

LOCATIONAL DECISIONS IN A CREATIVE CITY: EVIDENCE FROM PENANG'S ARCHITECTURAL FIRMS

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ABSTRACT

The importance of location has been revisited and reinstated with the emergence of concepts such as "creative economies, creative cities". In a creative city, the defining characteristic is the clustering of creative human talent or the "creative class" to drive growth, progress and economic development. In the literature, selected locations in urban areas function as magnets to attract and retain the creative class. This paper examines the case of Penang's construction industry, which is classified as a creative industry. The paper aims to understand the factors that shape the locational decisions of employers in Penang's construction industry. Both quantitative and qualitative research methods were used to elicit data. Thirty-five architectural firms were surveyed and 16 employers were interviewed. The findings suggest that location is not the main factor that determines where young creative architects prefer to live and work. In fact, Penang is currently facing the critical issue of attracting and retaining young creative architectural talent, as architects prefer monetary gains in larger cities than remaining in Penang. Penang is not perceived as an ideal location for young creative talent to cluster, and this in turn impacts the employers and the industry as a whole. More committed state interventions and a good incentivising system should be in place to reverse the "brain drain" and make Penang an optimal location that attracts the creative class back and drives the construction industry's competitive and creative edge to greater heights.

Keywords: creative city, creative class, architecture, Penang, economic development

INTRODUCTION

The 21st century witnessed the rise of a new economic order that leverages creativity and innovation. "Creativity" is now seen as a new factor of production that creates more sophisticated, high-tech and value-added goods and services (Gabe, 2011). Methods of production, labour processes, industries, firms and even cities are now capitalising on the importance of creativity to drive economic development and growth. For example, a British government blueprint, *The Creative Industries Mapping Document*, has acknowledged the importance of the creative economy for national wealth and noted that creative industries have "moved from the fringes to mainstream economics" [Department of Culture, Media and Sport (DMCS), 2001: 3 as cited in Capone, 2008: 338].

In urban development literature, new terminologies such as "creative industries, creative economies and creative cities" have since emerged to illustrate the emerging importance of these factors in driving progress and growth in cities. Most pertinent of all, creative industries in creative cities are intrinsically linked with the notion of location, and specifically urban locations. At this juncture, emerging and newly industrialised countries within Asia, such as Japan and Singapore, are also aware of the contribution of creative industries and creative cities to the progress and development of their nations. In Singapore for instance, efforts are being increased to exploit the nation's creative industries to be some of the main engines of economic development (Sasaki, 2008; Toh, Choo and Ho, 2003).

In Malaysia, policy rhetoric is moving in this direction as well. In the 10th Malaysia Plan (2011–2015) national blueprint, it is succinctly spelled out that Malaysia's education system is planning to generate creative and innovative human capital for the country's innovation-led and knowledge-based economy (Malaysia, 2010: 81). The blueprint also highlighted the need to enhance quality of life and make cities in Malaysia such as Kuala Lumpur, George Town and Johor Bahru more liveable in order to produce, nurture and compete for global talent (Malaysia, 2010: 237). In Penang for example, the State Government has aspirations to transform the city-state into a creative city inspired by Richard Florida's theories that advocate the role and positive impacts of "location, technology and human capital" (SERI, 2011: 103). Following Florida's arguments, creative cities are places that generate and benefit from the positive spill-over effects of agglomeration economies that Florida terms "the clustering force", which function as a magnet to attract and retain the brightest and most creative talent to drive continuous innovation, creativity and development for a city or nation (Florida, 2008: 57; Lazzeretti, Boix and Capone, 2009).

Although a nascent topic, there is a dearth of research on creative cities in the context of Malaysia, particularly in Penang. Hence, this study is a timely way to fill this huge research gap. As a maiden effort, this article will examine the architectural industry, which is a creative industry in Penang, by exploring the industry's location decisions and the factors that shape those decisions. The following research questions are raised: (1) What are the factors that shape locational decisions of employers in Penang's construction industry? and (2) Why do they choose to locate and concentrate in Penang over other cities in Malaysia? This paper gathered data from 35 architectural firms located in Penang.

In brief, this paper is organised into five sections. The first section is the introduction. Section two reviews two sets of opposing theories related to location, namely, Friedman's "flat world theory" and Florida's "spiky world hypothesis". Subsequently, a general overview of the methodology is outlined in section three before we present the findings and discussions in section four. Section five concludes this article by suggesting some practical and theoretical implications to help shape pragmatic urban planning policies.

LITERATURE REVIEW

Classical Theories of Location: Comparative Advantage

According to the classic free-trade theory of comparative advantage, it has been theorised that nations should produce and trade commodities based on their respective comparative advantages. Nations are encouraged to focus on the production of goods that they have a comparative cost advantage in, and subsequently trade the surplus for items that other nations are more efficiently suited to produce (Todaro and Smith, 2012; Friedman, 2006: 264). This theory was a popular explanation for the geographical location of industries in the 19th and 20th centuries. Based on this theory, two key factors shaped the locations of industries. The decision to locate industries was shaped either by natural resource endowments or the bountiful supply of capital and labour that a nation possessed (Thurow, 1996). As described by Thurow (1996):

Those with good soil, climate, and rainfall specialise in agricultural production; those with oil supply oil. Countries that were capital-rich (much capital per worker) made capital-intensive products, while countries that were labour-rich (little capital per worker) made labour-intensive products.

Put simply, classical location theorists such as Johann-Heinrich von Thunen and Alfred Weber opined that location decisions were shaped and reliant

on accessibility and proximity to physical infrastructure such as railways, roads, ports or natural resources, while "talent" was not a vital component in the equation (Florida, 2008: 102).

However, Thurow later contended that this argument is obsolete in this new era of man-made brainpower industries, where modern industries are utilising fewer natural resource endowments with nations structurally shifting their economies to leverage service and knowledge-based industries such as biotechnology, telecommunications, computers, banking and finance. The conventional production formula has been debunked. The new addition to the production equation now considers "knowledge, innovation and creativity", which are also part of a nation's key competitive advantage (Thurow, 1996; Reich, 1992, 2002). In fact, Thurow affirmatively argued that the 21st century is a period that downgraded and rendered the theory of classical comparative advantage as obsolete. For instance, during David Ricardo's era, goods were valued and tradable while intangible commodities such as services, innovation and creativity were nowhere in the equation (Friedman, 2006: 264). Clearly, as the world today liberalises, notions of competitive advantage will move to the forefront of policy agendas as theories of comparative advantage wane (Porter, 1990).

Friedman's Flat World

In the same vein, contemporary scholars such as Thomas Friedman have contended that the world we live in today is borderless and seamless, hence the irrelevance of place, space and location (Friedman, 2006). In his seminal work "The World is Flat", Friedman highlighted that the pervasiveness of forces of economic globalisation, such as technological advancements and liberalisation of economies, have reshaped labour processes and the way people live, work and play. In a flat world, Friedman argues that people, capital, goods and services are mobile and can move freely across borders as they are no longer constrained by their territorial boundaries. To Friedman, his claim of a flat world inadvertently led to the demise of geography – place, space and location. A flat world liberates us from geography and leaves us free to decide on where to live, work and play. In simple terms, place or location is now irrelevant.

However, Friedman cautions that a flat world is one that heightens competition and emphasises creativity. In sum, the entire globe is now in a competitive mode in which nations, cities and global talents compete amongst themselves to be strategically positioned in today's highly competitive global economy. He further adds that the collapse of the Berlin Wall on 9 November 1989 signified "the new age of creativity" in which a competitive nation is one where creativity reigns supreme (Friedman, 2006: 51). Similarly, the East also observed the rise of China as the nation opened up and integrated into the global

economy. This heralded a new epoch, where the explosion of creativity permeated every aspect of life in China and the world (Sinha, 2008).

Florida's Spiky World

However, Friedman's views of a flat world are not without critiques. Though concurring that the element of creativity is vital for driving growth, scholars such as Richard Florida have challenged and criticised Friedman's "flat-world hypothesis" by suggesting and counter-proposing that the world we live in today is in fact "spiky" (Florida, 2008: 15). Florida opines that in a spiky world, "talent, innovation and creativity" are the most sought after production factors and they are distributed unevenly in the global economy. He further explains that the spikes occur due to the clustering, agglomeration and concentration of creative and talented people in a particular location or what he calls the "rise of the creative class" (Florida, 2002, 2004). Quoting key examples mostly from North America, Florida argues that cities such as Toronto in Canada and major cities such as San Francisco and Seattle in America are leveraging the creative component of their industries to drive growth and progress. This in turn has led to the birth of what he terms the creative city. It is evident in Florida's literature that the notions of creative economy and creative class tend to be linked to urban development.

At this point, it is pertinent to mention that the concept of "cluster" is not novel. Early scholars such as Alfred Marshall purported that the concentration or clustering of firms in a single location would generate external economies of scale in the form of availability of industry-specific skills, lower rates of unemployment and knowledge spill-over due to their close proximity (Marshall, 1966; Peet and Hartwick 2009: 46). Subsequently, in the 1960s and 1970s, Jacobs (1972) asserted the potential of cities to be the main engine of economic growth. Jacobs (1972) elucidated that the concentration, close proximity and diversity of people and activities in a city are vital elements that drive growth and economic development in a city. Building on these theories, contemporary authors such as Florida and Charles Landry have further espoused the concepts of creative economy and creative city, which are now popular policy rhetoric in both developed and developing countries alike (Anonymous, 2004; Lee, 2011; Landry, 2000).

In the books *The Rise of the Creative Class* and *Who's Your City*, Florida purported that creative cities are locations that the creative class will choose to locate in given conducive surroundings that allow them to express their creativity optimally and to spur local economic development (Florida, 2004, 2008). A Creative City also functions as a magnet that attracts other creative people to live and work there. The logic is simple. Florida has introduced the concept of 3Ts – talent, technology and tolerance – a classification that describes a creative city whereby the "clustering force" and close proximity with other creative people

will attract more creative talent to further expand and allow greater flows of creativity and innovation (Florida, 2008: 4; Florida, 2004: 249). Florida argues that creative cities are the locations that most creative, talented and ambitious people need to live, work and play in to display their talent and creativity and achieve their full economic potential (Florida, 2006: 35). Essentially, this whole contention has revisited conventional growth theory that states that the clustering of human capital now surpasses the importance of clustering of firms (Florida, 2004: 221). Creative people tend to select a choice location before thinking of employment instead of vice-versa as in the past. Through his research, Florida managed to extract what creative people value in locations. Amongst them are the availability of multiple employment opportunities, lifestyle, social interaction, diversity (i.e., excitement and energy due to cultural diversity), authenticity/uniqueness, and the identity of a place (Florida, 2004: 223–231). In this study, the factors that determine the location decisions of the creative class as purported by Florida will be adopted and adapted to form the backbone of the questionnaire for this survey as outlined in the methodology section. The next section will provide some brief background on Penang.

Clustering Force and Creativity: The Way Forward for Penang

At the federal and strategic planning level, as encapsulated in the 10th Malaysia Plan (2011–2015), macro policies in Malaysia are focusing on developing cities, cluster-based development and urban agglomerations to spur economic development as the nation develops and modernises. The plan has strategised economic policy to focus growth in locations that guarantee the most potential for economic returns. An excerpt from the blueprint highlights: "Towards this end, priority will be given to building urban agglomerations, focusing corridors around clusters and developing high impact economic sectors" (Malaysia, 2010: 116).

At the state level, Penang is also moving in this direction. According to the Penang Economic Outlook 2011, the findings from a joint study between Khazanah Nasional and the World Bank had highlighted a new driver of growth – cities. The report argues that "it is not nations that are competing with one another but cities. To get growth right, we must get our cities right" (SERI, 2011: 4). Therefore, it is crucial to make our cities more liveable, people-oriented, aesthetically appealing and balanced by a clean, safe and green environment (SERI, 2011: 5). The title of the report, "Positioning Penang: Cities, People and the Economy" aptly says it all and concurs with Jacob's tenets where cities function as engines of economic growth due to the coming together and concentration of diverse people and activities, which creates economies of scale. The three key components of city, people and economy are intertwined to ensure success and growth in a city (Kharas, Zeufack and Majeed, 2010: 90). Without any one component, a city fails to function. The 10th Malaysia Plan has also

urged Malaysian cities to differentiate themselves by showcasing their key characteristics and unique roles to attract talent and investors. Clearly, national and state blueprints have spelled out Penang's aspiration to emphasise and leverage creativity and innovation in transforming itself into a creative economy and then a creative city.

Background: The Construction Industry in Malaysia

In an overview, Table 1 shows that the architectural services in Malaysia grew approximately 2.4 times in terms of gross output value from RM693,686,000 in 2002 to RM1,667,766,000 in 2010 (Department of Statistics, 2016). The number of architectural services establishments also increased almost two-fold during this period, from 732 establishments in 2002 to 1,458 establishments eight years later. Another positive indicator is a 2.3-fold increase in value-added architectural work from RM434,714,000 (2002) to RM1,004,827,000 (2010). In terms of employment, the total number of persons engaged in the industry has increased steadily, from 8,466 persons in 2002 to 11,006 persons in 2005 and 12,544 persons in 2010.

However, when salary per employee is calculated, there has been no salary increase at all. In fact, a decrease has been recorded. The salary paid per full-time employee was RM32,385 per annum in 2002 compared to a decrease of RM31,748 per annum in 2010. This suggests that salary-wise, employees in Malaysia's construction industry, particularly in architectural services, are not enjoying high salaries or wages.

The above scenario of low salary/wages is directly linked to several key and current issues faced by architects in Malaysia today. According to the Malaysian Institute of Architects' (MIA) monthly news bulletin *Berita Arkitek*, it was reported that despite having the Scale of Minimum Fees as a guide for architects, there were some delinquent architects who undercut and contravened the Architect Rules by charging their clients low fees, with no action taken by the Malaysian Board of Architects to penalise them (MIA, 2012: 4). Such an incidence of unscrupulous architects undercutting fees to secure jobs without adhering to the mandatory Scale of Minimum Fees may cause low business volume in the industry and subsequently low salaries and wages to employees.

In addition to this issue, the liberalisation of architectural services in Malaysia is another cause of concern amongst local Malaysian architects. Liberalisation literally means Malaysian architects will have to compete on a level playing field with their foreign counterparts. To exacerbate the situation, competition is already prevalent amongst local architects. As of 2012, there were 1,843 registered architects in Malaysia working in 223 body corporates and 100 partnerships. The remainder, 1,092, were sole proprietors (MIA, 2012: 4). The large numbers of sole proprietors is the cause of stiff competition amongst firms.

Table 1: Principal statistics of architectural services, 2002–2010

Year	No. of establishments	Value of gross output (RM'000)	Value of intermediate output (RM'000)	Value added	Total number of persons engaged during December or the last pay period			Salaries & wages paid (RM'000)	
					Total	Working proprietors & unpaid family workers	Part-time (paid)		
2002	732	693,686	258,972	434,714	8,466	733	7408	325	239,909
2003	914	752,717	292,388	460,329	9,367	887	8057	423	262,208
2005	1,090	981,530	418,281	563,249	11,006	861	9458	687	300,898
2007	1,114	1,134,899	508,851	626,048	11,698	820	9730	1148	309,881
2010	1,458	1,667,766	662,939	1,004,827	12,544	656	11564	324	367,136

Source: Department of Statistics, Malaysia (n.d.)

To counter this problem, there have been calls for sole proprietors to restructure, merge and consolidate amongst themselves to create a critical mass to compete as the industry opens its doors to even more foreign architects on the local scene. Against this backdrop and extending from Khoo et al.'s paper on Penang's architectural industry in 2013, the following sections will discuss methodology and key findings from this study.

METHODOLOGY

This study adopted a mixed method research approach. Both quantitative and qualitative research methods were employed to elicit information pertaining to the employers' decision to locate their firms in Penang. For the quantitative methods, a standard questionnaire was administered to survey all registered architectural firms listed with the MIA (Northern Branch). From the MIA list, the population size (of registered architects) was 92 establishments. The researchers attempted to survey all of them by visiting every establishment on the list. However, despite extensive effort to hand-deliver surveys and subsequently follow up via email and phone call reminders, only 35 firms responded, giving us a response rate of 38%.

In brief, the questionnaire was divided into five main sections. The first section touched on demographic and company details of the respondents. The subsequent sections enquired on why Penang was chosen as a location of choice. To understand the level to which the factors shape their locational decisions, a 5-point Likert Scale was used. The dimensions in the questions were derived from Florida's 3Ts indicator as well as others related to the availability of physical infrastructure and amenities in a city in shaping location decisions (Florida, 2002, 2006, 2008). The dimensions in these three categories were used to gauge the perceptions of the employers using a 5-point Likert Scale ranging from 1 = Strongly Disagree; 2 = Disagree; 3 = No Comments; 4 = Agree; and 5 = Strongly Agree. To determine whether they were truly satisfied with Penang as the ideal location, questions were also framed to ask whether they had intentions to shift out and relocate their businesses elsewhere. Employers were also asked to state the three main issues and challenges they faced when selecting Penang to locate, establish and expand their businesses in. In the last section, questions pertaining to how they viewed and perceived Penang as a successful creative city were gauged through a 5-point Likert Scale.

The entire fieldwork and data collection process lasted nine months. Both quantitative and qualitative methods were conducted almost concurrently. The quantitative survey was carried out from November 2012 to April 2013. Meanwhile, the qualitative component lasted six months from January to July 2013. As part of triangulating the findings from multiple sources and respondents, the questions in the qualitative interview protocol were framed

based on similar themes found in the quantitative survey questionnaire. The following section will discuss the key findings from both of these sources.

FINDINGS AND DISCUSSION

The findings are based on the survey of the 35 firms that responded and 16 qualitative interviews. Generally, this study showed that the construction industry in Penang is gender biased towards men, as illustrated in Table 2. The majority of the respondents were males (88.6%, $n = 31$) with only 11.4% ($n = 4$) female architects. This could be because architecture has been a male-dominated industry for a long time. In terms of age, most of the employers were grouped into the 41–50 years old cohort (43%, $n = 15$) followed by those aged between 51–60 years old (23%, $n = 8$). Despite 60 years old being the nominal age of retirement in Malaysia today, with architecture being a "man-made brainpower industry" (Thurow 1996) that uses more brains than brawn, employees may work beyond this age. As shown in this study, 11.5% ($n = 4$) of employers are aged between 61 and 70 years of age and 5.8% ($n = 2$) are above 70 years old.

The overall educational attainment for the employers was high, with 97% ($n = 34$) of them holding a degree. The majority of them had a bachelor's degree (62.9%, $n = 22$) followed by those with a master's qualification (31.4%, $n = 11$). One of them even held a PhD degree. A large percentage (42.9%, $n = 15$) of the employers were foreign-trained architects from the United Kingdom, America, Australia or Taiwan. Locally-trained architects constituted 25.7% ($n = 9$) of the sample. Though there were firms that were established as early as the 1960s and 1970s, the majority (45.7%, $n = 16$) of them were created during the 1990s. Subsequently, more firms were established from 2000 onwards, 40.3% ($n = 14$). The number of employees engaged in Penang architectural firms ranged from 1 to 60 persons. More than half (68.7%, $n = 24$) of the firms had between 1 to 10 employees, followed by 14.5% ($n = 5$) with 11 to 20 employees. Only a small percentage of 8.6% ($n = 3$) had 51 to 60 employees. As an industry where employees need to be creative and innovative to design new buildings, this paper found that most architectural firms in Penang (85.8%, $n = 30$) had between 1 to 10 creative employees. One firm even had more than 40 employees who were considered creative employees.

In trying to understand whether creative talent is instrumental in shaping their locational decisions, this paper found that more than half (i.e., 57%) of the respondents agreed that Penang had the quantity of creative talent required for their business, as shown in Table 3. Approximately 49% ($n = 17$) agreed and another 9% ($n = 3$) strongly agreed with this point. Similarly, descriptive analysis also showed that a majority of 57% ($n = 22$) of the respondents concurred that Penang is a location with the right quality of creative talent. However, 20%

Table 2: Background of architectural firms in Penang

Background of company	Frequency	Percentage
Gender		
Male	31	88.6
Female	4	11.4
Total	35	100.0
Age		
Below 30	1	2.9
31–40 years old	5	14.5
41–50 years old	15	43.0
51–60 years old	8	23.0
61–70 years old	4	11.5
Above 70 years old	2	5.8
Total	35	100.0
Educational Qualification		
Diploma	1	2.9
Bachelor degree	22	62.9
Masters degree	11	31.4
PhD degree	1	2.9
Total	35	100.0
Place of Educational Training		
Local-trained	9	25.7
Foreign-trained	15	42.9
Total	24	68.6
Missing	11	31.4
Total	35	100.0
Year Company was Established		
1960s	1	2.9
1970s	1	2.9
1980s	3	8.6
1990s	16	45.7
2000 onwards till now	14	40.3
Total	35	100.0
No. of Full-Time Employees		
1–10 persons	24	68.7
11–20 persons	5	14.5
21–30 persons	2	5.8
31–40 persons	1	2.9
41–50 persons	0	0
51–60 persons	3	8.6
Total	35	100.0

(continued on next page)

Table 2: (continued)

Background of company	Frequency	Percentage
No. of Creative Employees		
1–10 persons	30	85.8
11–20 persons	3	8.7
Above 40 persons	1	2.9
Total	34	97.1
Missing	1	2.9
Total	35	100.0

Source: Researchers' fieldwork survey (November 2012–July 2013)

(n = 7) disagreed and another 20% (n = 7) did not have any comments. At the same time, less than half (i.e., 46%) agreed that the availability of similar types of creative talent influenced their decisions to locate in Penang. In fact, approximately 31% (n = 11) disagreed that the availability of similar talent influenced their decision to locate in Penang. A situation of uncertainties was prevalent, as a high percentage, 34.3% (n = 12) refused to comment on the quality and competency of the construction industry's current creative workforce to spearhead and drive economic development in Penang. One-fifth (20%, n = 7) of the respondents disagreed with this statement and did not think Penang's current construction industry had the creative workforce necessary to lead and drive growth. Overall, in deliberating on the talent factor alone in shaping their decision to locate in Penang, the findings are mixed, and not very optimistic, given that a situation of 50–50 was captured, in which those disagreeing and those "unsure without a comment" constituted close to 50% of each dimension listed in the talent category.

To further understand the extent to which Florida's 3Ts are fundamental, the mean and standard deviation (SD) were calculated as illustrated in Table 4. The mean score was categorised into five categories as follows: 1.0 to 1.49 = Strongly disagree; 1.5 to 2.49 = Disagree; 2.5 to 3.49 = No comments/Unsure; 3.5 to 4.49 = Agree; and 4.5 to 5.00 = Strongly agree. Similar to the findings in Table 3, the mean score tabulated for talent ranged between 3.20 to 3.43, indicating that the respondents were unsure about the situation and chose not to comment on it. For multipoint or scale (i.e., Likert Scale) questionnaires, a reliability analysis of the variables is recommended and ascertained by generating an Alpha coefficient, which ranges between 0 to 1 (Santos, 1999). A higher score value indicates higher reliability of the generated scale. According to Nunnally (1978), a Cronbach's Alpha of 0.7 signifies an acceptable reliability coefficient, although lower thresholds are occasionally acceptable in the literature. The internal consistency of the four items in the talent category was highly reliable with a Cronbach's Alpha of 0.944.

Table 3: Perceptions of employers towards factors that shape their decisions to locate in Penang

Factors that shape your decisions to locate in George Town, Penang	Strongly Disagree	Disagree	No Comments	Agree	Strongly Agree
Creative talent					
a) Quantity of creative talent required for my type of business.	8.6% (n = 3)	11.4% (n = 4)	22.9% (n = 8)	48.6% (n = 17)	8.6% (n = 3)
b) Quality of creative talent required for my type of business.	2.9% (n = 1)	20.0% (n = 7)	20.0% (n = 7)	45.7% (n = 16)	11.4% (n = 4)
c) Availability of similar type of creative talent has influenced my decision to locate my company in Penang.	5.7% (n = 2)	25.7% (n = 9)	20.0% (n = 7)	40.0% (n = 14)	8.6% (n = 3)
d) Excellent quality and competency of creative workforce to spearhead and drive Penang's economic development.	2.9% (n = 1)	17.1% (n = 6)	34.3% (n = 12)	37.1% (n = 13)	8.6% (n = 3)

Source: Researchers' fieldwork survey (November 2012–July 2013)

In terms of technology, the Cronbach's Alpha of 0.684 was acceptable. Generally, the respondents agreed that the availability and accessibility of public and private institutions of higher learning in Penang was central towards technology production (Mean = 4.03), followed by the good quality of these institutions in Penang, which contributed to technological innovation (Mean = 3.69). Interestingly, Penang scored very well amongst the respondents in terms of the city-state's tolerance. A high Cronbach's Alpha of 0.813 was generated and the respondents agreed that Penang being open, tolerant and welcoming to culturally diverse people was a key factor that shaped their decision to locate in Penang (Mean = 4.06). This was followed by their perceptions of the high levels of tolerance and acceptance of Penangites towards diverse demographic groups such as ethnic minorities, senior citizens and others (Mean = 3.89) as well as commending the high openness of Penangites towards new ideas, lifestyles and cultures (Mean = 3.80). At the same time, the respondents also perceived favourably and agreed on the availability and quality of elected and unelected (business and civic) leadership and the opportunity for public and local engagement (Mean = 3.54). Respondents also agreed that participatory and urban democracy (Mean = 3.51) was one of the factors that influenced their decision to locate in Penang.

Table 4: Factors that shape the employers' decision to locate in Penang (Mean Test, Standard Deviation & Cronbach's Alpha)

Factors that shape your decisions to locate in George Town, Penang	Min	Max	Mean	Standard Deviation
TALENT (Cronbach's Alpha = 0.944)				
a) Quantity of creative talent required for my type of business.	1	5	3.37	1.087
b) Quality of creative talent required for my type of business.	1	5	3.43	1.037
c) Availability of similar type of creative talent has influenced my decision to locate my company in Penang.	1	5	3.20	1.106
d) Excellent quality and competency of creative workforce to spearhead and drive Penang's economic development.	1	5	3.31	0.963
TECHNOLOGY (Cronbach's Alpha = 0.684)				
a) Well-equipped with state-of-the-art technology required for my type of business.	1	5	3.46	1.120
b) Availability and accessibility to public and private institutions of higher learning in Penang	2	5	4.03	0.747
c) Excellent quality of public and private institutions of higher learning in Penang	1	5	3.69	0.993
TOLERANCE (Cronbach's Alpha = 0.813)				
a) A place that is open, tolerant and welcomes the entry of culturally diversified people.	2	5	4.06	0.684
b) High openness of Penangites towards new ideas, lifestyles and cultures.	1	5	3.80	0.933
c) High levels of tolerance and acceptance of Penangites towards diverse demographic groups such as ethnic/racial minorities, senior citizens, immigrants, etc.	2	5	3.89	0.758
d) Excellent availability and quality of elected and unelected (business and civic) leadership and the opportunity for public and local engagements.	2	5	3.54	0.852
e) Participatory and urban democracy.	2	5	3.51	0.818
AMENITIES & INFRASTRUCTURE (Cronbach's Alpha = 0.846)				
a) Excellent availability and quality of transportation system.	1	5	2.83	1.071
b) Excellent availability and quality of public amenities (i.e. gallery, library, museum, etc.).	1	5	3.06	1.083
c) Excellent availability and quality of open spaces (i.e. park, garden, etc.).	1	5	3.26	1.120
d) Excellent availability and quality of healthcare services.	2	5	3.89	0.796
e) Affordable and quality housing.	1	5	3.11	1.301
f) Low crimes, high safety.	1	5	3.43	1.037

Source: Researchers' fieldwork survey (November 2012 – July 2013)

However, the mean scores for amenities and infrastructure were less desirable, except for the dimension on availability and quality of healthcare services in Penang (Mean = 3.89). The overall mean scores for the other factors ranged between 2.83 and 3.43, which suggest that many of the respondents were not sharing their opinions on the availability and quality of amenities and infrastructure in Penang as a factor in shaping their locational decisions. In fact, a low mean score of 2.83 for quality of transportation system revealed that respondents were discontented with Penang's transportation system, which could act as a deterrent in them perceiving Penang as an ideal location for business.

Apart from the 5-point Likert Scale to gauge their perceptions, respondents were also asked several direct and nominally ranked questions with either "Yes" or "No" as an answer. From the findings illustrated in Table 5, almost all respondents (97.1%, n = 34) stated that Penang was their first choice of location to establish their firms and only a small percentage of 8.6% (n = 3) had intentions to move and relocate their businesses out of Penang in the subsequent three years. Amongst the reasons given was their company's vision to expand and to look for opportunities elsewhere. It was indeed heartening to note that all respondents were (still) happy with their decision to locate their business in Penang and a handful (5.7%, n = 2) were even interested in creating new subsidiaries in Penang in the coming three years.

Table 5: Penang as a choice of location for architectural employers

Statements	Yes	No
Penang was your first choice of location to establish your company.	97.1% (n = 34)	2.9% (n = 1)
Intentions to move and re-locate their business out of Penang in the next three years.	8.6% (n = 3)	91.4% (n = 32)
Happy with decision to locate business in Penang.	100% (n = 35)	–
Intentions to open up new subsidiary firms in Penang in the next three years.	5.7% (n = 2)	94.3% (n = 33)
Recommend other businesses to locate in your area.	97.1% (n = 34)	2.9% (n = 1)

Source: Researchers' fieldwork survey (November 2012–July 2013)

To complement the above quantitative analysis, the following section will analyse the findings from the in-depth interviews with 16 architectural employers with regard to their decisions to locate in Penang. When asked whether they view Penang as an ideal creative city that functions as a magnet that attracts other creative architects to cluster and locate there, a range of underlying reasons and issues were disclosed. Generally, the employers opined that Penang had no shortage of architects, but undeniably a rather critical phenomenon of "brain drain" is currently occurring within the industry. Although the city-state has a

renowned university (i.e., Universiti Sains Malaysia) that produces architects annually, unfortunately, this pool of creative talents is not attracted to staying and working in Penang. One architect lamented on this despite advertising three times for new architects to work in his company:

I have advertised in the newspapers three times already, but I could not get any good candidates. When I checked with my colleagues in our architectural fraternity, they experienced the same thing too. We realised that most of the Universiti Sains Malaysia (USM) graduates have left to work in bigger cities such as Kuala Lumpur or Singapore where the salaries and perks are better. Even if we have fresh grads joining us it will be short-lived. They will work with us for six months, and once they get a better offer from developers or from Kuala Lumpur or Singapore, they will leave us and not come back again. We feel like a training school!

(Locally-trained male employer, 44 years old)

Sadly, in Penang's case, the creativity and clustering of the creative class of architects are not tied to location as attested by the employers. There are other dynamics at play. The creative class, in this case, mostly younger adults in their late 20s or early 30s are more drawn to the glamour, fame and money offered by big cities such as Kuala Lumpur, Singapore and Dubai. Penang does not have high volumes of projects and in turn employers cannot pay their creative architects the salaries they deserve. To exacerbate the situation, Penang developers are known for being overly prudent, less generous and more calculating. This was succinctly echoed by another employer when asked whether Penang has the preconditions to attract creative talent:

Not that we do not have the creative talent. When you say Penang Island, what draws the creative skills is not the environment but the finance. When you do not have developers paying big bucks, then what you pay is what you get. Basically, we do not have the draw factor. Sadly, the pull factor is still dollars and cents offered by the big cities such as Singapore. Architecture in Penang is still more profit-determined than design-determined. The developers want value for money. Our architecture industry here is pushed by budget only.

(Foreign-trained female employer, 50 years old)

To further explore why some senior and foreign-trained employers made their initial decision to locate their businesses in Penang, most of their replies were quite similar. They came home to establish their businesses because of family. There was no mention of Penang being an ideal location as a factor that influenced their decision. For instance, an American-trained architect has the following to say:

Most of us came back because of family. If not for my family, I would have still been in the States or in Hong Kong, China or Copenhagen. I came back for licencing (from the Malaysian Institute of Architects) and for my family. This is my point. Most of us are back because of family. In addition, as we are getting old now, it is more difficult to re-locate elsewhere.

(Foreign-trained male employer, 47 years old)

When asked to comment on the importance of location in shaping his decision on where to establish his firm, this architect argued that given the marvels of technology, currently location is no longer important. He assertively shared his thoughts as follows:

If people feel that ... Oh! I have to be there to do a job, you are wrong. You do not have to be there. With such advanced technology currently, you have Facetime. Previously, we still had to meet to convince you. Now, we could Skype and Facetime. Actually, we can work SOHO (Small Office Home Office) style. For architecture, even though we sometimes need to visit the site, this does not mean we have to re-locate to a particular location to be creative.

(Foreign-trained male employer, 47 years old)

Similarly, another younger and equally technology-savvy employer also shared this view when asked whether is there a need for creative talent to be tied to a particular location in today's globalised world. He remarked in the following manner:

I do not believe in that. Yes, I think you can expand anywhere. You are not tied to a particular location and not tied to space. If you do that, you are stifling and limiting yourself. You are certainly not tied to a location.

(Locally-trained male employer, 42 years old)

IMPLICATIONS AND CONCLUSIONS

Penang's aspiration to be a creative city that attracts the creative class is shaped by other forces and not determined solely by the location factor alone. As shown in this study of Penang's construction industry, though many employers appear to be happy with the current location of their businesses, location is not the determining factor, as purported by Florida (2002, 2004, 2006, 2008). Currently, Penang is encountering a pressing issue of attracting and retaining young creative architectural talents who prefer higher salaries in bigger cities instead of staying

in Penang. Hence, Penang is not considered an ideal location for young creative talents to cluster, and this will impact the growth of the state of employment and the industry as a whole.

In dissecting each component in Florida's 3Ts, in addition to having a fairly high level of tolerance, Penang is still lacking in terms of being a magnet that attracts the creative class. The inability to attract and retain talent will hamper companies' growth and impede local economic development. This situation is exacerbated by less desirable amenities and infrastructure in Penang, where public transportation is a problem and affordable housing is out of reach for young people.

To compound the above situation, subtle profit-driven motives and capitalism are driving Penang's construction industry. Employers actually face chronic problems in their attempts to attract and retain talented members of the creative class who are in their late 20s and 30s. Indeed, as postulated by Friedman (2006), the pervasiveness of globalisation has rendered the world flat and enabled the free flows of capital, labour, and products/services to cross and transcend borders. As this study shows, attracting and retaining creative talent is a huge challenge in Penang as echoed by most of the employers. The city-state merely functions as a temporary test-bed and platform for young creative architects to gain experience before they sprint off to bigger and more competitive cities such as Singapore, Hong Kong and even Dubai where higher salaries and perquisites await them. Simply put, the younger creative talent in Penang is literally trading their creativity for money. However, in a developmental context, this choice by them to move to presumably more developed, creative and competitive environments in developed cities/nations is reflective of the "dependency, core-periphery developing mind-set" still entrenched in the minds of citizens in developing countries (Willis, 2005: 77–81; Larrain, 1998: 111–120). In this case, Penang is still viewed as assuming a periphery role with low salaries, wages and benefits compared to "core" cities such as those in newly industrialising countries (NICs), including Singapore and Hong Kong, and further afield in other developed economies in the West.

Although Penang is well-endowed with a university to generate creative talents in architecture, however, creativity as an intangible asset need not be tied to a particular location. Unlike the Ricardian times where natural resource endowments were physically fixed to a location, the creative class is highly mobile and disloyal to any particular location, as shown in this study. Arguably, the situation in Penang currently is less inclined towards Florida's theories and more favourable towards Friedman's depiction of a flat world in which a new international division of labour has emerged where you do not need to physically be in a particular location to do a task. The construction industry is a good example, as highlighted by some of the employers. Today's technological advancements allow creative architects to work anywhere in the world. They can create, innovate and design from any part of the world without having to be fixed

or drawn to a particular location as claimed by Florida (2002, 2004, 2006, 2008). However, Florida in his later publication, *The Rise of the Creative Class: Revisited* (2012), touched on aspects pertaining to the "delocalisation" of the creative class. This will again set forth deliberation on the importance of location in local economic development and the growth of a city.

From this study, much more has to be done by all stakeholders before the realisation of Penang's aspiration to become a creative city, at least in the context of architecture. The "creative economy, creative city" notion is still a new policy initiative in Malaysia and will require more committed and steadfast intervention by the state before any major transformation or positive outcomes occur. Subsequently, strategic partnerships and collaborations with the private sector (i.e., developers, etc.) can be introduced to move Penang towards becoming the ideal location for the architectural creative class. As it is now, policy directions are still at their infancy and there is no real drive or political will to move the entire economy to attract the creative class to Penang. More viable incentivising systems need to be in place to inculcate, instil and reward creativity within the industry. Most importantly, to join the ranks of being a truly and holistically developed nation, a shift in mindset and priorities has to occur. It is only by being less capitalism-oriented and profit-minded that the construction industry in Penang will be able to have hopes of expressing its creativity optimally.

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REFERENCES

- Anonymous. 2 February 2004. 'Creative Cities': The role of the Melbourne 2030 strategy in enhancing Melbourne's competitive advantage as one of the world's most creative and liveable cities. Speech to the Australian Fabian Society. http://www.fabian.org.au/files/050202Creative_cities.pdf (accessed 18 March 2011).
- Capone, F. 2008. Mapping and analysing creative systems in Italy (1991–2001). In *Creative cities, cultural clusters and local economic development*, eds. P. Cooke and L. Lazzarotti, 338–364. Cheltenham: Edward Elgar.
- Department of Statistics. 2016. Services statistics. http://www.data.gov.my/data/ms_MY/dataset/services-statistics-1017 (accessed 8 February 2017).
- Department of Statistics, Malaysia. n.d. Services statistics. Principal statistics of architectural services, 1971–2012. http://www.data.gov.my/data/ms_MY/dataset/services-statistics-1017 (accessed 8 February 2017).

- Florida, R. 2012. *The rise of the creative class: Revisited*. New York: Basic Books.
- . 2008. *Who's your city? How the creative economy is making where to live the most important decision of your life*. New York: Basic Books.
- . 2006. The nation in number. Where the brains are. *The Atlantic Monthly*. October.
- . 2004. *Cities and the creative class*. New York: Routledge.
- . 2002. *The rise of the creative class: And how it's transforming work, leisure, community and everyday life*. New York: Basic Books.
- Friedman, T. L. 2006. *The world is flat*. England: Penguin Group.
- Gabe, T. M. 2011. The value of creativity. In *Handbook of creative cities*, eds. D. E. Anderson, A. E. Andersson and C. Mellander, 128–145. Cheltenham: Edward Elgar. <https://doi.org/10.4337/9780857936394.00013>.
- Jacobs, J. 1972. *Economy of cities*. England: Penguin Books Limited.
- Kharas, H., A. Zeufack. and H. Majeed. 2010. *Cities, people & the economy. A study on positioning Penang*. A collaborative research between Khazanah Nasional and The World Bank. Kuala Lumpur: Khazanah Nasional Berhad.
- Khoo, S. L., N. Samat, N. Badarulzaman and S. R. Sheikh Dawood. 2013. Penang towards becoming a creative city: Challenges faced by the architectural industry. *International Journal of Environment, Society and Space* 1(1): 1–11.
- Landry, C. 2000. *The creative city: A toolkit for urban innovators*. Strout: Comedia.
- Larrain, J. 1998. *Theories of development*. Malden, MA: Polity Press in association with Blackwell Publishers Ltd.
- Lazzeretti, L., R. Boix and F. Capone. 2009. Why do creative industries cluster? An analysis of the determinants of clustering of creative industries. IERMB Working Paper in Economics, n° 09.02, April 2009. <http://econpapers.repec.org/scripts/redir.pf?u=http%3A%2F%2Fiermb.uab.es%2FRePEc%2Fdoc%2Fwpierm0902.pdf;h=repec:esg:wpierm:0902> (accessed 26 July 2012).
- Lee, D. 2011. *Creative cities: Lessons for Penang by Charles Landry*. A talk presented by Charles Landry. http://www.seri.com.my/v3/index.php?option=com_content&view=article&id=182:qcreative-cities-lessons-for-penangq-by-charleslandry&catid=38:latestnews&Itemid=54 (accessed 29 June 2011).
- Malaysia, 2010. *Tenth Malaysia Plan 2011–2015*. Putrajaya: The Economic Planning Unit, Prime Minister's Department.
- MIA (Malaysian Institute of Architects). 2012. *Berita Arkitek*. Kuala Lumpur: Pertubuhan Arkitek Malaysia [KDN No.: PP 1022/08/2013(0329310)]. December.

- Marshall, A. 1966. *Principle of economics. An introductory volume*, 8th ed. London: Macmillan.
- Nunnally, J. 1978. *Psychometric theory*. New York: McGraw-Hill.
- Peet, R. and E. Hartwick. 2009. *Theories of development. Contentions, arguments, alternatives*, 2nd ed. New York: The Guilford Press.
- Porter, M. E. 1990. *The competitive advantage of nations*. New York: The Free Press. <https://doi.org/10.1007/978-1-349-11336-1>.
- Reich, R. B. 2002. *The future of success*. London: Vintage.
- . 1992. *The work of nations*. New York: Vintage Book.
- Santos, J. 1999. Cronbach's Alpha: A tool for assessing the reliability of scales. *Journal of Extension* 27(2). <https://www.joe.org/joe/1999april/tt3.php>.
- Sasaki, M. 2008. March. *Developing creative cities through networking*. Paper presented at the World Creative City Forum 2007 in Osaka.
- Sinha, K. 2008. *China's creative imperative: How creativity is transforming society and business in China*. Singapore: John Wiley & Sons (Asia) Pte. Ltd.
- SERI (Socio-Economic and Environmental Research Institute). 2011. *Penang Economic Outlook 2011*. Penang: SERI.
- Thurow, L. 1996. *The future of capitalism*. New South Wales: Allen & Unwin.
- Todaro, M. P. and S. C. Smith. 2012. *Economic development*, 11th ed. Boston: Pearson Education, Inc.
- Toh, M. H., A. Choo and T. Ho. 2003. Economic contributions of Singapore's creative industries. In *Economic survey of Singapore first quarter 2003, with inputs from Economics Division, Ministry of Trade and Industry and Creative Industries Strategy Group, Ministry of Information, Communications and the Arts*. [http://portal.unesco.org/culture/en/files/29669/11370847883MICA__Economic_Contribution_Singapore_2003.pdf](http://portal.unesco.org/culture/en/files/29669/11370847883MICA__Economic_Contribution_Singapore_2003.pdf/MICA%2B-%2BEconomic%2BContribution%2BSingapore%2B2003.pdf) (accessed 9 August 2011).
- Willis, K. 2005. *Theories and practices of development*, 2nd ed. Oxon: Routledge.