Study Usage Expansion of Quick Response (QR) Cross Border in Yogyakarta

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Abstract: This research aims to provide policy recommendations that will be taken into consideration by stakeholders in Yogyakarta in an effort to accelerate the use of cross-border Quick Responses (QR) by tourists from Malaysia in Yogyakarta, both in the short and long term. This research is guided by several plans consisting of 4 policy recommendations such as tax refunds for hotel service transactions, free entry to cultural heritage sites, the future network of the tourism triangle, and cross-border QR redesign. This study also provides a technical description, potential and limitations of each policy and concludes that this plan is a potential policy alternative to utilize the economic momentum from Malaysian tourist visits to Yogyakarta to support Yogyakarta's economic development in the long term using research methods, literature studies, and focused group discussions as hypothesis development from the qualitative analysis carried out in this research.

Keywords: Malaysian tourist; QR cross border; Yogyakarta

1. Introduction

The digitalization of economics and finance brings significant changes in the economy, especially in payment system traffic. The success of various sectors in the economy in the real sector is closely related to reliable payment system traffic (Khalizadeh et al., 2017; Jing 2022). In recent years, a country's economic development priorities have begun to focus on sustainable development. One way to encourage sustainable economic growth is through the development of quality tourism (Abuamoud et al., 2014). Therefore, leading tourism destinations need to be supported by reliable payment system traffic (Houston, 2020).

According to Alamsyah et al. (2023), when related to the national context, one of the provinces that has advantages in culture-based tourism is Yogyakarta. In recent years, data from the Central Statistics Agency (BPS) shows the dominance of foreign tourists from Malaysia visiting Yogyakarta. This condition shows the need for research studies that focus on the behavior of Malaysian tourists in spending their leisure time in Yogyakarta. The intensity of direct Kuala Lumpur to Yogyakarta flights has increased to 17 times a week, served by Batik Air, Air-Asia and Malaysia Airlines which have very significant potential for Yogyakarta's economy, namely with a capacity of 158 passengers per flight. Therefore, a study of the behavior of tourists from Malaysia is needed to ensure the formulation tourism policy in Yogyakarta so that it can provide a distributive effect on regional welfare, especially in the formulation of policies related to the payment system. Currently, the volume of retail transactions in Indonesia is dominated by the use of Quick Responses (QR) Cross Border. Given the cultural similarities between Malaysian and Indonesian tourists, the authors assume that there are similarities in spending patterns and preferred payment
methods between the two countries. In order to expand the use of Cross Border Quick Responses (QR) by Malaysian tourists visiting Yogyakarta, Bank Indonesia (Taufik, 2023; Maharani, 2023) has initiated integration between Quick Responses (QR) Cross Border and Malaysia’s Quick Response (QR) code standard, namely Duitnow (Aini et al., 2018).

Responding to this initiative, the authors consider that this was able to capture the momentum of Malaysian tourists visiting Yogyakarta, moreover this is in line with the commitment to the Local Currency Settlement (LCS) mechanism (Mardania et al., 2018; Bani et al., 2023). However, the author believes that this initiation can still be developed into short and long term plans. This is because to ensure that Malaysian tourist visits can have an impact on the Yogyakarta economy through the acceleration of Quick Responses (QR) Cross Border, a policy arrangement is also needed that touches on behavioral aspects and not only technical aspects. Based on these considerations, in this study, the author has prepared several policy recommendations for accelerating Cross Border Quick Responses (QR) by Malaysian tourists visiting Yogyakarta. In the following sections, several recommendation points will be explained which have considered a combination of technical and behavioral aspects in them. The author hopes that this policy recommendation can be taken into consideration by stakeholders in Yogyakarta in efforts to accelerate the use of Quick Responses (QR) Cross Border by tourists from Malaysia in Yogyakarta, both in the short and long term.

2. Literature Review

The behavior of tourists from Malaysia when on holiday in other countries can be a reference and proxy in estimating the right policy arrangement to accelerate the use of QRIS in DIY. Research by Maknu et al. (2021) explains that Malaysian tourists who vacation in Japan experience difficulties in accessing information about halal tourism which ultimately leads to retail payment traffic that tends to be stiff (Ahmed & Phin 2016). These findings are also strengthened by the research results which explaining that the consumption of Malaysian tourists when on holiday in Bandung is influenced by internal factors (tourist characteristics) and external factors (characteristics of the tourist destination they are visiting (Djulius & Nugraha 2019). Regarding the use of QR codes, other research by explains that usefulness, individual tastes for innovation, applicable norms, and level of security influence the use of QR codes as a payment medium by Malaysian consumers (Ibrahim et al., 2019). The results of this research are also strengthened by other the findings of which explains that performance expectations, social influence, behavior, price and individual tastes for innovation influence the acceleration of payments using QR codes by Malaysian consumers (Marquez et al., 2022).

According to the other finding that the use of QRIS in the country is not optimal and comprehensive even though in the city of Solo at 2020 there will be an increase of 276% of merchants adopting QRIS (Tobing et al., 2021; Sekarsari et al., 2021). Due to the lack of regulation of digital economic innovation, especially the adaptation carried out by MSMEs and in line with. There are several notes, namely the existence of the internet network which creates obstacles in making payments and enforcing the merchant discount rate which is
burdensome for MSMEs in Pematang Siantar. Other finding state that it require education for merchants regarding digital financial literacy (Sekarsari et al., 2021).

Considers that the use of the QR code payment method is also an interesting and highly popular thing in ASEAN countries (Sihaloho et al., 2020; Julita, 2023). The use of the QR code payment is appropriate and can be transacted between countries, similar regulations and regulations especially between monetary authorities and the Government to ensure certainty of adaptation and optimization of the use of QR payments which will be a comparative approach between countries and merchants and users (Setiawan & Nursechafia 2016; Manurung & Lestari 2020; Maharani, 2023). The results of these studies can be a significant consideration for policy makers in Indonesia, where if they want to ensure retail payment activities by Malaysian tourists increase, policy makers can focus attention on halal tourism which is very easy to find in Indonesia, especially in DIY Province.

3. Method

This research was conducted in the Yogyakarta Special Region Province which consists of Bantul Regency, Sleman Regency, Gunungkidul Regency, Kulon Progo Regency, and Yogyakarta City and was even expanded in the "JOGLOSEMAR" scheme by involving the Borobudur Temple in Magelang Regency to strengthen its tourism attraction. This research will use 3 research approach (literature review, FGD, descriptive analysis).

3.1. Literature Review

In literature studies, it is necessary to determine the research topic and determine the problem formulation before the stage of collecting policy recommendations obtained from reviewing books, notes, reports, literature and observations can also be made from the topics raised by the researcher to obtain objective results (Nazir, 2013).

3.2. Focused Group Discussion

This study uses analytical tools is literature studies and focus group discussions (FGD) conducted with various stakeholders who are actors and policy makers in implementing this policy. According to Zed (2008) explains that the literature study method is a series of activities through collecting library data, reading, taking notes and processing research materials.

This study was also strengthened by conducting focus group discussions (FGD) to strengthen literature studies by mixing and matching literature studies with field conditions in order to implement this policy recommendation. FGD is a directed discussion and obtains impressions, interpretations and opinions guided by a moderator to collect primary data that supports research (Sekaran & Bougie 2016) and systematic collection of data and information on specific problems in group discussions. This focus group discussion activity is a policy discussion activity through brainstorming with the team that conducted the study with resource persons for this policy, namely the Regional Economic Policy Team of the KPw BI DIY (KEKDA KPw BI DIY), Academics (Universitas Atma Jaya Yogyakarta and ISEI Cabang Yogyakarta), and the Tourism Association Actors (GIPI Yogyakarta) which play an important role in the implementation of policies in this study.
3.3. Descriptive Analysis

The characteristics contained in this research are explained in the description of the findings of the field situation and are based on the concepts and theories underlying the study as well as comprehensive review activities of primary data sources in the analysis process using a literature review which attempts to adjust and match the context of the findings with the findings or views from previous library sources (Sekaran & Bougie 2016).

4. Result and Discussion

4.1. Literature Study

In this study, a design adjustment will be carried out for the cross border QR which is named Citra Abisatya which comes from Sanskrit which means "painting of a close friend". This initiative was carried out by redesigning the cross border QR display for Malaysian tourists in Yogyakarta. Currently, Malay cultural features to show the cultural closeness between the two countries are being implemented at the level of financial transactions (Ahmed et al., 2016). This initiative aims to show the cultural closeness between Malaysia and Indonesia which is applied at the retail financial transaction level.

Basically, this policy is a policy that is categorized as a moral incentive in the form of participation (Sikula, 2011; Panggabean, 2010; Hasibuan, 2017). The author categorizes this policy as a short-term initiation because the policy can be implemented immediately within the next 6 months-1 year. In practice, the cross border QR redesign after this policy will look like the figure 1.

![Figure 1. QR Cross Borders Prototype in Kuntum Bujang and Mega Mendung Patterns](image-url)

The limitations of implementing this policy are of course in the outreach to existing merchants and prospective new merchants regarding the core intentions of this QR cross border redesign. This is because, to ensure that Citra Abisatya really has a significant impact in attracting Malaysian tourists, domestic merchants need to know the reasons behind this policy. However, the author assesses that this socialization does not require much time because currently financial digitalization in Indonesia has played an important role in national retail transactions.
Initiative to provide special tax refunds for hotel transactions in Yogyakarta if Malaysian tourists are able to show proof of payment using cross-border QR at offline merchants in Yogyakarta (minimum transaction IDR 1,055,773 or the equivalent of RM325). The determination of this minimum transaction is based on BPS (2022) regarding the average expenditure of Malaysian tourists per visit in Indonesia in 2021. The current tax refund policy only covers commodity goods and does not include services from abroad. The author assesses that by providing tax refunds on hotel services used by Malaysian tourists in Yogyakarta, it will provide incentives to carry out retail transactions in. The stages of implementation of this policy are technically described as figure 2.

![Figure 2. Stages of Implementing Tax Refund Policy](image)

The author categorizes this policy as a medium-term initiative because this policy still requires additional coordination with the ranks of the Indonesian Ministry of Finance which of course will cause a policy lag due to changes in tax collection regulations. The limitations of this policy initiative are of course related to integration between institutions which requires an adaptation time of at least the next 3-5 years. Apart from that, the decrease in tax revenue due to tax refunds will indeed be compensated by an increase in the volume of QR cross border transactions in Yogyakarta, which will mainly be felt by Micro, Small and Medium Enterprises (MSMEs). Even so, further research is still needed to estimate whether the tax losses that occur are commensurate with the distribution effects resulting from the acceleration of digital payments.

The initiative to provide free entry to certain cultural sites in Yogyakarta if Malaysian tourists are able to show proof of payment using QR cross border at offline merchants in Yogyakarta (minimum transaction of IDR527,000 or the equivalent of RM152,73 with an exchange rate of 1MYR = IDR 3352.11 per March, 29th 2024). The consideration for determining a minimum transaction that is not as high as the tax refund policy is to ensure that Malaysian tourists can take advantage of QR cross border from the time they arrive from the airport to the hotel before continuing their trip to selected cultural sites.
The author considers that by providing free entry to certain cultural sites in the Yogyakarta, it will provide incentives to carry out retail transactions in the Yogyakarta because it requires proof of receipt for using QR cross border in the Yogyakarta. The stages of implementation of this policy are technically described as figure 3.

In practical, the determination of tourist attractions that receive free entry claims will be determined by the Regional Government and a number of institutions related to tourism (Dora & Frleta, 2016). Furthermore, this policy can be combined with the tourism triangle future network policy which will be explained in the next point. The author categorizes this policy as a medium-term initiative because this policy still requires collaboration with the tourism triangle future network as regional interconnection policy which will be explained in the next point. The limitations of this policy initiative are of course related to inter-institutional integration which requires adaptation time of at least the next 1-3 years. Apart from that, the complexity of determining categories of tourist attractions that provide free entry needs to be arranged in such detail to ensure that this policy does not harm the operations of the tourist attractions concerned.

The concept of a tourism triangle future network called Anagata Pasagi Telu is a concept suggested by the author to cluster tourism activities for tourists originating from Malaysia based on Integrated Tourism (Jannah et al., 2018). Anagata Pasagi Telu is a combination of Sanskrit and Javanese, where Anagata means future in Sanskrit and in Javanese Pasagi telu means triangle (Wikipedia, 2023).
In general, the Anagata Pasagi Telu concept is a form of integration between airports, hotels and tourist attractions. The city of Yogyakarta, which is the epicenter of growth for the Yogyakarta, is still a strategic point to support tourism activities in the Sleman Regency, Bantul Regency and Gunung Kidul Regency. The Anagata Pasagi Telu concept will create an even distribution of income distribution from the tourism sector in Yogyakarta, namely Kulon Progo Regency which gets income from the airport, Yogyakarta City which supports accommodation facilities from this concept, and Bantul Regency, Sleman Regency, and Gunung Kidul Regency which gets benefits from visiting tourist attractions.

In its development, in the long term the concept of anagata pasagi telu can be developed in synergy with the Joglosemar concept which was initiated by the Ministry of Tourism and Creative Economy of the Republic of Indonesia (2022), where Borobudur becomes a tourist icon in this concept, but the city of Yogyakarta remains the epicenter of growth of this concept and remains involving 3 (three) satellite areas namely Sleman Regency, Bantul Regency, and Gunung Kidul Regency with the New Yogyakarta International Airport in Kulon Progo Regency being a complement to airport infrastructure.

Anagata Pasagi Telu can concretely answer the behavior and needs of Malaysian tourists who really like heritage-based tourism and this concept is in accordance with the 2023-2027 RPJMD, the Government's desire to encourage quality tourism activities in Yogyakarta (DIY Province Regional Government, 2023). This policy aims to make it easier for Malaysian tourists to prepare for their trip in Yogyakarta, distribute income from the volume of QR cross border transactions in 3 satellite districts in Yogyakarta, incentivize Malaysian tourists to concentrate accommodation in the city of Yogyakarta as the heart of Anagata Pasagi Telu to facilitate access to the 3 satellite districts (The categorizes this policy as a long-term initiative because this policy still requires additional coordination with the ranks of the Ministry of Tourism and Creative Economy, DIY Provincial Bappeda, DIY Provincial Government, and other related institutions).
4.2. Focused Group Discussion
Based on a focus group discussion conducted with KPw BI DIY, ISEI Yogyakarta, Academics, and GIPI by following the provision the following results were obtained:

a. For tourism actors, time is needed to implement the results of this research because there are several problems in the field, Malaysian tourist culture which is quite sensitive to price issues requires careful planning and involvement with tourism network actors, both hotels, merchants, culinary delights, tourist attractions, etc. to provide a balanced market share in implementing this policy.

b. For academics, comprehensive support is needed in the adoption of technology and digital financial literacy such as in the use of QRIS, QR Cross Border and can support the momentum of increasing Malaysian tourists in DIY Province by conducting workshops or training for MSMEs in Yogyakarta.

c. For the DIY Provincial Government and the Regency/City Governments in DIY Province, improvements are needed to the tourism infrastructure in DIY and the need for development that is interconnected with the JOGLOSEMAR area which is strengthened in 6 lotuses to strengthen the length of stay to support quality tourism and mapping of tourist characteristics who visited Yogyakarta to make things easier for tourism actors in the field.

d. For KPw BI DIY and Bank Indonesia, concrete support is needed, especially in internet network infrastructure if you want to maximize the use of QR cross border in

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**Figure 6. QR Cross border Transaction Roadmap in the Anagata Pasagi Telu Framework**

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1. Payment for airfare and extra baggage
2. Payment for food, drinks, and souvenirs on the plane
3. Payment for immigration services (tax refund)
4. Optimizing the use of QRIS at merchants at the airport
5. Payment for travel and tour agent accommodation
6. Payment for airport train tickets
7. Parking and valet parking payments

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1. Payment or settlement of hotel rooms
2. Payment for service and extra services (extra bed, early check in cost, etc)
3. Payment for other hotel facilities (lounge, cafe, swimming pool, spa, etc)
4. Giving tips to hotel staff and employees
5. Payment for valet parking services
6. Merchant Payments around the hotel
7. Payment of infaq at the mosque/musholla

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1. Purchase tickets and rentals at tourist objects
2. Payment for tour guide services or supporting services for tourism object facilities
3. Merchant Payment for food, drink, and transportation around tourist attractions
4. Payment for purchasing merchandise/souvenir
5. Payment for rest rooms/parking in tourist area
6. Payment of infaq at the mosque/musholla

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Yogyakarta and aggressive steps are needed to penetrate QR cross border at all MSME merchants in DIY Province as well as in the tax scheme Refunds require integrated coordination with stakeholders.

e. For researchers, improvements are needed in the triangular framework pattern "anagata pasagi telu" because the availability of infrastructure is still not good in that range and it is necessary to evaluate the scheme of the cooperation plan between Malaysia-Indonesian tourism actors, namely B-to-C or C-to-C.

5. Conclusion and Recommendation

Tourism practitioners in Yogyakarta feel helped by the adoption of the payment system, namely QRIS, QR cross border, or QRIS Tuntas, but there are several notes, namely infrastructure in tourism areas, both tangible and intangible. Improvement of physical infrastructure and sky infrastructure (internet network) requires improvement and support from policy makers because it is closely related to the profits of tourism actors, most of whom are MSME players (Jing et al., 2022). Tourism incentives and strengthening future tourism networks are needed to provide a significant increase in the income of tourism actors, because the existence of tourism incentives provided by the Government will help increase consumption from tourists which will result in quality spending (quality spending) and improving the tourism network will make it easier connectivity in accessing various tourism objects that can withstand the length of stay of tourists which will encourage quality tourism.

Recommendation from this study state that the concrete support is needed from the Government to make improvements to the tourism infrastructure network and Bank Indonesia as a provider of the QRIS, QR Cross Borders and QRIS Complete payment systems so that they can generate maximum income for tourism players who are dominated by MSMEs. The government needs to provide incentives and strengthen the tourism network, namely by strengthening within the "JOGLOSEMAR" framework to produce quality spending and increase the length of stay by making Yogyakarta the epicenter of growth so as not to lose the momentum of increasing economic growth in Yogyakarta. For further research, it is necessary to refine quantitative research with adequate analytical tools to measure the impact of implementing the QR Cross Border policy in Yogyakarta by paying attention to the factors of increasing community income (stakeholders) and increasing regional income.

References


