org/10.14505/jemt.v14.2(66).04).
- Jahmani, A., Jawabreh, O., Fahmawee, E., Almasarweh, M. & Ali, B. J. (2023) The Impact of Employee Management on Organizational Performance in Dubai's Five-Star Heritage sites Sector. *Journal of Statistics Applications & Probability*, 12(2), 395-404. [doi:http://dx.doi.org/10.18576/jsap/120206](http://dx.doi.org/10.18576/jsap/120206)
- Jawabreh,O., Al Fahmawee, A., Ali, B. & Alshatnawi, E.(2023a) Heritage Lodgings and Customer Satisfaction: An Examination of Internet Evaluations of the Tourist Facilities at the Petra Heritage Site, Jordan, *ISVS e-journal*, Vol. 10, Issue 7,41-57.
- Jawabreh, O., Al Fahmawee, E., Alshatnawi, E., Jahmani, A., Obeidat, G. & Ali, B. (2023b) Environmental Sustainability and Tourism: Parameters of Tourist Satisfaction at Petra Heritage Site in Jordan, *ISVS e-journal*, Vol. 10, Issue 8,pp. 345-359. <https://doi.org/10.61275/ISVSej.2023-10-08-23>.
- Jawabreh,O., Masa'deh,R., Al Fahmawee.E. & Mahmoud,R. (2023c) Understanding the Dimensions of Customer Relationships in the Heritage sites s in Amman, Jordan, *ISVS e-journal*, Vol. 10, Issue 8,pp.401-412. <https://doi.org/10.61275/ISVSej-2023-10-08-27>.

- Jawabreh, O.A.A. (2021). Tourists and Local Community of the Case Study Umm Qais Heritage Site Special Economic Zone Authority (ASEZA). *GeoJournal of Tourism and Geosites*, 35(2), 490–498. <https://doi.org/10.30892/gtg.35229-676>
- Jawabreh, O. (2020). Innovation Management in Heritage Sites Industry in Umm Qais Heritage Site Special Economic Zone Authority; heritage sites classification and administration as a moderator. *GeoJournal of Tourism and Geosites*, 32(4), 1362–1369. <https://doi.org/10.30892/gtg.32425-581>.
- Ingram, P. & Joel A. C. Baum. (1997) Chain Affiliation and the Failure of Manhattan Heritage sites s, 1898-1980. *Administrative Science Quarterly*, 42(1), 68–102. <https://doi.org/10.2307/2393809>.
- Kasim. (2007) Corporate environmentalism in the heritage sites sector: Evidence of drivers and barriers in Penang, Malaysia. *Journal of Sustainable Tourism*, 15, 680-699
- Khanna. (2004) Incentives for environmental self-regulation and implications for environmental performance. *Journal of Environmental Economics and Management*, 48, 632-654.
- Kashyap (2003) Corporate environmentalism, antecedents and influence of industry type. *Journal of Marketing*, 67, 106-122
- Khazian (2004) Implicit connections with nature. *Journal of Environmental Psychology*, 24, 31-42. [https://doi.org/10.1016/S0272-4944\(03\)00022-7](https://doi.org/10.1016/S0272-4944(03)00022-7).
- Masadeh, R., Alananzeh, O., Jawabreh, O., Alhalabi, R., Syam, H., & Keswani, F. (2019) The association among employee's communication skills, image formation and tourist behaviour: perceptions of hospitality management students in Jordan. *International Journal of Culture, Tourism and Hospitality Research*, 13(3), 257–272. doi: 10.1108/ijcthr-02-2018-0028
- Mohammed El Dief. (2012) Determinants of environmental management in the red sea hotels: personal and organizational values and contextual variables, *Journal of Hospitality & Tourism Research*,
- Mason (1984) Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9, 193-206.
- Mensah (2006) Environmental management practices among heritage sites s in the greater Accra region, *International Journal of Hospitality Management*, 25, 414
- Mensah (2007) Environmental management and sustainable tourism development: The case of heritage sites s in the Greater Accra Region (GAR) of Ghana. *Journal of Retail and Leisure Property*, 6, 15-22
- Mowforth (1998) *Tourism and sustainability: New tourism in the third world*. New York: Routledge.
- Parnell, J. T. (1999) Cultural antecedents of behavioral differences between American and Egyptian managers. *Journal of Management Studies*, 36, 399-418.
- Pallant, J. (2005) *SPSS Survival Manual: A Step Guide to Data Analysis Using SPSS for Windows Version 12*. Chicago, Illinois: Open University Press.
- Rivera, J. (2002) Assessing a voluntary environmental initiative in the developing world : The Costa Rican certification for sustainable tourism. *Policy Sciences*, 35, 333-360.
- Rands (1995) Weaving an integrated web: Multilevel and multisystem perspectives of ecologically sustainable organizations. *Academy of Management Review*, 20, 908-935
- Rowland's (2007) The voluntary adoption of green electricity by ontario-based companies: The importance of organizational values and organizational context *Organization & Environment*, 20, 281-283.
- Rodriguez (2007). Relation between social-environmental responsibility and performance in Hotel firms. *International Journal of Hospitality Management*, 26, 824-839
- Saleh, M., Jawabreh, O., Jaber, J., Garaibeh, A., Ali, B., & Ali, A. (2023). The Impact of Financial Determinants On Bank Deposits Using ARDL Model. *Journal of Statistics Applications & Probability*, 12(2), 441-452. doi:<http://dx.doi.org/10.18576/jsap/120210>

- Saleh, M. H., Jawabreh, O., Emad Al Dein, A., & Ali, B. J. (2023). The Competitiveness of Jordanian Tourism Activity in Enhancement Economic Growth. *Applied Mathematics & Information Sciences (AMIS)*, 17(1), 161-174. doi:10.18576/amis/170117
- Shrivastava. (1995). The role of corporations in achieving ecological sustainability, *Academy of Management Review*, 20, 936-960 .
- Simanic, B. (2004, June-July). Environmental training and measures at Scandic Heritage sites s, Sweden. Sustainability and mass destinations, challenges and possibilities.
- Sharma(2000). Managerial interpretations and organizational context as predictors of corporate choice of environmental strategy. *Academy of Management Journal*, 43
- Sekaran. (2013). *Research Methods for Business: A Skill-Building Approach*, (6th edition), New York :Wiley.
- Sunghyup, S. ,& Richard R. Perdue .(2017). Understanding the dimensions of customer relationships in the Hotel and restaurant industries, *International Journal of Hospitality Management*, 64 ,pp. 73–84
- Scarlat, C. (2007). Business environmental responsibility in the hospitality industry. *Management, University of Primorska, Faculty of Management Koper*, vol. 2(1), pages 5-23.
- Tihanyi L (2000). Composition of the top management team and firm international diversification. *Journal of Management*, 26, 1157–1177.
- Ulhoi, J. P. (2001). Integrating environmental and stakeholder management. *Business Strategy and the Environment*, 10, 77-88.
- Walter, I. (1982). Environmentally induced industrial relocation to developing countries.
- Zabkar L.K. (2012). A Hotel sustainability business model: Evidence from Slovenia. *Journal of Sustainable tourism*, 20, 701-719.