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Table of Contents:

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Hotel Services Quality for Tourists in Transit

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Abstract:

This article aims to empirically validate a perception model of hotel service quality for short-stay tourists in transit by applying the SERVPERF model. Thus, 364 foreign tourists in transit in Guayaquil, Ecuador, whose final destination was the Galapagos Islands, were interviewed. The Confirmatory Factor Analysis (CFA) multivariate technique was adopted to evaluate the scales' validity and reliability. The results confirm the SERVPERF model's psychometric properties for the hotel services quality evaluation. The findings will contribute to hotel managers decision making.

Keywords: SERVPERF; Galapagos Islands; confirmatory factor analysis; hotel industry.

JEL Classification: M10 ; R11; Z32.

Introduction

Currently, tourism is recognized as a fundamental activity for growth and development worldwide (Ruspini 2019). In recent decades, this economic sector has had a substantial expansion due to the market's opening, development of technologies, theadvent of new business models, or the low prices offerings of (Benckendorff *et al.* 2019). However, the tourism sector's expansion has generated a more competitive market environment where it is necessary to carry out effective differentiation strategies (Al-Ababneh 2016).

The hotel industry's quality of service has become one of the most relevant factors to obtain sustainable competitive advantages (Sun and Pang 2017). In this way, service quality contributes to increasing customer trust and even generating tangible product value (Gandia and Parmentier 2017). Due to its importance, the quality of service and customer satisfaction in the tourism industry have become topics of interest in academic and business studies (Lai *et al.* 2018; Rather and Camilleri 2019; Wang and Tseng 2019). Initially, the qualitywas analyzed from the perspective of marketing strategies. Still, due to its impact on companies' performance, service quality is part of any business model (Sanjay Kumar 2018).

In Ecuador, tourism is one of the key economic growth activities because it has a territory with significant natural and cultural diversity (Carvache-Franco *et al.* 2020; Mestanza *et al.* 2019). The Galapagos Islands are a leading destination with two protected areas: the Galapagos National Park and the Galapagos Marine Reserve. The Galapagos province has been one of Ecuador's strategic tourist destinations and one of the most recognized places worldwide. It is the winner of international awards as a sustainable tourist destination in the world (Carvache-Franco *et al.* 2021; Pizzitutti *et al.* 2017).

In 2018, more than 182 thousand tourists visited Galapagos, 66% of them were foreign tourists, and 34% were national tourists (Ministry of the Environment and Water 2019). Also, Galapagos receives about 7.33% of the total foreign tourists who arrive in Ecuador each year (Ministry of Tourism of Ecuador MINTUR 2019). The tourism sector expansion has created a space for the hotel industry development. The accommodations service is the second sector with the highest tourist activity in Ecuador, after food and beverage services (MINTUR 2018). Therefore, the hotel industry has striven to provide better service quality and ensure the customers' future return (Sharma and Srivastava 2018).

Because the Galapagos Islands are World Heritage of Humanity and a biosphere reserve, they do not have an international airport. Thus, foreign tourists must arrive at the International airports in Quito or Guayaquil to travel to Galapagos (Rousseaud 2016). For the study, Quito and Guayaquil are called cities in transit since they are not the tourist's final destinations.

One of the primary services that enhance the tourist experience is accommodation (Kurtulmuşoğlu and Pakdil 2017). However, given theGalapagos Islands particular case, it is necessary to evaluate tourists' experience in transit cities, and how such experience contributes to tourists' return in the future. Few studies have assessed the quality of lodging services in a transit city (Min Poon and McKercher 2016). Consequently, to address the research gap, the present study aims to validate the psychometric properties of the SERVPERF model for evaluating the hotel services quality for tourists in transit. Hence, the authors assessed the external validity of the SERVPERF model for one of the tourist services with significant growth in recent years. The results will bring theoretical and practical contributions to destination managers and service providers.

1. Literature Review

In the hotel industry, several variables influence the choice of lodging (a) size; (b) location; (c) image; (d) category; (e) price; (f) additional services; and (g) availability of parking spaces (Park et al. 2018). However, providing a quality service is always the key to generating customer satisfaction, related to word-of-mouth advertising and indirectly to customer loyalty and return intention (Kurtulmuşoğlu and Pakdil 2017). According to Dileep and Mathew (2017), the service quality within the tourism sector depends significantly on the delivery process. Therefore, the perceived quality of services will depend on both the provider and the client's factors. In this sense, the perception of the service quality has been studied from a multidimensional perspective through the following factors: (a) operational aspects; (b) physical aspects; (c) technologies; (d) human aspects; (e) services received; (f) location; and (g) trust, among the most studied factors (Nunkoo *et al.* 2017).

Furthermore, Parasuraman *et al.* (1985 1988) propose a general service quality evaluation model based on five components that allow abstracting the phenomenon's complexity. As perception is a latent subjective variable, the quality of services is considered an abstract construct which is challenging to define and measure because it is intangible, heterogeneous, Inseparability and perishable intangibility, heterogeneity, inseparability and perishability (Gupta 2016; Iglesias *et al.* 2019; Parasuraman *et al*. 1985, 1988).

From the consumer's perception, are various models measure the services' quality (Sanchez-Balcells *et al*. 2018). The most widely used model is the SERVQUAL proposed by Parasuraman *et al.* (1985, 1988). Based on the cognitive dissonance theory, this model measures the difference between the expectation and the service's reality. SERVQUAL has been a benchmark model for developing a sequence of variants and adaptations applicable to various industries (Al-Ababneh 2016).

Due to the complexity of hotel services, Quester et al. (2015) support the idea of measuring the service from a multidimensional perspective since some of the individual components of services can affect the overall evaluation. Hotels manage to have competitive advantages in some of their particular service components, which allows them to differentiate themselves from the competition (So and Li 2020).

The existing literature on the evaluation of service quality commonly cites the SERVQUAL model as the base structure of the quality evaluation of various service, which has allowed the comparison and generalization of results (Basfirinci and Mitra 2015; Liu *et al.* 2015). The SERVQUAL model has proven to be a versatile model used in different service types (Gupta 2016). The quality dimensions are presented in Table 1.

Table 1. Quality dimensions

Authors	Dimensions
Duque and Palacios (2017)	Tangible These include the state of facilitating assets, the physical condition of buildings, and the environment. The hotel industry's tangible characteristics are a general atmosphere, the quality of the food and drink, the room's design, the prices, and the general cleanliness.
Parasuraman, Zeithaml and Berry (1985)	Reliability To the extent that the service is believed to be trustworthy, the service provider's name and reputation and front-line employees' traits contribute to credibility. The appearance of the personnel and the condition of the equipment. Trust is the element that unites consumers to the company and makes them feel that they can trust the services provided
Kostopoulou, Diamantidis and Daulle (2017)	Answer's capacity It is the ability to handle complaints and timeliness of service effectively. Also, it refers to employees willing to help consumers and respond accurately and courteously to their requests. Employees' responsiveness is a crucial factor affecting service quality sinceconsumption and production coincide in the service industry.
Parasuraman, Zeithaml and Berry (1985)	Security It is the freedom from danger, risk, and doubt. That implies physical security, financial security, and confidentiality. The employees' skills, knowledge, and experience form the concept of quality assurance in the hotel industry, which is essential for clients to feel safe and satisfied.
Kostopoulou, Diamantidis and Daulle (2017)	Empathy The courtesy, respect, consideration, and kindness showed to clients by personal contact. Furthermore, empathy refers to the individualized service and general care provided to consumers. Individualized attention in the hotel industry is a concept that is related to the behavior of employees. Service meetings are essentialtoconsumerloyalty and satisfaction.

For academics, SERVQUAL has become the industry standard tool for evaluating customer satisfaction by measuring its service components in the hotel sector (Stefano *et al.* 2015; Wu *et al.* 2018). Also, there are adaptations for this model to adjust to particular contexts such as the health industry, advertising, education, hospitality, among others (Fan *et al.* 2017; Galeeva 2016; Quester *et al.* 2015; Saini *et al.* 2018).

However, critics argue that SERVQUAL cannot independently assess the service's performance (Ahmed *et al.* 2017). Quester, Romaniuk and Wilkinson (2015) argue that the 5-dimensional scale has theoretical limitations. Moreover, empirical studies in various service contexts have evidenced deficiencies at the level of SERVQUAL validity and reliability (Fleischman *et al.* 2017; Shokouhyar *et al.* 2020; Souto and Correia 2017).

Scholars have developed other SERVQUAL models with greater precision and consistency, to maintain the exact dimensions. In this way, Cronin and Taylor (1994) propose an alternative performance-based model (SERVPERF). This model measures service quality based on customer perception of the service provider's performance. The difference is that it does not consider what is related to expectations, which reduces the base model by half (Cronin and Taylor 1994).

Mahmoud and Khalifa (2015) present SERVPERF as the most optimal option because it is an instrument with greater parsimony, which explains a more significant proportion of the variance and provides an explanation with greater convergent and discriminant validity. In their comparative study, Rodrigues *et al.* (2011) agree with the ideal use of the perception scales for service quality when evaluating the scales at the level of perception, perception - expectations, and direct measures, they agree.

SERVPERF has a higher predictive validity and maintains a high degree of reliability and internal consistency. For this reason, it could be indicated that SERVPERF is superior to SERVQUAL from a theoretical and empirical perspective (Fleischman *et al.* 2017; Lee and Kang 2019; Mahmoud and Khalifa 2015).

In the hotel industry, a series of general and specific models have been defined and applied to measure services' quality, as shown in Table 2.

Although there are currently various ways to measure the quality of services, the frequent application of the SERVQUAL and SERVPERF scales to measure a wide variety of services is notable (Duque, Palacios 2017). However, the extensive use of the SERVQUAL model has not prevented it from being the subject of various criticisms (Galeeva 2016).

Table 2. Operationalization of the quality of services in the hotel sector.

Authors	Instrument	Dimensions	Results
Noor and Ali (2018)	SERVQUAL	Tangibility, Reliability, Responsiveness, Assurance, and Empathy	The authors conclude that all instrument dimensions are significant and positive concerning quality and satisfaction in their work. This study was carried out in a group of hotels in Pakistan.
Babić-Hodović, Arslanagić-Kalajdžić, Banda and Sivac (2019)	SERVPERF	Tangibility, Reliability, Responsiveness, Assurance, and Empathy	The study was developed by collaborating with six hotels in Bosnia and Herzegovina to analyze the influence of services' quality on the clients' satisfaction of the clients with lodging services. The results indicated that the model's dimensions are significant and favorable with high predictive power.
Kumar and Zikri (2018)	HOLSERV	Employee, Tangibles, and Reliability	The model implemented in the study shows that only the tangibility and reliability dimensions are positive and significant for three-star hotels in Indonesia. This result is justified considering that the study's analysis unit is oriented to look for a comfortable service and at low prices.
Keshavarz and Jamshidi (2018)	LODGSERV	Tangibility, Reliability, Responsiveness, Guarantee, Empathy + Convenience	The study is based on the model provided by Knutson, Stevens, Wullaert, Patton, and Yokoyama (1990). It adds a dimension regarding the convenience or ease of accessing information and solving the problem. The results showed that all the dimensions evaluated were positive and significant about the Malaysian hotel industry's service quality process.
Ali, Hussain, Konar and Jeon (2017)	LodgingQualityIndex (LQI)	Reliability, Responsiveness, Trust, Communication, and Tangibility	This study assesses the quality of hotel services in the economy in Malaysia. The results prove that all the LQI model dimensions are positive and significant for improving service quality and customer satisfaction.

Several researchers suggest applying an instrument that only captures the client's perception to determine the quality of services, as proposed by Cronin and Taylor (1994) with SERVPERF (Lee and Kang 2019). This type of measure is recommended to facilitate a series of practical criteria such as reducing the effort on the part of the interviewee when completing the questions and, in turn, speeding up the data collection process (Haque, Sultan 2019). For this reason, several academics recommend using SERVPERF as a scale with the greatest predictive and psychometric power in the field of tourism and the accommodation subsector (Cronin and Taylor 1994; Mahdikhani and Yazdani 2020).

2. Methodology

The present research used a quantitative methodological design to empirically validate a measurement instrument that assesses the hotel industry's quality of services (Saunders *et al.* 2016). This study's quantitative design uses non-experimental, cross-sectional, and correlational research (Creswell and Creswell 2017). For the data collection, a survey based on the SERVPERF model was applied, with five dimensions of perception of the quality of hotel services proposed by Duque and Palacios (2017).

This study's population is made up of users of hotel services, specifically transit tourists Guayaquil who were destined for the Galapagos Islands. Based on this, a non-probabilistic convenience sampling process was carried out, which is a valid method for studies of a confirmatory nature with a representative size of cases (Creswell and Creswell 2017). The data were collected during January and February 2019 utilizing a questionnaire distributed in Spanish and English. The survey's application was personal to increase the data's reliability and have a higher response rate (Szolnoki and Hoffmann 2013).

Four hundred nine surveys were applied to surveyed tourists of 27 nationalities. Through frequency analysis, it was found that 28 of the respondents were Ecuadorian, who were excluded since the unit of analysis of this study is foreign tourists. Moreover, the database was filtered by the city of accommodation. It was decided to eliminate the surveys of those tourists who stayed in a city other than Guayaquil. With this, 364 surveys of foreign tourists who stayed in hotels in Guayaquil were obtained.

Given the purpose of the research, the use of the multivariate statistical technique of Confirmatory Factor Analysis (CFA) was considered. This technique evaluates each variable's contribution that or question to its respective dimension and thus measures the suitability of the proposed measurement model (Prudon 2015). The CFA offers the advantage of analytically proving that a precise theory, in this case, the quality of services, is explained based on different measures representing psychological, sociological, or commercial constructs (Hair Jr. *et al.* 2019). Therefore, this analysis makes it possible to check whether the defined model conforms to the evaluated reality.

The data analysis was carried out in several phases. First, the data were descriptively analyzed to identify essential characteristics of the sample. An analysis of missing data, outliers, and normality was performed at the univariate and multivariate levels. Also, the comparability of the data was tested for factor analysis. The third phase consists of estimating the AFC. For this, we started from the analysis of fit indices' goodness to later examine the reliability and validity of the latent factors that are part of the construct (Hair Jr. *et al.* 2019).

3. Results and Discussion

To evaluate the quality of hotel services in the city of Guayaquil by foreign tourists in transit with their finaldestination to Galapagos, a measurement instrument based on the SERVPERF model adapted for hotel services proposed by Duque and Palacios (2017) was applied. The data was collected at the Guayaquil city airport, specifically the international departures area, where 364 valid surveys were obtained. To improve the results' reliability, an informed consent was presented to the respondent indicating the research's purpose. The survey's average time and the confidential handling of the data were guaranteed (Siegle 2019).

The survey's application of the survey was aimed at foreign tourists in transit, of which 56.6% were women and 43.4% men. Information was collected only from tourists over 18 years old (Nicolussi 2015). The average age of the tourists was 47 years old. However, a representative sample was obtained for different age ranges, as indicated in Table 3.

Table 3. Age of respondents

	Frequency	Percentage
From 18 to 25	26	7.14%
From 26 to 35	64	17.58%
From 36 to 45	78	21.43%
From 46 to 55	63	17.31%
From 56 to 65	98	26.92%
More than 66	35	9.62%
Total	364	100%

Considering the valid surveys, the tourists staying in the city of Guayaquil came from three continents with 26 nationalities. According to the results, there are many North American visitors: 35.7% of the Canadian visitors and 8.2% altogether 43.9%. Europeans followed them with 36.24%, Latin Americans 17.71%, and finally Asian tourists with 2.18%. The number of days they stayed in the city of Guayaquil before their Galapagos destination averaged two days.

Before estimating the AFC, it was necessary to analyze the variables' distribution to identify best-fitting estimation the estimation method that. An inspection of the data's normality was applied by analyzing the skewness and kurtosis coefficients (Kline 2016) to know the distribution of the data obtained from the survey. From the data obtained, it was concluded that there is evidence of non-normality since the asymmetry and kurtosis statistics exceed the absolute value of one (Lloret *et al.* 2014).

The Kolmogorov-Smirnov test, contrasted the null hypothesis of a univariate normal distribution to obtain more precise conclusions. The results rejected the null hypothesis and evidenced the non-normality of the variables analyzed (D'Agostino 2017). Finally, the Mardia multivariate test yielded a p-value lower than the significance level of 0.05, thereby confirming the data's multivariate non-normality (Oppong, Agbedra 2016).

Furthermore, the feasibility of the factor analysis estimation is evaluated by analyzing the degree of adequacy of the association matrix. Hence, the Kaiser Meyer-Olkin (KMO) test was calculated, and it yielded a coefficient of .943, suggesting a good measure of sample adequacy (Hair Jr. et al., 2019). As a complement, the Bartlett test of sphericity was estimated, and it contrasts the null hypothesis - the correlation matrix is an identity matrix (Hair Jr. et al., 2019). The sample adequacy and sphericity test results presented in Table 4 confirm the application of the study's confirmatory factor analysis.

Table 4. Sample adequacy measures: KMO and Barlett's test

Kaiser-Meyer-Olkin		.943
Bartlett's Test ofSphericity	Approx. Chi-Square	6483
	Df	231
	Sig.	.000

Once the sample suitability for the CFA application had been verified, the model was evaluated by estimating the Standardized Root Mean Square (SRMR). According to the estimates, this SRMR index shows a good fit because it is 0.07, less than the critical limit value of .08 (Henseler *et al.* 2016). Additionally, the model's collinearity was examined by estimating the VIF, based on the critical value of 5 to manifest problems in collinearity (Daoud 2017). The estimates were favorable since all the coefficients are less than 5. Therefore, it is appropriate to examine the results of the model.

Subsequently, the reliability analysis of the measurement model constructs was performed. Cronbach's Alpha and the composite reliability index were used for the reliability analysis, and the critical value of .7 was a sample of adequate internal consistency (Kline 2016). The results of both indices, presented in table 2, show that all the model factors have values higher than the critical one, indicating an adequate level of internal consistency.

Table 5. Estimation of the reliability and the variance extracted

	Original scale			Adjustedscale		
	Cronbach's Alpha	Composite reliability	Mean extractedvariance (AVE)	Cronbach's Alpha	Composite reliability	Mean extractedvariance (AVE)
Answer'scapacity	0.867	0.918	0.790	0.873	0.912	0.722
Confiabilidad	0.875	0.910	0.671	0.875	0.910	0.671
Empathy	0.858	0.901	0.653	0.867	0.918	0.790
Security	0.855	0.903	0.699	0.855	0.903	0.699
Tangibility	0.873	0.912	0.722	0.898	0.929	0.767

Concerning validity, both convergent validity and discriminant validity are analyzed. Convergent validity is examined using two parameters, factor loadings with critical values of 0.7 and the mean-variance extracted (AVE), which corresponds to the variance extracted with a minimum value of 0.5 (Hair Jr. *et al.* 2019). In the variable factorial loads analysis, it was identified that the Conf_8, Conf_10, and Emp_22 items had a less than the acceptable minimum value of .7, as shown in figure 1.

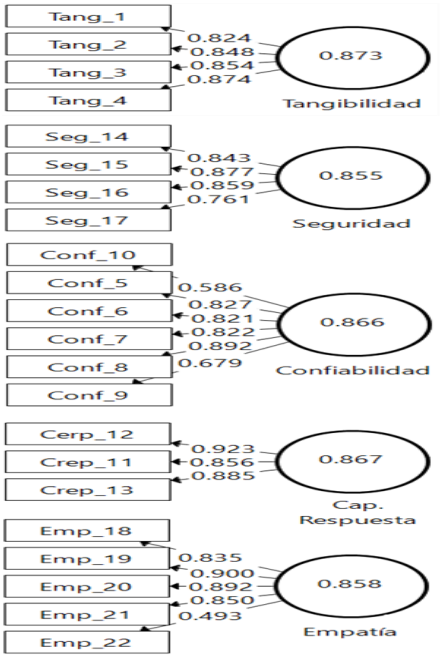

Figure 1. Standardized loads and Cronbach's Alpha of the original model

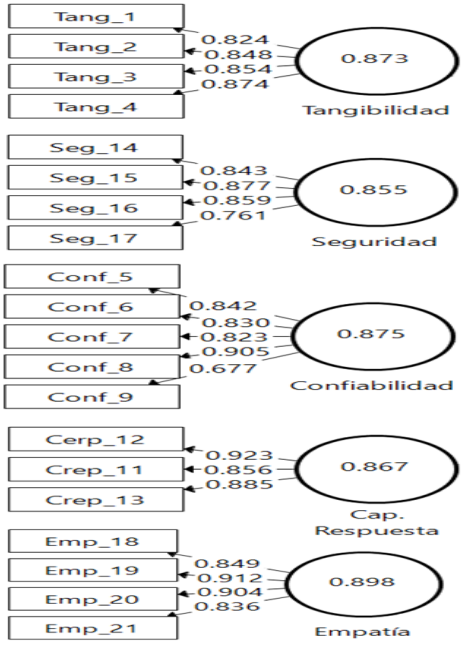

Figure 2. Standardized loads and Cronbach's Alpha of the fitted model

However, the variable Conf_8 had a value close to the critical 0.673, so it was kept on the scale. The variables Conf_10 and Emp_22, with loads of 0.586 and 0.493were eliminated from the model (Cheung and Wang 2017).

After the adjustment, the reliability indices, factor loadings, and the mean-variance extracted (AVE) were calculated. The estimates confirmed the reliability of the scale dimensions and the convergent validity of the constructs. The estimates met the factorial loads critical values represented in figure 2 and exceeded the optimal value of the AVE of .5, seen in Table 2.

The cross loads and the Fornell-Larker criterion (Hair *et al.* 2017) are analyzed to evaluate the discriminant validity. The cross loads criterion consists of appreciating the items' loads with other factors. The loads must be less than the factor to which they belong, which were verified in the estimates made (Burns *et al.* 2017).

The Fornell and Larker criterion sets a higher value for the squared correlation matrix's main diagonal (Hair *et al.* 2017). Thus, the estimates of the extracted variance are more significant than the squared interconstructed correlation, as shown in table 6. The idea is that the latent construct or factor should explain the variance in its items (Hair Jr. *et al.* 2019). Therefore, the model factors' discriminant validity is confirmed according to the Fornell and Larcker's criterion of crossed loads.

Table 6. Discriminant Validity Fornell-Larcker Criterion

	Answer'scapacity	Reliability	Empathy	Security	Tangibility
Answer'scapacity	0.889				
Reliability	0.789	0.819			
Empathy	0.760	0.807	0.808		
Security	0.803	0.805	0.846	0.836	
Tangibility	0.667	0.686	0.691	0.680	0.850

Conclusion

Quality management has become a necessary condition for success. Since the Ecuadorian tourism sector is strategic to boost the economy, the hotel industry is the second most important sector at the national level. Thus, the evaluation and improvement of the loging services' quality is crucial to strengthen tourism.

This research study verified the internal reliability - with Cronbach's Alpha values greater than 0.850- of the SERVPERF model dimensions or factors for evaluating the hotel service quality for transit passengers. At the convergent validity level, the extracted variance was greater than 0.671, higher than its critical value of 0.5. Discriminant validity was checked by meeting the Fornell and Larcker criterion. The operationalization of the quality of hotel services proposed by Duque and Palacios (2017) was the reference. The instrument used was applied to a representative sample of 364 foreign tourists, whose final destination was the Galapagos Islands, at the airport in Guayaquil.

Regarding the practical implications, it is recommended to strengthen the buildings' state and physical condition, the general environment, the quality of food and drink, the rooms' design, and the general cleanliness to improve the service's tangibility. The service's security field should aim to invigilate physical security and confidentiality. Also, the skills, knowledge, and experience of employees should be improved. Regarding reliability, it is proposed to monitor and take care of the service provider's reputation, the image and appearance of the employees, and teamwork conditions. It is recommended to deal effectively with complaints and punctuality of service to increase responsiveness. In addition, employees should be trained o assist tourists and respond accurately and courteously to their requests. Finally, to improve empathy, employees should be courteous, respectful, considerate, and friendly and they must strive to provide individualized service.

Further research could evaluate the quality of hotel service in the Galapagos Islands. Finally, the study's limitation is the temporality of the selected sample because the tourists' opinions and market conditions may vary over time.

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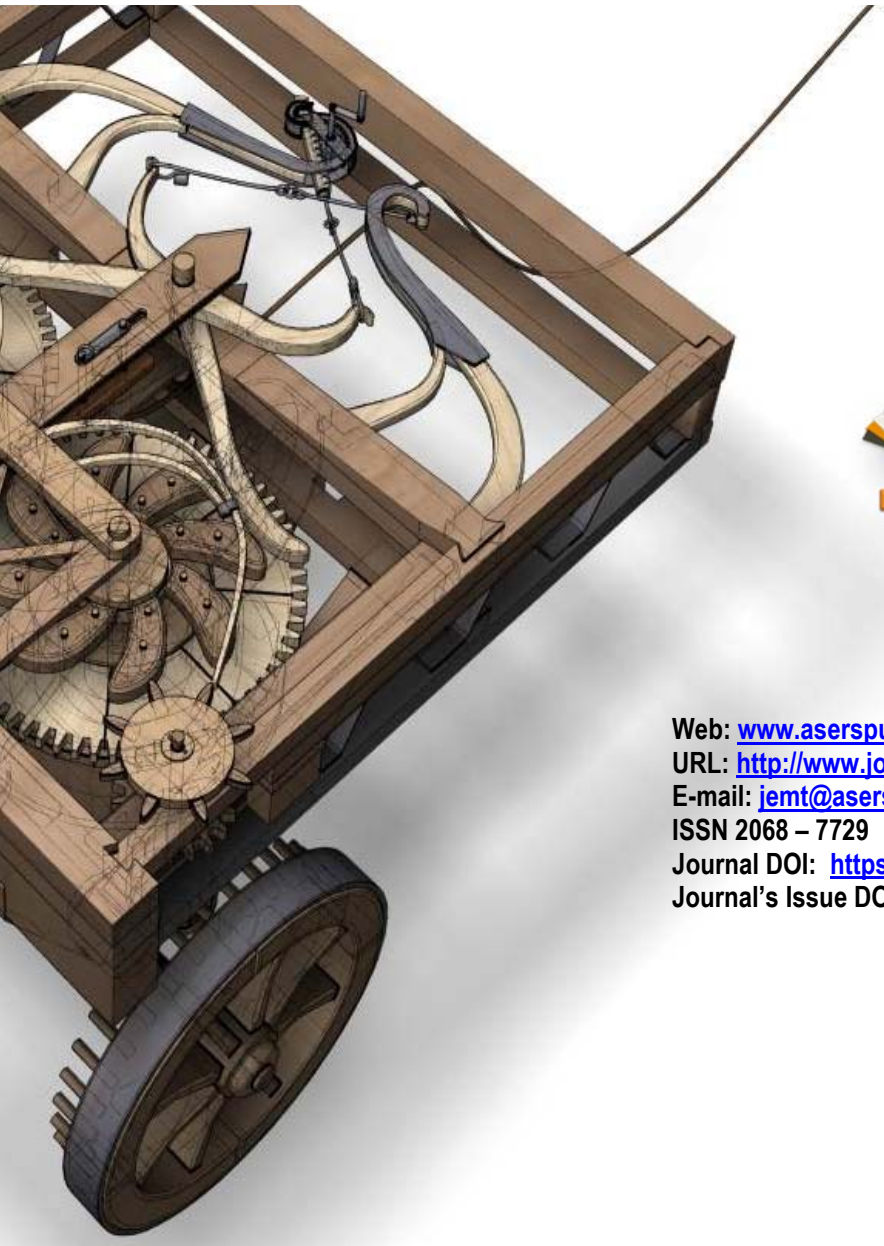

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