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Study on Optimum Peripheral Business Model in Pengerang, Johor

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Abstract: The study discloses potential numbers of business models that could be instigated by the Pengerang people who keen to venture as peripheral traders. Secondary sources of data have been used due to the limitation and obstacles in collecting primary data. This paper indicates the optimum peripheral business model that can be potentially executed.

Keywords: Peripheral business, Demand and supply, Household expenditure, Business model

1. Introduction

The development of Pengerang Integrated Petrochemical Complex (PIPC), the largest petrochemical complex in Malaysia is expected to create over 50,000 new job opportunities throughout its development stages. The whole development of PIPC will see a total estimated investment of approximately RM 120 billion and is expected to boost Malaysia's Gross National Income (GNI) by an additional RM 20 billion by 2020. The mega project is also projected to create close to 9,000 new job opportunities for the local population and improve Pengerang's socio economy immensely once completed. "A balanced, sustainable and economically, as well as socially beneficial development like such will help Malaysia achieve its high income status in line with Malaysia's Vision 2020," says a reliable source close to the Johor State Government (UPEN).

At present, two committed investors, Malaysia's Dialog Group and PETRONAS have started ground work to develop their facilities at PIPC. Dialog Group Berhad, a company which is listed on the Main Board of the Malaysian Stock Exchange is currently developing its Independent Deep-Water Petroleum Terminal (IDPT) under a three-party joint venture with Dutch-based Royal Vopak and State-owned State Secretariat Incorporated. Its IDPT is being constructed in phases over 500 acres of reclaimed land and its Phase One development is expected to meet completion timeline for commissioning as early as February 2014.

All nations around the world have long felt the impact of economic development. A dramatic reduction of land, together with all their valuable income resources, has resulted in problems that permeate the rural society. The development will.

From the above statement, it's vital to all stakeholders; either from government or non-government bodies to support and seriously take part in developing peripheral business setting up for Pen Gerang community and at the same time, manage to pursue a long-term economy development. Therefore, this research believes there was a vast potential in planning for Pen Gerang residents particularly to take hold of the opportunity. The primary goal for this research is to develop framework to determine the optimum business model for peripheral business in Pen Gerang, Kota Tinggi, and Johor.

To achieve the state research goal, several objectives are developed:

1. To investigate the population and demographic of Pen Gerang.
2. To measure the income level of the target group based on household income.

Definitely have an impact to surrounding community. Traditional ways of earning a livelihood on crops or stock provide the primary sources of income (Sunaidin San Ka Chan, 1997). To stimulate these marginal economies, it has become inevitable for rural regions to seek alternative income for local resources. Many studies previously had indicated that despite positive impact of the development, their important roles and contributions knowledge in the development and natural resource management have been recognized (Pulido and Bocco, 2003; Karjala and Dewhurst, 2003; Musliwa, 2002; Loomis, 2000; Earth Summit, 1992).

Resources, communities and authorities serve very important roles in economy development (Tsaur et. al., 2006). Theoretically, a successful business is central to the dynamics among these three stakeholders such that each makes positive contributions to the others (Ross and Wall, 1999). The impacts of PIPC development in Pen Gerang had resulted some communities and other stake holders lost their income because of their lands and houses had been sold to the PIPC developers and to enable them in earning livelihood income to substitute their traditional ways of earning, the state government under Economic Planning Unit (EPU) has assigned UniKL to conduct a research study in determining the optimum peripheral business which could be explored by the community that affected due to the development of PIPC in Pen Gerang, Kota Tinggi, Johor.

This research is embarked in respond to the issue stated as to investigate the optimum business model that could be established in Pengerang, Johor. Any changes in communities, social and environmental dimensions influence the business model because these three dimensions influence each other.

- 1.To identify the household expenditures that spending for peripheral business items in Pen Gerang.
- 2.To determine the major group of items or expenditures that most linked to market demand.
- 3.To recommends the optimum business models under peripheral business in Pen Gerang.

This research will focus on the process involve in preparing the strategy framework for determining the peripheral business model in Pen Gerang. Hence, it will not cover the implementation, monitoring and the post effect of the process (or impact assessment study). The research scopes are as follows:

1. Carry out a literature review on current or ongoing market development plan which have a similarity in this country or abroad. This revision will cover the feasible concept of market demand, concept and characteristics of optimum market target and some examples of peripheral business indicators that already been implemented worldwide as to develop the optimum peripheral business model.
2. Conduct a literature review to portray a business (or growing one) is identifying the demand profile of the peripheral business in Malaysia and selected study areas. The description will covers the background and history of peripheral business, economic indicators and their development challenges.
3. Develop a set of viable indicators for market demand based on input from literature studies.
4. Based on data gathering, the researcher Location of the customer's resident. The places that then will analyze the population and related agency characteristics of the study area. The analysis will also cover various aspects such as total population, household income level, major group of retail items and household expenditures.
5. Make a conclusion base on analysis of customers' buying patterns. For example, if the overall level of market demand related to peripheral business model.
6. Propose the optimum business model that could be explored by existing and new players in Pen Gerang.

2. A Review of the Literature

Consequently to develop business model we have to know the marketing target is about attracting customers who will buy what you're selling. And acquiring that kind of knowledge requires some research and planning on your end. (Kurtz and Dave, 2010). Marketers have outlined four basic strategies to satisfy target markets: undifferentiated marketing or mass marketing, differentiated marketing, concentrated marketing, and micromarketing or niche marketing. (Baker and Michael, 2008). Prior to the 1960s and 70s, most American adults— depending on their gender—more or less followed a similar life script. For men, it was to join the military or go to school, get married,

start a career, have kids and then, after 30 years with the same company, retire with a nice pension and a gold watch. Their wives stayed at home and did the real work of running a household and raising kids. For businesses back then, marketing was easy.

If you were a small business, you knew all of your customers by name. And if your company was big enough, it had only a few marketing options: place an ad in the local newspaper, or in one of a handful of national magazines, or on one of three broadcast TV networks. From a marketing perspective, people were dependable. Blame it on the Beatles or disco, but by the early 1980s everything had changed. Advertisers came up with what they called “generational marketing”—instead of defining everybody by gender and stage of life, they began to consider things like demographics and socio-economic factors when targeting customers. (Cohen A. Wiliam, 2005). Structure and growing the business by putting the plan for world domination into action are very vital. Once demand is identified, then begin targeting the people who will pay for all of the products. Target market can be broken down into four “who, where, why and how” components:

Demographics: The “who” Who needs the product or service? Include basic demographic details such as age, gender, family size, educational level and occupation. Geographic: The “where” customers can be found (i.e., their zip code), and be sure to learn details like the size of the area, its population density, and its climate. Psychographics:

The “why” Reasons for customers decided to make the choices. This is personality and lifestyle information that will help researcher to figure out the customers buy a product, it could figure out how much of product they need and how often they need to buy it. Also consider what benefits will be provided over the competitors, and the customers loyalty. Behaviors: The “how” Customer’s behaviors in buying the products to fulfill a need how do they regard that need? How do they regard the product? How much information do they have on this need or how the product fulfills it, and what are their information sources? (Kurtz and Dave, 2010).

At the bare minimum, the things that the business player should know about their customers is their customer gender because in the 21st century, women and men still make very different purchasing decisions for a variety of complex reasons. Other important things that are the age of customers, interests or hobbies, living place, money, their lifestyle and purchasing power. Find out the degree of disposable income within the community whether residences are homes rented or owned, Means of transportation. Do prospective customers in the area own vehicles, ride buses or bicycles, and so on? Does the community consist primarily of young people still approaching their prime earning years, young professionals, empty nesters or retirees, family status? There lots of families in the area or mostly singles or married. Customer’s leisure activities and type of hobbies and recreational activities do people in the community participate in? The target customers are those who are most likely to buy the product. (Homburg et, al., 2009).

Retail marketing has most of the same goals of commercial marketing, but its scope is limited to retail products. Examples of retail items include clothing, phones and other electronic gadgets, books and computer games. Retail marketing also focuses on selling to individuals instead of wholesale customers. David Gilbert, author of the book “Retail Marketing Management,” explains retail marketing orientation is most effective when the business aligns its product with the group of consumers most willing to buy it. One of the best marketing techniques for retailers is to hold events or parties at the store. This can be anything from a grand opening party to a charity event to a special customer appreciation day. Depending on your retail business, you may also opt to hold educational events or classes in your store. For example, if you own a beauty supply store, you could hold regular makeup application or hair design classes. Whatever the event, make sure your products are the main attraction. Getting people in your doors is the hardest part of making a sale. Retail marketing is the range of activities undertaken by a retailer to promote awareness and sales of the company’s products. This is different from other types of marketing because of the components of the retail trade, such as selling finished goods in small quantities to the consumer or end user, usually from a fixed location. Retail marketing makes use of the common principles of the marketing mix, such as product, price, place and promotion. A study of retail marketing at university level includes effective merchandising strategies, shopping and consumer behavior, branding and advertising. Retail marketing is especially important to small retailers trying to compete against large chain stores. (David, 2003).

3. Results and Discussion

Social sciences research methods can loosely be described as either positivist or interpretivist but it is arguably more useful to think of the various approaches as existing on a spectrum between the fully quantitative (positivist) and the fully qualitative (interpretivist). Many authors (e.g. Bryman, 19; Brannen, 1992) have discussed the differences between the two approaches. Because the research related with the community population in certain areas usually using interpretivist is more appropriate.

3.1 Research Framework

Generally the design of the research divides into three areas. The figures 1 illustrate the scope of this research.

Figure 1: Research Framework (Determine Optimum Business Model for Peripheral Business in Pengerang, Johor)

The primary objective of this research is to discover the optimum business model for peripheral business in Pen Gerang. The collecting data was limited to secondary because of the restraint made by EPU due to uncertain circumstances. The data collection is concentrated to secondary data which is revealed from the government and non-government agencies. In determining the peripheral business model in Pen Gerang researcher has divided the target group into two major categories; (1) Pen Gerang permanent neighborhood/Resident and (2) The in-coming or migration of Oil and Gas workers.

Chart 1: Total population of Pengerang, Kota Tinggi, Johor, 2010 (Target group of market demand)
(Source: Department of Statistics Malaysia, UPEN, Majlis Daerah KT)

1.1 Pengerang permanent resident.

The data analysis in chart 1 above revealed that the total number of population in 2010 in Pengerang are 15, 169 peoples and by races strata turn into total 12, 521 is Malays/Bumiputera, 1, 530 Chinese, Indian 26 whilst 26 is other and non-citizen is 1, 063 peoples. It is showing the higher number of market demand were dominated by Malays/Bumiputera followed by Chinese, Non-Citizen, Indian and other. These finding having a significant value in way to determine optimum business model.

Chart 2 : Total Population Pengerang, Kota Tinggi, Johor, (2010-2020) (Ave. Growing 1.13%/year) Target Group of Market Demand Source : Department of Statistics Malaysia, UPEN, Majlis Daerah KT

Based on national average population growing which is 1.13%/year, in chart 2 above revealed that the total number of population in 2010 in Pengerang are 15, 169 compared to year 2013 is 15,683 and the total population forecasted for year 2016 is 16,215peoples. Whilst for the year of 2019 is expected to increase to 16, 765 population and for year 2020 around 16, 954 population in Pengerang. The higher target group of market demand by races strata turns into Malays/Bumiputera followed by Chinese, Indian non-citizen and other. It is showing the higher number of market demand were dominated by Malays/Bumiputera followed by Chinese, NonCitizen, Indian and other.

1.2 The in-coming or migration of Oil and Gas workers to Pengerang, Johor.

Chart 3: Oil and Gas workers in Pengerang, Kota Tinggi, Johor, 2013-2020 (Source: Petronas, UPEN and JPDC)

Chart 3 above revealed that the total number of oil and gas worker at Pengerang, Johor by the year 2013 to 2016 will be 50,000 workers and upon completion of the plant construction expected by year 2017 the number of workers will be decreased to merely 12,000 workers respectively. The findings stated the target group of market demand during the early commencement of plant construction the total number of workers is on higher stage but it will be decreased gradually by the year 2016-2017.

1.3 Median age of head of household aged 20 years and over by Johor State, Malaysia 2010.

Table 1: Median age of head of household aged 20 years and over by Johor State, Malaysia 2010.

Average household size	Median aged of head > 20year old
4.1 orang	45.9 Tahun

Table 2 : Total Population Pengerang, Kota Tinggi, Johor by age group, 2010

Mukim		Jumlah	0 - 4	5 - 9	10-14	15 - 19	20 - 24	25 - 29	30 - 34
Pengerang		1 5,169	1,201	1,409	1,346	1,265	1,201	1,378	1,037
35 – 39	40 - 44	45 - 49	50 - 54	20 - 24	25 - 29	30 - 34	55 - 59	60 - 64	65 - 69
806	535	632	1,119	1,201	1,378	1,037	1,439	1,074	368
70 - 74	75+								
123	236								

Source: Department of Statistics, Malaysia, UPEN, Majlis Daerah KT

Table 1 viewing the target group on the average of households size is 4.1 persons in the year 2010 whilst median age of head of households aged 20 years and over at age 45.9 year old. It was revealed in table 2 that the higher ranking of age group was dominated between ages 55 to 59 years old with the total of 1,439 persons and followed by age group of 25 to 29 with total of 1,378 persons.

1.4 Percentage of workers by profession in Malaysia, 2010

Table 3: Average workers by profession between age 15-64 Mengikutpekerjaan, Malaysia, 2010

By Profession	Percentage
Pengurus/Managers	5.1
Profesional/Professional	9.2
Juruteknik dan profesional bersekutu Technician and associate professional	10.0
Pekerja sokongan perkeranian Clerical support workers	9.1
Pekerja perkhidmatan dan jualan Service and sales workers	19.3
Pekerja mahir pertanian, perhutanan dan perikanan	7.5
Pekerja kemahiran dan pekerja pertukangan yang berkaitan Craft and related trades workers	9.6
Operator loji dan mesin serta pemasang Plant and machine-operators and assemblers	11.7
Pekerjaan asas Elementary occupations	12.2
Tidak diketahui Unknown	6.2

Table 3 discovered the target group of market demand in Pengerang by percentage of workers between age 15 to 64 years old by profession in Malaysia for the year 2010. Workers in sales and service had recorded the higher ranking with 19.3% whilst elementary occupations recorded 12.2%, plant and machine-operators and assemblers is 11.7%, technician and associate professional 10%, craft and related trades workers 9.6%, professional for 9.2%, clerical support workers 9.1%, Agriculture, forest and fishing-men 7.5%, second lowest recorded by unknown workers 6.2% and the lowest is Managers 5.1%.

1.5 Average household income of the target group

TARGET GROUP INCOME (COUNTRY)

Table 4: Average monthly household income and average annual growth rate, Johor, Malaysia 2009 dan 2012

COUNTRY	AVERAGE		
STATES	(RM) 2009	(RM) 2012	Average Annual Growth Rates (2009-2012)(%)
Malaysia	4,025	5,000	7.2
Johor	3,835	4,658	6.5

Table 5: Average monthly household income per capita and average annual growth rate, Johor, Malaysia, 2009 dan 2012 (Source: Department of Statistics, Malaysia and UPEN.)

COUNTRY	AVERAGE		
STATES	(RM) 2009	(RM) 2012	Average Annual Growth Rates (2009-2012)(%)
Malaysia	1,168	1,451	7.2
Johor	1,100	1,368	7.3

Table 4 exposed the average household income rate in Malaysia for the year 2009 is RM4,025 whilst for 2012 amounting to RM5,000. Therefore, the average annual growth rate in Malaysia for 2009 – 2012 was recorded 7.2%. Table 4 also revealed the average household income rate in Johor, Malaysia for the year 2009 is RM3,835 whilst for 2012 amounting to RM4,658 and the average annual growth rate in Johor, Malaysia for 2009 – 2012 was recorded 6.5%

Based on table 5, the average monthly household income per capita in Malaysia for the year 2009 amounting RM1,168 whilst for 2012 is RM1,451. Therefore, the average annual growth rates in Malaysia for 2009 – 2012 is 7.2%. Table 5, revealed the average monthly household income per capita in Johor for 2009 is RM1,100 whilst for 2012 amounting to RM1,368. Therefore, the average annual growth rates in Malaysia for 2009 – 2012 is recorded 7.3%.

1.6 Average monthly household income for higher 20% Medium 40% and Lowest 40% by Ethnic Group and Strata for Rural Population Malaysia 2012.

HOUSEHOLD INCOME-TARGET GROUP

Chart 4: Average monthly household income for higher 20% Medium 40% and lower 40% by ethnic and strata. Rural, Malaysia 2012 (Source: Department of Statistics, Malaysia.)

Chart 4 showing that Chinese race has recorded the higher, medium and lowest average monthly household income with RM 8,495, RM 3,667 and 1,615 respectively. Whilst Indian recorded the second average household income with 20% higher RM 7,240, 40% medium RM 3,272 and lowest 40% RM 1,328 respectively. Malays/Bumiputera in third ranking higher and followed by others races. This indicated that Chinese has dominated the higher income 20% medium 40% and the lowest 40% respectively.

1.7 Average monthly household income by gender, ethnic group and strata for rural population, Malaysia 2012.
HOUSEHOLD INCOME – TARGET GROUP

Chart 5: Average monthly household income by gender, Ethnic Group and strata for rural population, Malaysia, 2012
(Source: Department of Statistics, Malaysia)

Chart 5 revealed Chinese male has recorded the higher average monthly household income with RM 3,951 and Indian male recorded RM3,539 per month respectively. It's also showing that Chinese female recorded the higher average monthly household income with RM2,795 and Malays female recorded RM2,368. This shows that both Chinese male and female had recorded the higher average monthly household income, and followed by Indian male and Malays female.

1.8 Market demand by types of expenditures group.

MARKET DEMAND-BY TYPES OF EXPENDITURES GROUP

Chart 6: Average monthly household group expenditures, MALAYSIA, TAHUN 2010 (Source: Department of Statistics, Malaysia)

Chart 6 revealed the substantial finding related to optimum business model in which the average monthly household

expenditures in Malaysia 2010 were recorded the higher expenditure is for houses and utilities with RM 495, foods and beverages RM444, transportation RM327, restaurants and hotels RM239, communication RM124, recreations RM101, decorations and maintainance RM89, clothing and footwears RM75, health RM29, and others RM79. The higher household expenditures, Malaysia tahun 2010 is dominated by houses and utilities and the lowest expenditures was for health expenses RM29. This research had identified that the optimum market demand of peripheral businesses in Pengerang, Kota Tinggi, Johor. The optimum market demand will be contributed by Pengerang residents and oils and gas workers with the total population in 2010 in Pengerang are 15, 169 peoples in which by races strata turn into total 12, 521 is Malays/Bumiputera, 1, 530 Chinese, Indian 26 whilst 26 is other and non-citizen is 1, 063 peoples. It is showing that the higher number of market demand were dominated by Malays/Bumiputera followed by Chinese, Non-Citizen, Indian and other. Based on national average population growing which is 1.13%/year, revealed that the total number of population in 2010 in Pengerang are 15, 169 compared to year 2013 is 15,683 and the total population forecasted for year 2016 is 16,215peoples. Whilst for the year of 2019 is expected to increase to 16, 765 population and for year 2020 around 16, 954 population in Pengerang. The total number of oil and gas worker at Pengerang, Johor by the year 2013 to 2016 is approximately 50,000 workers and upon completion of the plant construction expected by year 2017 the number of workers will be decreased to merely 12,000 workers respectively. The target group of market demand during the early commencement of plant construction the total number of workers is on higher stage but it will be decreased gradually by the year 2016-2017.

Based on the secondary data analysis, correlation both Table 5 and chart 6 revealed that the optimum peripheral business models are likely to be recommended for the Pengerang occupants.

Table 5: Optimum peripheral business model

NO	TYPE OF BUSINESS	BUSINESS MODEL
1.	Merchandise/Retails	Whole Market/Mini Market/Shop h
2.	Dry/Wet products for daily consumption	Night Market
3.	Agriculture foods product	Agro Market (FAMA)
4.	Tourist	Budget Hotel/Homestay
6.	Foods and Beverages	Foods Court/Restaurant/mini food s

Continued research is needed in the areas that discovered. This would be of particular importance to Pengerang residents, where competition levels and their expectation are accomplished.

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