## PAPER • OPEN ACCESS

# ICT-based border detection between Indonesia and Singapore

To cite this article: F Danny et al 2020 J. Phys.: Conf. Ser. 1469 012092

View the article online for updates and enhancements.



# IOP ebooks<sup>™</sup>

Bringing together innovative digital publishing with leading authors from the global scientific community.

Start exploring the collection-download the first chapter of every title for free.

IOP Conf. Series: Journal of Physics: Conf. Series **1469** (2020) 012092 doi:10.1088/1742-6596/1469/1/012092

# ICT-based border detection between Indonesia and Singapore

F Danny<sup>1,\*</sup>, H C Dewi<sup>2</sup>, N B Febi<sup>2</sup>, D P Aprillia<sup>2</sup>, G H Goan<sup>2</sup>, N C Julie<sup>2</sup>, W Gustini<sup>2</sup> and A Alia<sup>3</sup>

<sup>1</sup> Marine Engineering Department, Darma Persada University, Jakarta, Indonesia <sup>2</sup> Mandarin Language and Culture Department, Darma Persada University, Jakarta, Indonesia

<sup>3</sup> English Language and Culture Department, Darma Persada University, Jakarta, Indonesia

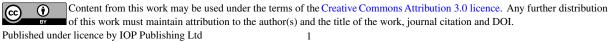
#### \*fdanny30@yahoo.com

Abstract. The high intensity of Batam and Singapore transportation cannot be separated from the Chinese population of Batam which is a community group in the city of Batam. The existence of Batam Chinese has been going on for centuries, since they came from mainland China using boats. With tenacity, social networks and geographical proximity to Singapore, Batam Chinese people become dominant in the economy in Batam. This study seeks to show maritime aspects and shipbuilding technology and their relationship with social society through transnational concepts. With globalization, and to develop networks, people really need sea transportation to support the transnational process.

#### 1. Introduction

In an increasingly interconnected world, understanding the formation of a transnational orientation is very important; especially how people view the transnational world and the social distance between countries and regions. Some modernization theories predict the trends in a global convergence, arguing that socio-economic development will ultimately lead to diffusion and global cultural support (e.g., family and gender values) across geographical boundaries and countries. It is also said that increasing transnational activities such as trade and cultural exchanges, economic interdependence, and population mobility can help blur the borders of countries, reduce social distance, create a world society, and bring people from various countries and regions closer [1].

Hannerz describes four groups of people who are actively engaged in the transnational flow of culture and who, in some constellation or other, give cities their 'global' character [2]. These are (1) 'transnational business', involving high waged, highly skilled professional, managerial and entrepreneurial elites usually associated with finance, banking and business services; (2) 'Third World populations', comprising low-waged immigrants who occupy insecure niches in the unskilled or semiskilled sectors of the urban service economy; (3) 'expressive specialists', who participate in the cultural scene in areas such as art, fashion, design, photography, film-making, writing, music and cuisine; and (4) 'tourists', who are present in considerable numbers, attracted by the cosmopolitan intensity of the global city. According to Ahwa Ong, transnationalism takes its form through elements of family ethics that form the basis of paternal ties and the role of global markets and economic production which includes strategies to build channel for the sources of global capitalism [3]. Hannerz describes four groups of people who are actively engaged in the transnational flow of culture and who,



International Conference on Innovation In Research	IOP Publishing
IOP Conf. Series: Journal of Physics: Conf. Series 1469 (2020) 012092	doi:10.1088/1742-6596/1469/1/012092

in some constellation or other, give cities their global' character [2]. These are: (1) 'transnational business', involving high waged, highly skilled professional, managerial and entrepreneurial elites usually associated with finance, banking and business services; (2) 'Third World populations', comprising low-waged immigrants who occupy insecure niches in the unskilled or semiskilled sectors of the urban service economy; (3) 'expressive specialists', who participate in the cultural scene in areas such as art, fashion, design, photography, film-making, writing, music and cuisine; and (4) 'tourists', who are present in considerable numbers, attracted by the cosmopolitan intensity of the global city.

Indonesia sea waters besides as a link among cities and island, also among countries. As the border in Sumatera Island, Batam as a bridge between Indonesia and Singapore. Geographically, Riau Islands consisting of cluster larger and small islands and each other connected by waters. Several islands relatively large of them are named Bintan Island where located the capital of province is Tanjung Pinang. Batam Island that was the center of the development of industry and trade, Rempang and Galang Island which is a region extension of territory industry of Batam, Karimun Island, Kundur Island, Lingga Island, Island of Bunguran in Natuna, and cluster of Anambas Island. Transportation is a means of supporting mobility, where people can use the facilities in Batam public transport as taxi, buses, and motorcycles taxi. Besides transport, Batam that is also the islands regions, sea transport is one of the important transportations connected all the islands. The use of sea transportation connecting Batam with islands around and with neighboring countries as Singapore and Malaysia, make development and transport enough, as the ship ferry (ship crossing between countries).

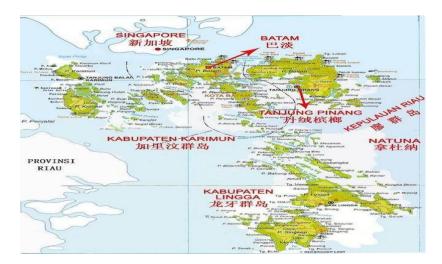


Figure 1. Maps of Riau Islands [4].

The transnational concept is a form of social network. In this case, transnationalism is seen as a social network between Chinese in Batam and Singapore. The relation between Batam and Singapore covers many sectors, including tradition, economy, trade, and other social activities. In the tradition of transnational network between China and Batam in terms of Chinese temples, the Chinese' transnational temple network interlinks all temples in the foreign countries and in China itself. This network deals with the temples' lineages and their spread abroad. These temples have ancestral gods and local deities to form bridges between Chinese abroad and China. As Tan Chee-Beng said that, in his analysis of the Guangze Zunwang temple in Nan An, South Fujian, the god Guangze Zunwang is very popular among Minnan people who generally migrated to Southeast Asia, Indonesia, Malaysia, and Singapore [5].

A number of family associations in the Southeast Asia organize the pilgrimage to the original temples in China. The local relationship and ancestral gods are not only the symbols of trust but also the relationship between China and other countries. The Chinese immigrants, like other migrants, remain in their traditions and beliefs even though they have migrated crossing geographical boundaries and living International Conference on Innovation In Research

IOP Conf. Series: Journal of Physics: Conf. Series 1469 (2020) 012092 doi:10.1088/1742-6596/1469/1/012092

in a new place because such traditions and beliefs have been inculcated. Both aspects have characterized their Chinese identity. The Chinese people in Southeast Asia re-establish their Chinese religious traditions and transnational networks that contribute to the trans-nationalization of traditions and beliefs. Chinese people in Southeast Asia generally carry popular deities from the area where they migrate. Thus, the temples in cities such as Penang, Singapore, and Jakarta have gods from various villages and districts in Fujian and Guangdong as well as from other provinces in China and Taiwan. Singapore as one of many parts of Southeast Asia becomes the meeting point of gods from various locations in the mainland of China.

#### 2. Methodology of research

The method used in this research was the qualitative descriptive method. The data gained from literature study and also field study. Field study was going to Batam ferry terminal in Sekupang and also in Harbour Front, Singapore. Field study also went to the temple in Batam and Singapore.

#### 3. Results and discussion

The first generation of Chinese in Batam had existed since the 18th century. Most of them worked as fishermen. Later on, some of them worked in the forestry sector in rubber gardens, traders, and business owners. Batam Island is very close to Singapore, and is a very strategic place for trading and fisheries. At present, Batam Island has developed into an industrial area [6]. With the existence of Chinese in Batam, it certainly brings Chinese traditions and cultures, for example the Chinese beliefs or religions that believe in gods. The Chinese temple in Batam is the Samudra Dharma Temple (shui kou dabogong

水口大伯公 or known as the Cuikao Pekong Temple in Tiban Mentarau. In addition to being a worship place, the Buddhist education center becomes the tourist destination from Singapore. From 1990 to date, this temple is established as a form of thanksgiving to gods or pekong bumi that are worshiped by the traders; also known as the god of wealth.

The oldest temple in Batam is the Tua Pek Kong temple or Dabogong (大伯公) in Windsor, Nagoya area. The temple was established in 1970 and its position is located in the middle of the city, always crowded with visitors. This temple is also known as the Budhi Bhakti Tua Pek Kong Bio Temple. Aside from being a worship place, this temple is also a tourist destination from Singapore, Malaysia, Thailand, China, Korea, and Japan to ask for sustenance. Moreover, the location is very strategic from Hang Nadim airport, approximately 30 minutes and from the Batam International ferry port about 15 minutes.

Similar to the temples in Batam, the temples in Singapore become the destination of Chinese people of Batam both for worship and for vacation. Seng Wong Beo Temple (Ducheng Huang Miao 廟 古 隍

都城) is located at Tanjong Pagar aged 111 years old. This temple is visited by many people from outside Singapore, especially the Chinese people of Batam. This relatively old temple is the only temple in Singapore that still retains one form of Chinese tradition, namely the marriage of spirits.

In addition to the Seng Wong Beo temple, there is still the Thian Hock Keng temple or Tian Fu Gong temple (天 福 宫). This temple is the oldest temple in Singapore dedicated to the Goddess of the Sea, Mazu. This temple was built in 1839 as an expression of gratitude to the goddess of the sea, Mazu who gave protection to the Chinese when migrating from South China. This is a temple of Hokkien people as the majority people of South China who migrated to Southeast Asia. This temple is the center of religion and also the center of social, economic activities because it is a meeting place for traders, Minnan businessmen and also meeting points or centers of organization for Minnan people. This temple becomes a haven for Chinese people who have just arrived from the mainland China or who want to return to China. To date, this temple is not only a place of worship for Minnan people. Thian Hock Keng continues to preserve its traditions and cultures in the middle of Singapore's advancement, without forgetting the roots of its ancestral cultural traditions.

By looking at the four temples, two in Batam and two in Singapore, they show the concept of the trans nationalization network of the Batam and Singaporean Chinese, and vice versa. Visiting these

International Conference on Innovation In Research

IOP Conf. Series: Journal of Physics: Conf. Series 1469 (2020) 012092 doi:10.1088/1742-6596/1469/1/012092

**IOP** Publishing

temples is for the sake of not only worship, but also social networking among the people involved in the trade. The temples can represent their respective functions as religious, social, and economic places as well as traditions and cultural centres. Every major ceremony or temple festival, such as Chinese New Year, Cap Gomeh celebration, and temple celebration, is always visited by many visitors both from inside and outside the region. The temples are located in the center of the city or close to the center of trade and display attractions or cultural performances that attract tourists such as Chinese puppet shows, lion dance, music, Cap Gomeh parade, and other festivals. All of these events require sea transportation that represent the process of trans nationalization.

Below is an example of a ferry crossing terminal from Batam to Singapore:

## 3.1. Sekupang ferry terminal, Batam

Sekupang is a terminal ferry new renovated by the government. The port was also used for one of the tourisms in Batam. The port serving defections international to Harbor Front terminal ferry in Singapore.



Figure 2. Sekupang ferry terminal.

# 3.2. Harbor front ferry terminal, Singapore

The port is the busiest sea port in Singapore, because here most passengers from Batam, Tanjung Balai Karimun, Tanjung Pinang and cruises down, before entering Singapore. Located in front of the island of prosperity, where Sentosa Island is tourism island, where there are various tourist entertainments ranging from resorts, hotel, a golf course, aquarium underwater, the beach and more including Universal Studios. On the harbor is port front of the busiest container in Singapore. Nearby there are also of the mosque relic Johor, that there are tombs royal descent Johor that one time when the Singapore by their kingdom. Harbor front itself is were mall that sell various trinkets, starting from the clothes, electronic, food lawful and others, so port harbor is the front fused and are in a mall.

IOP Conf. Series: Journal of Physics: Conf. Series 1469 (2020) 012092 doi:10.1088/1742-6596/1469/1/012092



Figure 3. Harbor Front terminal ferry, Singapore.

Schedule departure ferry and the ticket price:



Figure 4. Schedule shipping ferry of All Port Batam–Singapore.

### 4. Conclusion

The concept of trans nationalisation network of the Batam and Singaporean Chinese involves the activities of Batam Chinese who visit Singapore, and vice versa. By visiting these temples which are not only places of worship, they use it as a place for social networking among the people involved in the trading. The temples can represent their respective function as religious, social, and economic places, as well as traditions and cultural centres.

#### References

- [1] Yang Hu 2018 Attitudes Toward Transnational Intermarriage in China Testing Three Theories of Transnationalization *Demographic Research* **37** pp 1413-1444
- Hannerz U 1993 When culture is everywhere: Reflections on a favorite concept *Ethnos* 58 1-2 pp 95-111
- [3] Ong A 1997 Chinese modernities: narratives of nation and of capitalism *Ungrounded empires: The cultural politics of modern Chinese transnationalism* pp 171-202
- [4] http://www.indonesiatravelling.com
- [5] Chee-Beng T 2015 Commensality and the Organization of Social Relations Commensality: From

**IOP** Publishing

IOP Conf. Series: Journal of Physics: Conf. Series 1469 (2020) 012092 doi:10.1088/1742-6596/1469/1/012092

*Everyday Food to Feast* 13[6] Sutrisno E 2006 *Tionghoa Batam: Before and Now* (Batam Link Publisher)