# IMPORTANCE-PERFORMANCE MATRIX ANALYSIS OF KOTA BHARU'S ISLAMIC CITY IMAGE

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## Abstract

In 2005, Kota Bharu as the Kelantan state capital in Malaysia was rebranded from a Cultural City to an Islamic City and projecting its image as an Islamic identity. Limited studies have been undertaken to assess city image from the perspective of visitors. Therefore, this paper aims to evaluate the perception of visitors on the importance and performance of the Islamic city image of Kota Bharu. Data were gathered using a self-administered survey questionnaire among domestic and international visitors in Kota Bharu in 2018. The questionnaire was prepared based on ten categories of Islamic Built Environmental factors, namely; natural environment, social need and human comfort, religious identity, tolerance, layout, elements of Jannah (paradise), intellectual and knowledge, cleanliness, economic system, and safety setting. The data were analysed quantitatively using partial least squares-structural equation modelling (PLS-SEM). The results revealed that visitors considered "Religious Identity" as the most important attribute which reached a satisfactory level, while other factors also needed to be addressed. The findings are expected to contribute to a better understanding of stakeholders in enhancing the image of Islam Bharu for management and marketing purposes.

*Keywords*: City image, importance-performance matrix analysis, Islamic city, Kota Bharu.

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## INTRODUCTION

Kota Bharu as the state capital of Kelantan in 1991, was declared a "Cultural City" based on the historical elements, and its art and cultural heritage (Harun, Md Ali, & Zawawi, 2011). In 2005, the state government rebranded Kota Bharu as an "Islamic City". The principal objective behind the rebranding was to establish Kota Bharu as an Islamic City having its own identity and by highlighting the values of Islam. This was to be achieved by infusing the city's development planning processes with desirable Islamic precepts as stated in the Kota Bharu Islamic City Master Plan (Mohd Yusof, 2011; MPKB-BRI, 2006; Saad & Radzi, 2009), and also in the most recent draft of the MPKB-BRI Local Plan 2035 (Replacement) (MPKB-BRI, 2017). In the context of the research area of this study, the branding of Kota Bharu from a Cultural City to an Islamic City has transformed the city into an excellent strategy for tourism (Hassan et al., 2017b, 2017a; Mohd Nasir & Salleh, 2014) to promote Islamic tourism products aside from other popular cultural varieties.

Accordingly, this transition has resulted in important implications for the development of the city regarding its image to be more conducive with the philosophy of Islam. Not to mention, prevailing studies among the residents of Kota Bharu reported that there was confusion and misunderstanding towards the Islamic city concept and branding of Kota Bharu at the time (Mohd Yusof, 2011). As suggested by Mohd Yusof & Yaacob (2013), a clear understanding of the Islamic city concept and image must be identified and explained to the community and visitors to avoid confusion and misunderstanding that may disrupt the entire process. Therefore, this paper aims to evaluate the perception of visitors on the importance and performance of Kota Bharu's Islamic city image, in order to propose managerial and marketing strategies to improve the current condition of the city's Islamic image.

## DESTINATION IMAGE

Image perception is an important aspect in determining an individual's motivation and decision to travel to other locations as a favourable image will likely lead to the individual's satisfaction level (Mungai, 2013). Understanding destination image is essential since it plays a key role in travel decisions (Pike, 2008) destination choice (Abd El Latif Ayad & Shujun, 2013), and tourist loyalty (Alexandre & Ana, 2015). As such, to identify existing imagery for a city, one needs to comprehend the image of the city itself. According to Lynch (1960), a city's image is read according to its physical and perceptible looks of the city's objects which are conveyed as the city's built environment.

Mohd Isa, Hj Zen, & Long (2014) defined Islamic built environment as a situation or setting that encompasses the combination of created elements with the implementation of Islamic ideology to serve human needs and values. Nonetheless, in the present context of this study, the interpretation of an Islamic

city image is reflected by the Islamic built environment (IBE) perceived and adopted from the ten factors of the IBE by Mohd Isa (2015). The factors include the natural environment, social need and human comfort, religious identity, tolerant, order, elements of Jannah *(paradise)*, intellectual and knowledge, hygiene, economic system, and the safety setting.

**Table 1:** Descriptions of the Factors of the Islamic Built Environment

| Islamic Built Environment (IBE) Factors | Description of Factors |
|---|---|
| Landscape and natural environment | The aspect of the natural environment as emphasised and embedded in the built environment. |
| **Social need and human comfort** | The setting that concerns the social need and bringing human comfort. |
| **Religious identity** | The religious identity that suits the local culture and is aimed at restoring the noble history of Islamic civilisation. |
| Tolerant | Able to bring the spirit of tolerance and liberty to the community. |
| Order | Setting and planning to impose Islamic feelings. |
| Elements of Jannah *(Paradise)* | The translation elements of Jannah (paradise) which are intelligence, beauty, and tranquillity. |
| Intellectual and knowledge | Expression of intellectual and knowledge aspects of Islam. |
| Hygiene | Emphasis on hygiene and cleanliness. |
| Economic system | Executing an honest and worthy economic system based on Islamic values. |
| **Safety setting** | The safety setting to the built environment to provide a safe environment for the community. |

Source: Mohd Isa (2015)

## IMPORTANCE-PERFORMANCE MATRIX ANALYSIS (IPMA)

Importance-Performance Analysis (IPA) which is also called Importance-Performance Matrix Analysis (IPMA) is a method of evaluating the quality of service (Ormanovic et al., 2017). According to Ramayah & Rouibah (2016), this simple graphical tool can identify the most crucial attributes concerning their need for managerial action and define areas of improvements in developing a successful marketing programme to achieve an advantage over competitors. Hence, it is necessary to perform IPMA to avoid any ambiguity concerning managerial decisions and for marketing purposes (Deng & Pierskalla, 2018; Ramayah, Cheah, Chuah, Ting, & Ali Memon, 2016).

In tourism research, IPMA has been employed by researchers in many fields and has proven to be a valuable destination management tool (Deng &

Pierskalla, 2018; Rašovská, Kubickova, & Ryglová, 2020). It has also been used in Malaysia in reviewing urban tourism development (Muhibudin, Mohamed, & Abooali, 2010) and is widely used as an analytical technique for customer satisfaction management (Ahmad & Wan Afthanorhan, 2014; Dmitrieva, Fernandes, & Nunes, 2019). Therefore, in this study, IPMA is used to assess the visitors' perceptions of the Islamic city image attributes of Kota Bharu as areas for further research.

Conventional IPA was first introduced by Martilla & James (1977), where the assessment provides the average value of the importance and performance of different service attributes calculated in a defined coordinate system on a two-dimensional matrix. In this approach, the horizontal axis represents performance, and the vertical axis represents importance. The attributes are represented on a matrix where each attribute falls into one of four quadrants, as shown in Figure 1. The objects that fall into the "concentrate here" quadrant are of the utmost interest to the evaluators, as they represent areas of improvement.
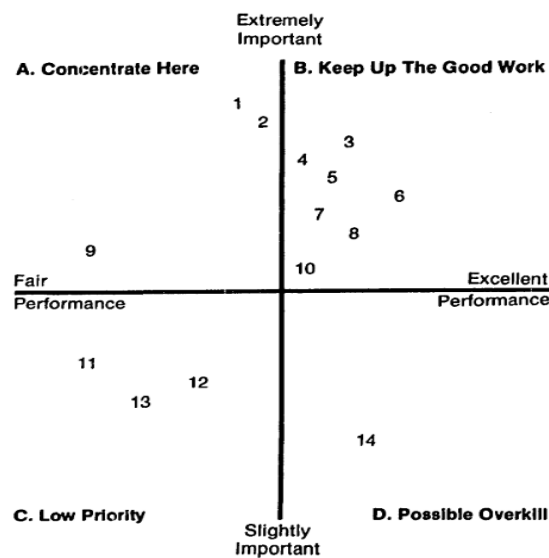


**Figure 1**: The partition of the original IPA matrix
Source: Martilla & James (1977)

Although, one of the most significant drawbacks in the quadrant model (QM) rests in the priority of elements for improvement, where the smallest element that shifts in the coordinate system can lead to drastic changes in identifying priorities. Therefore, researchers have incorporated the concept of "gap" (discrepancy), which is regarded as the difference between performance and importance by adding the diagonal line at an angle of 45°. This is where the values of importance are the same as the values of performance which forms a diagonal model (DM), where generally, the DM performance is better than the QM (Abalo, Varela, & Manzano, 2007; Ormanovic et al., 2017). Figure 2 shows the modified IPMA grid used in this study.
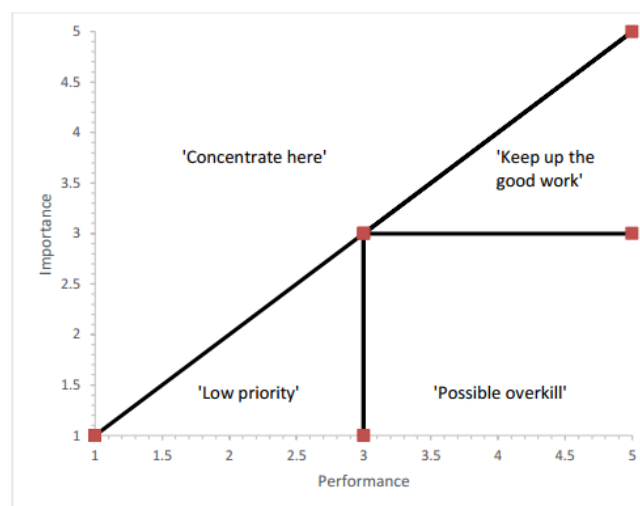


**Figure 2**: The partition of modified IPMA matrix
Source: Pitas et al. (2017)

## METHODOLOGY
*Instrument Design and Measurement of Variables*
A survey questionnaire comprising 62 questions was used in this study as the data collection instrument. Given that most of the items in the questionnaire were targeted to measure the respondents' perceptions and attitudes, a Likert-type scale was considered more appropriate and reliable to use (Ibrahim et al., 2013; Maiyaki & Mohd Mokhtar, 2010). The survey instrument was developed to measure the key variables of the research based on a 5-point Likert-type rating scale; 1 = "strongly disagree" and 5 = "strongly agree".

*Data Collection*
The survey was carried out amongst 428 domestic and international visitors aged 18 and above between April and August 2018. The duration of the survey was determined based on the peak seasons noted for international tourist arrivals (Kelantan Tourist Information Centre [TIC], 2018). The location of the survey included the city centre, public transportation hubs (airport and bus stations), and at popular tourist locations. Both a paper-based questionnaire, as well as an electronic copy displayed on a mobile tablet device, was used as instrument options for respondents in order to achieve a higher response rate.

*Data Analysis*
The data analysis consisted of two stages. In the first stage, the data were analysed with frequency using the Statistical Package for the Social Sciences (SPSS) software to determine the respondent's demographic profile, characteristics, and their perceptions towards Kota Bharu's overall Islamic city image attributes. In the later stage, Partial Least Squares-Structural Equation Modelling (PLS-SEM) of the SmartPLS 3 software was used to evaluate the IPMA to identify the overall effects of the structured model (importance) and the average value of the latent variable performance (performance).

## FINDINGS
*Demographic Background and Travel Characteristics of the Respondents*
Table 2 displays the respondents' demographic background and travel characteristics. Regarding gender, the respondents were equally divided with the majority of respondents married (51.9%) and well-educated (85.5%) aged between 26 and 40 years (49.8%). More than half of the respondents (63.8%) were local visitors, while the remaining respondents were international visitors. About 41.4% of respondents worked as professionals, followed by students (19.9%). Also, more than half of the respondents (51.6%) were first-time visitors, who mostly visited Kota Bharu with their families or friends (51.4%). Their primary sources of information were based on their experience as well as via the media or the internet. Given the majority of respondents travelled for leisure (53.9%) and shopping (37.2%), this could reflect the visited locations which were mainly the city centre (67.4%) and local markets and night markets (66%). The intention to revisit the study area was very high, at 91.3%.

**Table 2:** Respondents Demographics and Characteristics

| Demographics/ Characteristics | Category | Frequency | Percent |
|---|---|---|---|
| Gender | Male | 216 | 50.5 |
| | Female | 212 | 49.5 |
| Age | 18-25 years | 164 | 38.3 |

| | | | |
|---|---|---|---|
| | 26-40 years | 213 | 49.8 |
| | 41-56 years | 49 | 11.4 |
| | 57 and above | 2 | 0.5 |
| Marital status | Single | 222 | 51.9 |
| | Married | 193 | 45.1 |
| Religion | Muslim | 302 | 70.6 |
| | Others | 126 | 29.4 |
| Residence | Local | 273 | 63.8 |
| | International | 155 | 36.2 |
| Education level | No formal education | 1 | 0.2 |
| | Primary school | 2 | 0.5 |
| | Secondary school | 55 | 12.9 |
| | College/ University | 366 | 85.5 |
| | Others | 4 | 0.9 |
| Occupation | Employed (management/ professional) | 177 | 41.4 |
| | Employed (manual/ clerical) | 65 | 15.2 |
| | Employed (design) | 36 | 8.4 |
| | Self-employed | 51 | 11.9 |
| | Unemployed | 10 | 2.3 |
| | Retiree | 3 | 0.7 |
| | Student | 85 | 19.9 |
| Travel Frequency | First visit | 226 | 51.6 |
| | More than one visit | 212 | 48.4 |
| Travel Accompany | Alone | 73 | 16.7 |
| | Partner | 99 | 22.6 |
| | Friends or families | 225 | 51.4 |
| | Colleagues | 31 | 7.1 |
| | Others | 7 | 1.6 |
| Travel Learn | Already knew | 229 | 52.3 |
| | Media or Internet | 213 | 48.6 |
| | Friends or relatives | 142 | 32.4 |
| | Books or guides | 50 | 11.4 |
| | Travel agency | 55 | 12.6 |
| | Fair or exhibitions | 23 | 5.3 |
| | Others | 37 | 8.4 |
| Travel Purpose | Holiday | 236 | 53.9 |
| | Shopping | 163 | 37.2 |
| | Business | 52 | 11.9 |
| | Meeting, conference, seminar | 78 | 17.8 |
| | Education | 66 | 15.1 |
| | Arts and culture | 42 | 9.6 |
| | History and heritage | 33 | 7.5 |
| | Sports and recreation | 40 | 9.1 |
| | Health | 15 | 3.4 |

|  | | | |
|---|---|---|---|
|  | Religious activities | 40 | 9.1 |
|  | Visit friends or relatives | 116 | 26.5 |
|  | Others | 48 | 11.0 |
| Place Visited | City centre | 295 | 67.4 |
|  | Market or night market | 289 | 66.0 |
|  | Museum or palaces | 128 | 29.2 |
|  | Art, culture or craft centre | 134 | 30.6 |
|  | Mosque or *pondok* | 120 | 27.4 |
|  | Nature, beach or river | 159 | 36.3 |
|  | Others | 39 | 8.9 |
| Intention to Revisit | Yes | 400 | 91.3 |
|  | No | 36 | 8.2 |

*The Importance-Performance Analysis of Kota Bharu's Islamic City Image*
Table 3 displays the findings of the total impact (importance) and the index value (performance) from the IPMA. Regarding importance, the Order construct (OD) marked the highest score (74.769) followed by Intellectual and Knowledge (IK) (68.083). Nevertheless, concerning performance, Order (0.200) and Religious Identity (RI) (0.393) were far better compared to other constructs.

**Table 3:** Index Value and Total Impact of IPMA

| Construct | Importance (Total effect) | Performance (Index Values) |
|---|---|---|
| Element of Jannah (EJ) | 62.655 | 0.097 |
| Economic System (ES) | 64.486 | 0.045 |
| Hygiene (HG) | 56.865 | -0.125 |
| Intellectual and Knowledge (IK) | 68.083 | 0.125 |
| **Construct** | **Importance** | **Performance** |
| Landscape and Natural Environment (NE) | 60.163 | 0.133 |
| **Order (OD)** | **74.769** | 0.200 |
| **Religious Identity (RI)** | 67.806 | **0.393** |
| Social need and human comfort (SN) | 62.282 | -0.027 |
| Safety Setting (SS) | 63.040 | -0.022 |
| Tolerant (TL) | 64.147 | 0.008 |

Figure 3 below illustrates the Priority Map (IPMA) of the Islamic City image viewed among Kota Bharu visitors. As shown in the figure, it can be seen that most of the factors were seen as equally important based on the component's position in the plotted priority map. The map reveals that the Religious Identity (RI) construct was viewed as attentive, but with lower performance compared to the Order (OD) construct. Nevertheless, Religious Identity (RI) is excellent since its ratings of importance and performance were reasonably balanced. This indicates that the RI factor has been at a satisfactory level (keep up the good work).
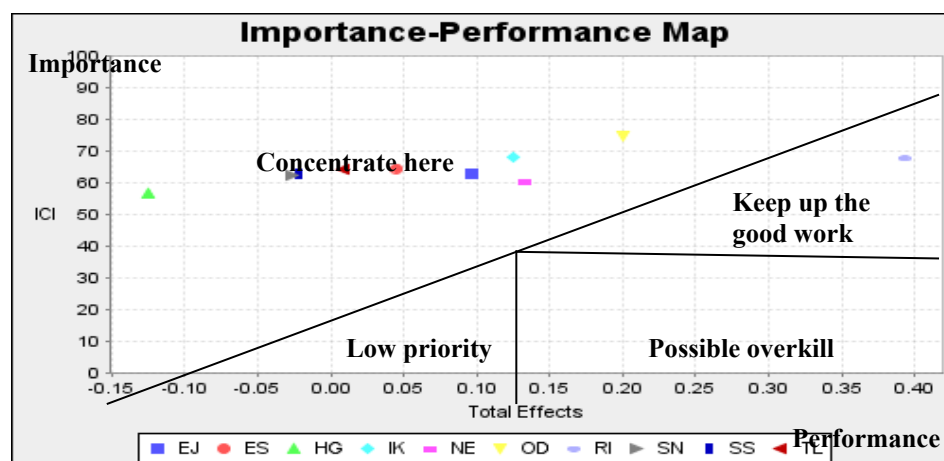


**Figure 3**: IPMA of Islamic City Image amongst Visitors

Aside from that, other constructs occupy the zone above the diagonal, which means that the remaining constructs need to be concentrated. According to Ramayah et al. (2016), the greater discrepancy between importance and performance leads to a higher need for remedial action. Accordingly, this is because a larger discrepancy is assumed to cause greater dissatisfaction, which needs to be noted and concentrated. Regarding Hygiene (HG), this construct is quite remote from the other constructs having the lowest performance, which is an issue that should be addressed among the entire concentrated constructs. On the other hand, no construct was found in the 'low priority' and 'possible overkill' section.

## DISCUSSIONS
IPMA analysis was conducted to identify the most relevant indicators for the management and marketing of Kota Bharu. According to the results of the analysis, all factors were found to be excessively exemplified based on the component's position in the plotted IPMA map. This indicates that all factors are

important and should be considered in building the Islamic City image. The Religious Identity (RI) factor has also been at a satisfactory level of the city's Islamic image, which assessed whether the city features were constructed incorporating Islamic architecture features. This illustrates the sense of Islamic ambience, evoking a sense of reviving the glorious history of Islamic civilisation, and representing the local culture. These features are in line with the initiatives implemented from the initial inception of the Islamic city concept in Kota Bharu where it has a set of design features by applying the characteristics of Islamic architecture while preserving the Kelantan local identity.

Although Identity (RI) is viewed as attentive, its performance is less compared to the Order (OD) factor. OD was perceived as being more dominant compared to RI, possibly because the mosque and *Qiblat* structures gave a higher impact on the waking spirit of Islam, compared to the structures with Islamic façades. The Islamic urban setting with the mosque as the core provides memories to God and reminds Muslims of the obligation of prayer. The location of the mosques attached to the commercial and social centre falls along the same lines with the common features of other Islamic cities.

Nonetheless, it is also important to highlight that Hygiene (HG) had the lowest score in the IPMA, which should be acknowledged by city managers. Cleanliness is also an important factor regarding the Islamic city image but was found in this study to have the lowest performance. As such, it must also be taken seriously by the authority to determine feasible and affordable solutions to address this issue. Notably, the government should undertake and promote creative and effective awareness-raising campaigns based on the Islamic approach in conjunction with the branding of Kota Bharu as an Islamic city.

## CONCLUSIONS
The results of the IPMA analysis revealed that visitors assessed Religious Identity (RI) as the most important attribute; even though all nine factors were equally perceived as important but still require the same degree of attention. Hygiene was identified as the main area of focus in projecting the city's Islamic image, given its importance and significance. The result of this study could be used as a reference for city managers, tourism marketers and other stakeholders in propelling the Islamic image of Kota Bharu. Though, this should be supported by a sound marketing strategy and awareness programs. For future study, investigation on other segments of domestic and international visitors to Kota Bharu could be undertaken. Here, different contexts could be employed by considering new variables such as tourist loyalty.

## ACKNOWLEDGEMENTS

## REFERENCES

Abalo, J., Varela, J., & Manzano, V. (2007). Importance values for Importance-Performance Analysis: A formula for spreading out values derived from preference rankings. *Journal of Business Research*, 60, 115–121. https://doi.org/10.1016/j.jbusres.2006.10.009

Abd El Latif Ayad, T. H., & Shujun, Y. (2013). Perceived Egypt's Destination Image by Chinese University Students. *African Journal of Business Management*, 7(41), 4288–4297. https://doi.org/10.5897/AJBM12.1380

Ahmad, S., & Wan Afthanorhan, W. M. A. (2014). The Importance-Performance Matrix Analysis in Partial Least Square Structural Equation Modeling (PLS-SEM) with SmartPLS 2.3 M3. *International Journal of Mathematical Research*, 3(1), 1–14.

Alexandre, L. L. C., & Ana, P. M. S. (2015). Strategic image management: The image of the City of So Paulo/SP. *African Journal of Business Management*, 9(6), 288–297. https://doi.org/10.5897/ajbm2014.7562

Deng, J., & Pierskalla, C. D. (2018). Linking importance-performance analysis, satisfaction, and loyalty: A study of Savannah, GA. Sustainability (Switzerland), 10(3). https://doi.org/10.3390/su10030704

Dmitrieva, M., Fernandes, P. O., & Nunes, A. (2019). Guests' Satisfaction: Application of the Importance-Performance Analysis. In J. M. Cristina Sousa, Isabel Vaz de Freitas (Ed.), ICTR 2019 2nd *International Conference on Tourism Research* 2020.

Harun, S. N., Md Ali, Z., & Zawawi, R. (2011). The Changing Image and Identity of Kota Bharu, Kelantan, Malaysia: From Cultural City to Islamic City. International *Journal of Social Planning and Development*, 1, 75–80.

Martilla, J. A., & James, J. C. (1977). Importance-Performance Analysis. *Journal of Marketing*, 41(1), 77–79. https://doi.org/10.2307/1250495

Mohd Isa, N. (2015). Developing a Definition for Islamic Built Environment in Malaysia by Sieving through the Interpretation of Public Opinion Shapers. International Islamic University Malaysia.

Mohd Isa, N., Hj Zen, I., & Long, A. (2014). The Indicator of Factors That Make an Environment Truly Islamic in Malaysia. *Australian Journal of Basic and Applied Sciences*, 8(23), 53–61.

Mohd Yusof, M. F. (2011). Persepsi Komuniti Setempat Terhadap Penjenamaan Kota Bharu sebagai Bandar Raya Islam. In *Persidangan Kebangsaan Masyarakat, Ruang dan Alam Sekitar* (MATRA2011) (pp. 1–8). Pulau Pinang, Malaysia: Universiti Sains Malaysia.

Mohd Yusof, M. F., & Yaacob, M. R. (2013). Penjenamaan Tempat (Place Branding) dan Faedah kepada Sektor Pelancongan. In *Persidangan Kebangsaan Ekonomi Malaysia* ke VII (PERKEM VIII) (Vol. 1, pp. 159–165).

MPKB-BRI. (2006). Pelan Induk Kota Bharu Bandar Raya Islam 2005-2015. Kota Bharu: Majlis Perbandaran Kota Bharu Bandar Raya Islam.

MPKB-BRI. (2017). Draf Awal Rancangan Tempatan MPKB-BRI Kelantan 2035 (Penggantian). Kota Bharu: Majlis Perbandaran Kota Bharu Bandar Raya Islam.

Muhibudin, M., Mohamed, B., & Abooali, G. (2010). A Review on Urban Tourism Development in Malaysia. In B. Mohamed (Ed.), *Regional Conference on Tourism Research: The State of the Art and its Sustainability* (pp. 205–211). Penang, Malaysia: Universiti Sains Malaysia.

Mungai, M. (2013). Exploring Motivations and Factors Impacting upon Destination Choice of the UK Residents: Reflecting on Kenyan Tourism. *Information and Knowledge Management*, 3(7), 10–17.

Ormanovic, S., Ciric, A., Talovic, M., Alic, H., Jeleskovic, E., & Causevic, D. (2017). Importance-Performance Analysis: Different Approaches. *Acta Kinesiologica*, 11(2), 58–66.

Pike, S. (2008). Destination Marketing: An Integrated Marketing Communication Approach. Hungary: Routledge. https://doi.org/10.1017/CBO9781107415324.004

Ramayah, T., Cheah, J., Chuah, F., Ting, H., & Ali Memon, M. (2016). Partial Least Squares Structural Equation Modelling (PLS-SEM) using Smart PLS 3.0 (First). Kuala Lumpur, Malaysia: Pearson Malaysia.

Ramayah, T., & Rouibah, K. (2016). Identifying Priority Using an Importance-Performance Matrix Analysis (IPMA): The Case of Internet Banking in Malaysia. *International Journal of E-Adoption*, 6(1), 1–15. https://doi.org/10.4018/ijea.2014010101

Rašovská, I., Kubickova, M., & Ryglová, K. (2020). Importance–Performance Analysis Approach to Destination Management. Tourism Economics, (February). https://doi.org/10.1177/1354816620903913

Saad, S., & Radzi, M. M. (2009). Urus Tadbir sebuah Bandaraya Islam Malaysia: Kajian Kes di Kota Bharu, Kelantan. *Malaysian Journal of Society and Space*, 3(3), 8–25.

TIC. (2018). Kelantan Tourist Arrival Statistic. Kota Bharu.