
Original Article

New Urbanism and township developments in Malaysia

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Abstract The traditional importance of ‘location, location, location’ is well recognized. The increasing competitions in township developments have encouraged many developers to exploit various development concepts as tools to create unique selling propositions to give them a competitive advantage. Different *ideas have been devised* to accentuate the market positioning of developers in order to meet the customer demands for a contemporary *green* and *connected* communal living lifestyle. There is a lack of clear and well documented model to provide a holistic conceptual framework for understanding such master-planned communities. This article reports on research that explored the possible commercial application of the New Urbanism philosophy as a model for green field township developments in Malaysia. The New Urbanism is an architectural and urban planning movement, which is described as representing an alternative to urban sprawl in the United States. From a broad-based philosophy, the movement has evolved and developed into a set of well documented design principles that seek to create a *liveable* community for improved social well-being and the enhancement of social capital. The research was conducted through structured interviews with experienced professionals and practitioners in the property development industry in Malaysia. The research was supplemented by questionnaires that addressed the commercial significance of various new urbanist principles to township developments in Malaysia by using a Relative Index ranking. The research suggests that although there are potential commercial applications of the new urbanist design concepts in township development in Malaysia, these have to be relatively selective based on location and market positioning of the developers.

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Introduction

New Urbanism is an architectural and urban planning movement propagated in the United States not long before the turn of the last century as an antidote to urban sprawl (Fulton, 1996). It advocates design-based strategies based on perceived ‘traditional’ urban forms in order to help arrest processes of suburban sprawl and inner-city decline and to build and rebuild neighborhoods, towns and cities (Bohl, 2000). New Urbanism design principles operate on a number of scales, from buildings, lots and blocks to neighborhoods, districts and corridors, and ultimately to entire cities and regions (Katz, 1994).

The shared principles call for the organization of organizing development into neighborhoods that are diverse, compact, mixed-use, pedestrian-oriented and transit friendly (Bohl, 2000). The culmination of efforts to promote the philosophy and principles of New Urbanism in the United States and some other parts of world resulted in the formation of the Congress for the New Urbanism (CNU); a non-profit organization representing architects, planners, builders, developers and others with the like mind who champion the renaissance of traditional and walkable neighborhoods as livable communities (CNU, 1997). With its initial objective to challenge urban sprawl, the New Urbanism movement has developed from an

abstract philosophical base into promoting concise design principles to serve as guides to urban design. This operates from the macro-scale of metropolitan regions to the micro levels of street and building layouts (New Urbanism, 2009). New urbanist principles have resonated with, and have been incorporated into, the agendas of individuals, and organizations from other fields, including environmental protection, sustainable development, historic preservation, smart growth, transit, pedestrian and bicycle planning, and main street programs (Bohl, 2000). Of late, the New Urbanism is influencing the design concepts of various mainstream developments in the United States – the analogy being how the marketing strategy of Starbucks raised the quality of coffee in competing restaurants and cafes (Steuteville, 2004). On the international scale, New Urbanism principles are taking root elsewhere, including Europe and Australia (CNU, 1997). This research explores the potential application of the New Urbanism philosophy as a model for commercial developments in Malaysia.

Research Aims and Methodology

The principal research objective was to investigate the potential of new urbanism principles to township developments in Malaysia. It considered, from a commercial perspective, whether the principles could enhance the marketability of development schemes or merely represented lip service to an architecture fad for the simple purpose of marketing. The central issue of this study therefore addresses ‘the relevant and applicability of New Urbanism design principles

as marketing tools in township development in Malaysia’. The specific research questions are:

- What are the principles, benefits and criticisms of New Urbanism?
- What is the relevance of New Urbanism principles in the context of Malaysian planning regime?
- What are the current competitive development practices, trends and characteristics of large-scale successful township developments in Malaysia?
- How is market competitiveness derived by providing the desired externalities beyond the level mandated under current the planning regime?
- What are the potential applications of New Urbanism design principles as a model for township development in Malaysia from a commercial perspective?

In order to address these aims and objectives the research methodology was designed based on qualitative and inductive approaches as shown in Figure 1. These included the following:

- A desk study to provide a conceptual framework for understanding the nature of the real estate development process in the Malaysian context in order to provide the context to the research.
- Qualitative research based on structured interview with a focus group comprised of different professionals involved in the built environment including real estate developers and representatives of the relevant statutory authorities in Malaysia.

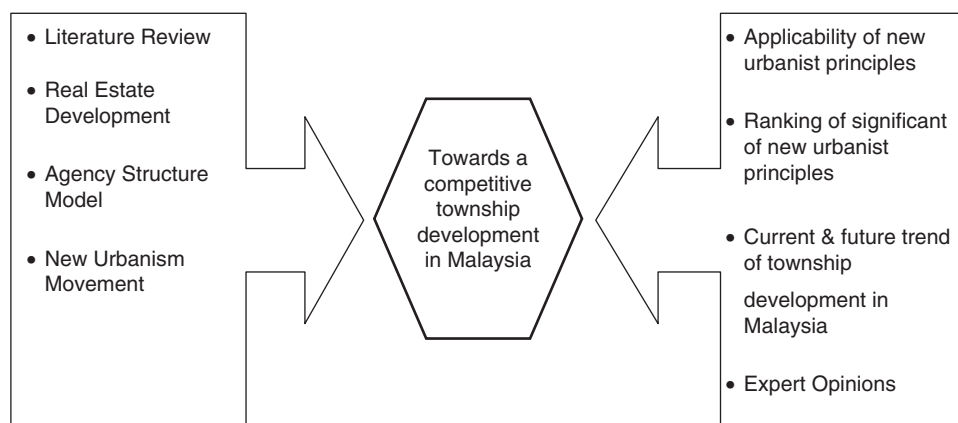


Figure 1: The approach adopted for this study.

Principles of New Urbanism

New Urbanism is based on the principles of planning and architecture that work together to create human-scale, walkable communities (Steuteville, 2004). New urbanists take a wide variety of approaches – some work exclusively on infill projects, others focus on transit-oriented development, still others are attempting to transform the suburbs, and many are working in all of these categories (Steuteville, 2004). New urbanist design principles operate on a number of scales, from buildings, lots and blocks to neighborhoods, districts and corridors, and ultimately to entire cities and regions (Katz, 1994).

New Urbanism is held to be the revival of the lost art of place-making, and is essentially a re-ordering of the built environment into the form of complete cities, towns, villages and neighborhoods – the way communities have been built for centuries around the world. New urbanism involves fixing and infilling cities, as well as the creation of compact new towns and villages (New Urbanism, 2009). According to the most recent version of the CNU's Charter, 'neighborhoods should be diverse in use and population; communities should be designed for the pedestrian and transit as well as the car; cities and towns should be shaped by physically defined and universally accessible public spaces and community institutions; urban places should be framed by architecture and landscape design that celebrate local history, climate, ecology, and building practice'.

New Urbanism is also referred to as involving neo-traditional design, transit-oriented development and traditional neighborhood development (Steuteville, 2004). From infill projects to transit-oriented projects, and from traditional architecture to architecture with a modern flair, primarily all New Urbanism projects focus on the 'power and ability of traditional neighborhoods to restore functional, sustainable communities' (Steuteville, 2004). New Urbanism does not attempt to 'replicate old communities' but instead to create communities that are based on *traditional* community principles with the provision of *modern* amenities demanded by consumers (Steuteville, 2004; Custer, 2007). According to Steuteville (2004), for example, communities based strictly on traditional neighborhood design might lack sufficient parking for current consumers, but New Urbanism communities attempt to meet that need while promoting a more pedestrian friendly

and transit-system-oriented lifestyle. Further, historic cities employed a 'relentlessly regular' grid; New Urbanism communities modify that grid with T-intersections to slow and disperse traffic while creating a 'neighborhood' network of pedestrian and cycling paths (Rielly, 2001).

The core of New Urbanism is in the design of neighborhoods, which can be defined by the following 13 elements, according to town planners Andres Duany and Elizabeth Plater-Zyberk, two of the founders of the CNU (Steuteville, 2004).

1. The neighborhood has a discernible center. This is often a square or a green and sometimes a busy or memorable street corner. A transit stop would be located at this center.
2. Most of the dwellings are within a 5-min walk of the center, an average of roughly 2000 feet.
3. There are a variety of dwelling types – usually houses, rowhouses and apartments – so that younger and older people, singles and families, the poor and the wealthy may find places to live.
4. At the edge of the neighborhood, there are shops and offices of sufficiently varied types to supply the weekly needs of a household.
5. A small ancillary building is permitted within the backyard of each house. It may be used as a rental unit or place to work (for example, office or craft workshop).
6. An elementary school is close enough so that most children can walk from their home.
7. There are small playgrounds accessible to every dwelling – not more than a tenth of a mile away.
8. Streets within the neighborhood form a connected network, which disperses traffic by providing a variety of pedestrian and vehicular routes to any destination.
9. The streets are relatively narrow and shaded by rows of trees. This slows traffic, creating an environment suitable for pedestrians and bicycles.
10. Buildings in the neighborhood center are placed close to the street, creating a well-defined outdoor room.
11. Parking lots and garage doors are rarely at the front of the street. Parking is relegated to the rear of buildings, usually accessed by alleys.
12. Certain prominent sites at the termination of street vistas or in the neighborhood centers are reserved for civic buildings. These provide sites for community meetings, education, and religious or cultural activities.

13. The neighborhood is organized to be self-governing. A formal association debates and decides matters of maintenance, security and physical change. Taxation is the responsibility of the larger community.

Although many well-known new urbanist projects are 'master-planned communities', meaning large urban-fringe developments design as a unit, these concepts can also be incorporated into existing urban communities (Otak, 1999), and even in communities that have highways with heavy traffic through their Commercial Center (DEA & Associates, 1999). In more specific terms, New Urbanism's Charter advocates mixed-use centers where low- and mid-rise buildings form a continuous street wall, and where offices and affordable housing can be located above retail shops. The city envisioned by New Urbanism is not dense by European or Asian standards, but it is denser than conventional American sprawl. Its idealized urban hierarchy runs the gamut from background housing and private yards to foreground civic and institutional buildings, with public squares and parks (Kelbaugh, 2007).

The CNU has outlined the principles and ideals of New Urbanism on 20 February 2001 in its Charter of the New Urbanism, which seeks to guide the new urbanist movement. In brief, it echoes the creed and dedication of the Congress towards promoting walkable, neighborhood-based development as an alternative to sprawl as well as providing leadership in community building. The Charter of the New Urbanism also published a concise list of 27 principles that reveals its straightforward reliance on such diverse proposals as Jane Jacobs' (1992) views on organized complexity, Werner Hegemann and Elbert Peet's civic art, Ebenezer Howard's garden cities, and Benton MacKaye's regionalism. Organized into three levels, the principles provide guide to public policy, development practice, urban planning and design.

The three levels of New Urbanism principles are the regional level, the neighborhood level and the individual street/building level. At the regional level, the Charter recognizes that the metropolitan regions are finite and each acts as a fundamental economic unit of the contemporary world. Hence, there must be a public-private cooperation to reflect this reality. The Charter advocates that the metropolis has a necessary and fragile relationship to its agrarian hinterland and natural landscapes. The relationship is environmental, economic and cultural. Farmland and

nature are as important to the metropolis as the garden is to the house. With regard to new development, the Charter reiterates that *new development contiguous to urban boundaries should be organized as neighborhoods and districts, and be integrated with the existing urban pattern. Non-contiguous development should be organized as towns and villages with their own urban edges, and planned for a jobs/housing balance, not as bedroom suburb. Cities and towns should bring into proximity a broad spectrum of public and private uses to support a regional economy that benefits people of all incomes. Affordable housing should be distributed throughout the region to match job opportunities and to avoid concentrations of poverty.*

At the neighborhood level, the Charter asserts that neighborhood, the district and the corridor are the essential elements of development and redevelopment in the metropolis. They form identifiable areas that encourage citizens to take responsibility for their maintenance and evolution. As such, neighborhoods should be compact, pedestrian-friendly and mixed-use. Daily living should occur within walking distance, allowing independence to those who do not drive.

Interconnected networks of streets that encourage walking, reduce the number and length of automobile trips, and conserve energy are paramount. In addition, a broad range of housing types and price levels shall be provided so as to bring people of diverse ages, races and incomes into daily interaction, strengthening the personal and civic bonds essential to an authentic community. Conservation areas and open lands should be provided to define and connect different neighborhoods and districts. The Charter also advocates that the concentrations of civic, institutional and commercial activity should be embedded in neighborhoods and districts, not isolated in remote, single-use complexes. Schools should be sized and located to enable children to walk or bicycle to them. With all these in place, the economic health and harmonious evolution of neighborhoods, districts and corridors shall prevail.

At the street and building level, the Charter reveals that the primary task of all urban architecture and landscape design is the physical definition of streets and public spaces as places of shared use. The design of streets and buildings shall, therefore, be able reinforce safe environments and properly configured to encourage walking as well as to enable neighbors to know each other and protect their communities. All

buildings shall also provide their inhabitants with a clear sense of location, weather and time. Preservation and renewal of historic buildings, districts and landscapes shall affirm the continuity and evolution of urban society. Mirroring the philosophy of New Urbanism as defined by the

Charter of the New Urbanism (New Urbanism, 2009), it dedicated to promoting walkable urbanism, transit-oriented development, trains and sustainability, has succinctly summarized the principles of New Urbanism into 10 key design attributes as summarized in Table 1.

Table 1: Principles of New Urbanism

<i>Key concepts</i>	<i>Physical attributes</i>
1. Walkability	Most things within a 10-min walk of home and work Pedestrian friendly street design (buildings close to street; porches, windows and doors; tree-lined streets; on-street parking; hidden parking lots; garages in rear lane; narrow, slow speed streets) Pedestrian streets free of cars in special cases
2. Connectivity	Interconnected street grid network disperses traffic and eases walking A hierarchy of narrow streets, boulevards and alleys High quality pedestrian network and public realm makes walking pleasurable
3. Mixed-use and diversity	A mix of shops, offices, apartments and homes on site. Mixed-use within neighborhoods, within blocks and within buildings Diversity of people – of ages, income levels, cultures and races
4. Mixed housing	A range of types, sizes and prices in closer proximity
5. Quality architecture and urban design	Emphasis on beauty, aesthetics, human comfort and creating a sense of place Special placement of civic uses and sites within community Human-scale architecture and beautiful surroundings nourish the human spirit
6. Traditional neighborhood structure	Discernable center and edge Public space at center Importance of quality public realm: public open space designed as civic art Contains a range of uses and densities within a 10-min walk Transect planning: highest densities at town center, progressively less dense towards the edge The ‘transect’ is an analytical system that conceptualizes mutually reinforcing elements, creating a series of specific natural habitats and/or urban lifestyle settings. The ‘transect’ integrates environmental methodology for assessment with zoning methodology for community design. The professional boundary between the natural and man-made disappears, enabling environmentalists to assess the design of the human habitat and the urbanists to support the viability of nature. This urban-to-rural ‘transect’ hierarchy has appropriate building and street type for each area along the continuum
7. Increased density	More buildings, residences, shops and services closer together for ease of walking to enable a more efficient use of services and resources, and to create a more convenient, enjoyable place to live New Urbanism design principles are applied at the full range of densities from small towns to large cities
8. Green transportation	A network of high-quality trains connecting cities, towns and neighborhoods together Pedestrian-friendly design that encourages a greater use of bicycles, rollerblades, scooters and walking as daily transportation
9. Sustainability	Minimal environmental impact of development and its operations Eco-friendly technologies, respect for ecology and value of natural systems Energy efficiency Less use of finite fuels More local production More walking less driving
10. Quality of life	Taken together these add up to high quality of life well worth living and create places that enrich, uplift and inspire the human spirit

Source: New Urbanism (2009).

Models for Real Estate Development Process

Real estate development can be defined as a *process* that involves changing or intensifying the use of land to produce buildings for occupation, and the *product* that is the outcome of the development is a change of land use and/or a new/altered building in a process that combines land, labor, materials and finance (Cadman and Topping, 1995). The unique characteristics of the real estate market, the amalgam of diverse legislations and players involved, the real estate development is held to be a complex process that can be divided into the following main stages (Cadman and Topping, 1995):

- Initiation
- Evaluation
- Acquisition
- Design and costing
- Permissions

- Commitment
- Implementation
- Let/manage/dispose

Within the various stages of development, there are various parties with different vested interests that may be involved as depicted in Figure 2. The possible motives and behaviors of the players are tabulated in Table 2.

Stemming from the complexity of real estate development process, a growing interest in understanding the land and property development process among researchers has been evident in recent years. Numerous conceptual models of the land development process have been produced to describe and predict the behavioral patterns of development processes. As pointed out by Maziah (1996), however, much of the academic literature provides a difficult entry point for those seeking initial access into the study of the development process because the models are typically technical in content and

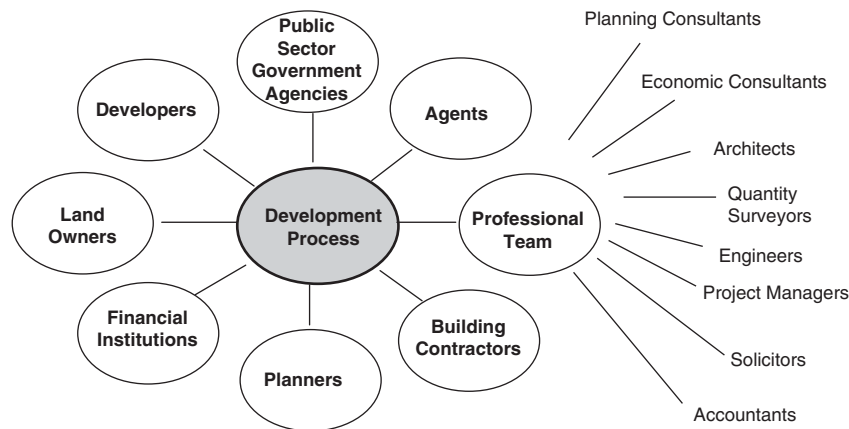


Figure 2: Key players in real estate development.
Source: Lloyd (2008).

Table 2: The motive and behavior of the players

<i>Institution</i>	<i>Motive and behavior</i>	<i>Issues</i>
Landowner	Maximize return from land transaction	Self-interests or wider interest
Developer	Profits, growth, reputation	Competitiveness; corporate social responsibility
Financial institutions	Profits, growth	Corporate social responsibility
Building contractors	Profit, growth	Small scale; fragmented; vulnerable
Professional design and management team	Profit, growth, reputation	Competitiveness; corporate social responsibility
Development agent	Profit, growth, reputation	Competitiveness
Planners	Regulation, forward planning, conditions and enforcement	Public interest

Source: Lloyd (2008).

are too specialized in focus. Healey (1992) identifies five mainstream models of development process as follows:

1. The equilibrium model that is based on the neo-classical economies theoretical framework within the parameters of a positivist approach.
2. The event sequence model that depicts the development process as a chronological sequence of stages, at each of which events occur. These models fall within the empiricist theoretical framework.
3. The agency model that falls within the humanist framework, which emphasizes the roles of different actors in the process and the importance of the decisions they make in ensuring its smooth operation.
4. The structure models that portray the development process as a specialized form of productive economic activity, from the perspective of the economy as a whole, that is, tend to be structuralism.
5. The structure and agency models that contend that different types of development are characterized by different institutional and legislative frameworks, as well as the complexity of the social relations involved.

In an attempt to provide a comprehensive review of the existing models of land development process, Maziah (1996) highlighted that the structure and agency models provide relatively richer insights into understanding the variety and complexity of the development industry than the other models. In essence, the structure and agency model views land development process as not only the physical process of creating and transferring buildings to their occupiers but is also as a social process dominated by the economic interests involved. As such, the land development process is best explained within the critical framework of the institutional analysis as shaped by the structure and agency approach (Maziah, 1996).

The Characteristics of Role Product Development

As noted by Hamid (2002), there are two major approaches to describing the nature of real estate market. One approach is to examine the market

from the economic point of view whereas the other approach looks at its inherent physical characteristics. From the economic perspective, Ring (1972) considers the real estate market to be primarily local in character; transactions are private in nature; the commodity is not standardized; the market is unorganized and lacks central control; there is an absence of short-selling and; a poor adjustment of market supply and demand. Harvey (2000) emphasized that the real estate market deals in 'property rights', often referred to as 'interests'. The demand for real estate, according to Harvey (2000), is essentially a derived demand emanated from other sectors of the economy. As a result of a complex interaction of myriad characteristics of real estate, Hamid (2002) argued that the real estate market is generally an imperfect market characterized of largely monopolistic and oligopolistic competition. With regard to the physical characteristics of real estate, the distinct characteristics of real estate that differentiate it from other commodities are its relative fixity in supply, and its heterogeneity, durability and immobility (Barlowe, 1986; Brett, 1990; Hamid, 2002). These are important characteristics to consider for understanding the behaviors in the real estate sectors.

It is argued that, from a marketing perspective, the characteristics of real estate result in its features as 'project is product' or the 'site is factory and product', which distinguish real estate from other commodities (Hamid, 2002). As such, the product concept is also the development or project concept, which, according to Hamid (2002), comprises an amalgam of hardcore product characteristics such as building architecture and layout design; the siting characteristics such as location, amenities, surrounding neighborhoods and infrastructure provisions; and economic characteristics such as selling price and loan facilities offered by the developer's banks. In essence, Hamid (2002) highlighted two levels of product concept in real estate development – the first level being a general concept that addresses what is primarily to be offered, and the second level being a precise statement of the needs that each particular product will fill and the form the product will take. By providing a clear definition of the product concepts, the developers will be able to *realistically address buyers' needs and wants in the product development so as to ensure that the right product is positioned in the market* (Hamid, 2002, p. 34). This sets the context to the marketing of new real estate development.

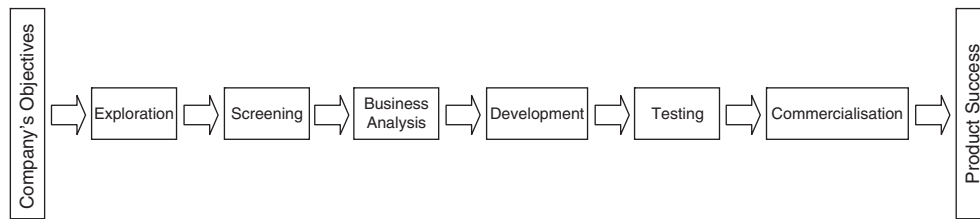


Figure 3: The six-stage product development process.
 Source: Adapted from Baker (1985).

In this context, Baker (1985) identifies six stages in a typical new product development as depicted in Figure 3. The process commences with product exploration followed upon identifying and setting the company's objectives. This is followed in sequence by screening of new product idea, business analysis, product concept development, testing and finally, its commercialization.

The exploratory stage is the first stage in any new product development that seeks to generate new product ideas and involves the contributions of various specialists to identify the most fashionable concepts at the time together with the most influential characteristics that would make a new product a success. The next stage is the screening process that is intended to evaluate the merits of each idea in order to identify the best alternative. The third stage in new product development is a business analysis or feasibility study to determine whether the new product option is worth undertaking with a given market profile and economic and business contexts. On confirming the new product is commercially feasible, the process moves to the product development stage, which is primarily a technical activity comprising the formulation of product design and specifications, and physical production of a 'test' product. The fifth stage is product testing through detailed market study in order to identify the customer perception of the new product concept relative to the marketer's perception. This involves a process of 'gap' analysis; reconciliation of customer and marketer perceptions; product refinement; and validation of the marketability of the new product concept. Upon favorable confirmation of the marketability of the new product concept, the final stage involves product commercialization that includes a full scale launch of the new product onto the market.

Township Development in Malaysia

Over the last decade, many established developers in Malaysia have begun to devise alternative marketing approaches to their development concepts in order to enhance the quality of life aspirations of their customers and their commercial objectives of improved marketability and financial returns. Quoting interviews with some of the major developers in Malaysia, Hamid (2002) highlighted that real estate product is more than just the physical appearance of buildings. It is an amalgam of the environment, the infrastructure, the surrounding neighborhoods and the amenities that make up the total development concept that makes it competitive in the marketplace. Harvey (2000) stressed that the location effect was important to the value of real estate and involved both general and special accessibility. Harvey (2000) described special accessibility as the convenience or ease of accessing to amenities without the need to travel excessively. These are the features emphasized in many township developments in Malaysia.

A number of measures have been devised to accentuate the market positioning of the developers during recent years. These include the promotion of environmentally oriented and ecological-friendly development schemes, the provision of parks and recreation space, and support for green movements. Such development strategies are seemingly conceived to meet contemporary customer desires for a green and connected communal living lifestyle. Nevertheless, there is no available model to provide a holistic conceptual framework for understanding such master-planned communities. Various empirical studies have been carried out in the United States and have proven that the new urbanist features tend to increase the value and marketability of real estate (Hirschhorn and

Souza, 2001; Bohl, 2003; Eppli and Tu, 2003; Song and Gerrit-Jan, 2003). This research may be viewed as an exploration of the product developments in real estate marketing in Malaysia.

Research Findings

The role of the development concept in marketing

The consensus from all respondents is that the development concept is important in the successful marketing of township development project. An ex-general manager from a developer offered his view based on his 30 years of experience in township development that for a sizable project above 100 acres, inclusion of a distinctive theme will certainly enhance its marketability. The development concept is about creating a project's unique selling proposition. The 'me too' project would not work under intense competition, more so if one expects to generate above average profit. He also contends that developers should not be over-zealous about cost reduction. Many people cannot differentiate between cost-cutting and value-engineering. Indeed, he asserts that the word cost-cutting is a 'taboo' to him as far as property development business is concerned. The real challenge should be enhancing profit through value creation rather than mere cost-cutting. A senior manager from a reputable developer opines that good development concept is important simply because buyer's expectation on housing needs are diverse and the more affluent the society the higher the expectation in terms of aesthetics and lifestyle requirements.

Similar to those from the developers, a respondent who is a principal in a private architecture practice concurs that the development concept plays an important role in ensuring the marketability of a project. To illustrate the point, he highlights that there is a growing propensity of Malaysians in general to pursue a living lifestyle that calls for a more sustainable type of living environment such as tropical living concept with lush greenery. Consequently, modern urban living and cityscape environments are reflected in the design concept of many of his projects, of which seems very much mimicking the footage of western lifestyle. Without a good and relevant concept that matches the market needs and wants, the developers may risk losing their competitiveness in the marketplace. Another respondent who

is a practicing architect and town planner put it succinctly that

... developers nowadays emphasise on the development concept to ensure the marketability of their projects, other than the location of the project. The traditional mantra of 'location, location, location' to attract buyers is obvious but due to increasing competition in townships, the development concept differentiates each project and becomes a selling point.

Another respondent who is a principal of a quantity surveying consultancy could not be more agreeable to all the aforementioned opinions. He emphasized that a good development concept is definitely an important marketing tool. While location is the key criteria in determining the potential of a particular scheme, a well-conceived concept with enhanced accessibility can otherwise turn a scheme of only an average location advantage into a competitive masterpiece. Citing example of Desa Park City in Bandar Manjalara, the respondent accentuates that in terms of location, Desa Park City is definitely subservient to Bandar Utama. However, with its excellent park concept and unique architecture feature, it was able to rival Bandar Utama in terms of property value and market competitiveness. Although average price of housing in Bandar Utama is almost stagnant at about RM700 000 per unit, the price for similar unit in Dasa Park City is almost hitting RM700 000–800 000 per unit and is still on a rise. Another respondent who is the principle of a quantity surveying consultancy agrees that development concept is very important in the marketability of the project as purchasers search for answers to their current housing woes and changing personal/family needs lifestyle, security, green features, pleasant environment and so on.

A real estate agent who has been involved in the downstream activities of property marketing for the past 15 years opined that the development concept plays a very important role in township marketing. Planned community with good security surveillance system, clubhouse facilities, well-planned pedestrian walking path and lush landscaping with strong emphasis on environmental friendly and 'green' concept is a necessity rather than a privilege in township development. According to another real estate agent, for up-market properties in the Klang Valley, property

prices may become a secondary consideration. The customers are looking for locations that are well-served by a wide range of amenities and good infrastructure accessibility. For township within 1-hour drive time to Kuala Lumpur City Centre, the key issue is agglomeration economies rather than mere location. Citing example of the Setia Eco Park at Klang, he points out that owing to the investment in the dedicated highway connecting to the existing North Klang Valley Expressway, the otherwise less attractive location of Setia Eco Park has been witnessed to be able to be transformed into a much sought after township.

From the interviews conducted, it is established that the 'value creation' strategy is far superior to 'cost focus' strategy in ensuring the market competitiveness of township development. Gone were the days where the developers focused on mass housing with the hope of achieving economies of scale. Selling prices were pegged relatively low against the competitors. The pressure was to seek ways and means to 'cost down' the design and infrastructures/amenities in order to squeeze some margins out of the tight selling prices. Return on development value might be low because of low selling prices. However, owing to low selling prices, the take-up rate was a breeze in creating the desired volume. Through the mass volume created, the absolute profits were sufficiently high to sustain the competitiveness of the business in the marketplace. The general consensus derived from the interviews was somehow seemed to be against this old strategy.

The finding suggests that for a sizable development, a theme that sets it away from the pack tends to enhance its marketability. This is because development concept is about creating a project's unique selling proposition. It is important simply because buyer's expectation on housing needs are diverse and the more affluent the society the higher the expectation in terms of aesthetics and lifestyle requirements. Without a good and relevant concept that match the market needs and wants, the developers may risk losing their competitiveness in the marketplace in no time. Developers nowadays emphasize on the development concept to ensure the marketability of their projects, other than the location of the project. The traditional mantra 'location, location, location' to attract buyers is obvious, but owing to increasing competition in townships, the development concept differentiates each project and becomes a selling point.

Supply of land within certain preferred location is finite. Eventually, township developments have to move horizontally away from the city center. This is seen in line with the literature review in which according to Hamid (2002), the characteristics of real estate that are distinct from other commodities give rise to one unique aspect about real estate development in that the 'project is product' or the 'site is factory and product'. As emphasized by Hamid (2002), development concept comprises an amalgam of product hardcore characteristics such as building architecture and layout design; the situs characteristics such as location, amenities, surrounding neighborhoods and infrastructure provisions; and economic characteristics such as selling price and after-sale services.

Although location is the key criteria in determining the potential of a particular scheme, it was deduced from the interviews that a well-conceived concept with enhanced accessibility can otherwise turn a scheme of only an average location advantage into a competitive masterpiece. Planned community with good security surveillance system, enhanced accessibility through investment in infrastructure, clubhouse facilities, well-planned pedestrian walking path and lush landscaping with strong emphasis on environmental friendly and 'green' concept is a necessity rather than a privilege in township development.

The current trend in township development in Malaysia

On the question of what is the current trend in township development in Malaysia, some of the opinions expressed by the respondents are rather quite general in nature while some are more specific. As one of the respondents from the developer put it ... *to be successful, one has to be competitive in a market place. The more savvy players have learned to incorporate such themes as resort living, golf course town-ship or university town to attract purchasers. On the whole it is a healthy trend for it shows our consumers too have progressed. Now they crave for higher level of utility.* What he was trying to explain is that the 'rule of the game' has changed owing to higher expectation from the public. The current trend is a testimony of changes in social-economic setting of the nation. Another respondent who is also from the developer explains more specifically that the planning

and development of township in the coming trend tends to focus on incorporating green and sustainable features to suit the expectation of the consumers. Township's planning nowadays do incorporate ideas along the New Urbanism philosophy. One of the respondents caveats that the trend is also dependence on the target market, nevertheless he is of the opinion that in township development, most developers attempt towards building a self-sufficient and self-contained development, and in most instances an integrated one.

As a framework for argument, one respondent who is an architect and town planner by profession offers his broad view that the overall success of township development depends on the strength of the planning or development concept, more so with intense competition from developers. The public being better informed and exposed to development concepts by developers are also more discerning in selecting the township based on the development concepts. Increasingly, developers are turning to unique and innovative design concepts as a marketing tool. To conclude these points, a respondent who is also a fellow architect reiterates that the trend in township development as expected and demanded by the public depends on the types of potential house buyers. For instance, high-end buyers tend to look for township development with the concept of environmental friendly, lush landscaping, modern lifestyle, comprehensive security and so on. The medium-class buyers tend to go for moderate living lifestyle, greenery, recreation facilities, security and so on. On the other extreme, the low-income groups expect better 'community and socialism context' type of living and are less concerned about security and environmental issues.

Further interview with other respondents reveal similar opinions that the current trend in township development includes lifestyle, green, sustainability, security, connectivity, accessibility, security, connectivity, accessibility, facilities, conveniences and exclusivity. In short, the current trend of township development in essence is a self-contained community complete with good landscaping, amenities, security and lifestyle concept. Those respondents who are pretty much involved in downstream property marketing activities highlight that, of late, most developers tend to focus on pocket size development or boutique development with luxurious fittings and furnishing. They are moving towards green building standard and ecological environment.

One respondent who is a real estate agent cautions that we shall not generalize the trend. It depends on whether the development is 10 acres, 100 acres or 1000 acres in size. An urban township development could be below 10 acres in size but suburban development could reach 1000 acres and takes 10 years or more to complete. Different sizes of development have different critical success factors to consider. There is also a trend in large township developments to 'break down' the entire site into smaller parcels with 'gated and guarded' features individually. Generally, as the respondent explains, the current trend calls for modern but not too futuristic with attractive façade design and internal layout, as well as the overall master layout concept. It must also be a 'gated and guarded' community in view of the higher risk of theft and vandalism in currently facing the society. In addition to the above, the landscape is a very important feature to prevent the so-called 'concrete jungle'.

The level of awareness of New Urbanism principles in Malaysia

Those respondents from the development companies are generally not aware or well-informed of the jargon 'New Urbanism' in the first instance. However, after presenting the concept of New Urbanism to them, they reckon that the idea of New Urbanism is not something alien to the local context. They do observe that the idea of emphasizing on the design concept such as addressing the ecological issue by providing large reserve of green area, water features, self-sufficient township with complete facilities and amenities within the township and so on have been very much emphasized by the reputable developers in the country, hence, is not a new phenomenon. However, the question remains; to what degree are the principles of New Urbanism actually being adopted locally?

Those respondents with background in architecture and town planning are more aware of the philosophy of New Urbanism as a urban planning movement that emphasizes on few main factors that govern the principle of the design, such as traditional neighborhood, community's living, economic's zoning, satellite's planning and so on. One respondent explains succinctly that new urbanist principles have been promoted by several groups of design professionals, mainly in

the United States, to create a better neighborhood environment.

Generally, like those from the developers, respondents from other professional practices feedback that they are not aware of the jargon 'New Urbanism' but after reading its literature, they feel that it is not really a new thing in Malaysia. Many of those design principles as advocated in the movement have been witnessed in the country, particularly in reputable and up-market township developments by reputable developers. However, one of the respondents who is in quantity surveying practice reiterate that the New Urbanism movement generally relates to problems originating from cities getting bigger and bigger and the resulting problems thereon. Most jobs are in the cities but as the land prices keep increasing, city housing becomes more expensive and most residents get pushed out to the suburbs. Inner city decay, ghost towns at night, transportation nightmares, pollution and so on. New urbanist principles developed to resolve those issues above.

The applicability of new urbanist principles in the local context

In general, all respondents are optimistic that the philosophy of New Urbanism is applicable in the local context albeit with some caveats. As one respondent explains, any design concept adopted must be capable of maximizing the utility of the customers while at the same time achieving the company's profit goal. The new urbanist design principles are wide and comprehensive. He reckons that a thorough survey may have to be put in motion for feedbacks on the importance of each of the principles. Another respondent from a developer opines that the new urbanist principles are practical and 'do-able' if developers are committed and understand on the needs and expectation of potential consumers. Awareness and understanding on subject matters will support the incorporation and implementation of new urbanism principles in future development. Likewise, a respondent who is also from a development company suggests that in the local context, particularly in greenfield development, such principles should be promoted. The principles are certainly applicable universally, but in existing developed areas adaptation has to be made. After all, the principles appear to be an

ideal way to develop our limited, precious and finite land resource.

An architect feels that the new urbanist principles should be applied selectively to targeted group of buyers to suit their needs of living lifestyle. He points out that low-medium income group constitutes the majority of Malaysian population and this group of people needs a healthy community type of living. Therefore, only selected principles are applicable. Another respondent who is a practicing architect and town planner cautions that the new urbanist principles are general statements of intent, which need to be incorporated physically into the master plan layout. In the local context, the new urbanist principles can be applied as long as they comply with local planning laws and regulations. Most principles can be applied but specific new urbanist principles such as 'green transportation' involves public transportation that depend on government policy and government support.

Somewhat sharing a same sentiment, a respondent who is a practicing quantity surveyor caveats that while new urbanist principles seem applicable locally, their specific application has to be dependence on location. With his years of experience in doing cost estimate and feasibility study for developers, he foresees that the construction will be higher based on the new urbanist design principles. As such, the selling price also has to be higher to commensurate with the higher cost.

Henceforth, the applicability of new urbanist principles may be only confined to Klang Valley and such other developed areas in which the purchasing power of the populace is envisaged to be higher. He illustrates his point by quoting Desa Park City in Bandar Manjara as an example where the concept of New Urbanism can probably be observed, the success of which is supported by premium selling prices. A fellow practicing quantity surveyor summarizes that in the local context, all or most of those principles are applicable but the extent or emphasis depends very much on developer's marketing plans and strategies in relation to their own projects/development land. Respondents who are involved in the downstream activities of marketing believe that the ideas (New Urbanism movement) are good and people may welcome it and love to stay in this type of development, particularly among the medium-income group. They feel that some of the principles are very practical

particularly in regard to walkability and connectivity, which are very much the panache in mixed development. This may help create a wonderful and convenience sanctuary for the residents and occupants.

The conclusion derived from the interviews is that there are potential applications of new urbanist principles to the local context particularly in greenfield development. After all, the principles appear to be an ideal way to develop our limited, precious and finite land resource. However, one has to be selective and critical in the application. The new urbanist principles are general statements of intent that need to be incorporated physically into the master plan layout. In the local context, the new urbanist principles can be applied as long as they comply with local planning laws and regulations. Evaluating from the perspectives of professionals and practitioners, the potential application of new urbanist principles to township development in Malaysia are subject to the following parameters:

1. Application shall be selective based on the targeted group of buyers to suit their needs of living lifestyle. Low-medium income group constitutes the majority of Malaysian population and this group of people needs a healthy community type of living. Therefore, only selected principles are applicable.
2. Most principles can be applied but specific new urbanist principles such as 'green transportation' involves public transportation that depend on government policy and government support.
3. The specific applications of new urbanist principles are dependence on location. The expected construction cost is envisaged to be higher based on the new urbanist design principles. Consequently, the selling prices also have to be higher to commensurate with the construction cost. In this respect, the applicability of new urbanist principles may be only confined to such developed areas in which the purchasing power of the populace is envisaged to be higher.
4. All or most of those principles are applicable but the extent or emphasis depends very much on developer's marketing plans and strategies in relation to their own projects/development land.

From the survey conducted on the ranking of the significance of various new urbanist principles

based on Likert scale, the following are the results obtained where Band 1 is being most significant in contributing to the marketability of a township development and Band 8 being the least:

- Band 1: Quality of life
- Band 2: Connectivity and sustainability
- Band 3: Walkability; quality architecture and urban design; and green transportation
- Band 4: Traditional neighborhood
- Band 5: Mixed-use and diversity
- Band 6: Mixed housing
- Band 7: Increased density

The ranking of significance is organized into various 'Bands' because there are a number of principles that scored the same Relative Index (RI) in the analysis. Looking beyond the quantitative figures, a few controversial issues were revealed from the interview as summarized as follows:

- Not all the 10 principles are applicable locally. Notably, only those that fall within Band 1–Band 4 are of potential applications locally from the marketing point of view.
- The social stigma that may otherwise associate with high density development. Good living environment is normally associated with quite and serene living surrounding free from busy economic activities and traffic noise. While increased density leads to economies of scale to sustain the commercial component of the development as advocated in the New Urbanism concept, the 'not-in-my-backyard (NIMBY)' phenomenon among the urban dwellers is not uncommon.
- Low cost provision in mixed housing is a good concept from social point of view; however, because of social stigma, some may not prefer low cost housing to be located in the vicinity of high cost housing.
- In general, New Urbanism appears more suitable for medium to medium high cost development. In its purest form, new urbanist movement seems to cater more to the average general public rather than the elite society that constitutes a totally different sector from the marketing point of view. Hence, in up-market development, only selected principles are applicable.
- Last but not least, there is an issue pertaining to quality of life. It should be regarded as the outcome of the combination of all the other new urbanist principles rather than a principle,

therefore, should not be included in the list. Quality of life should be viewed as a function of an amalgam of product hardcore characteristics such as building architecture and layout design; the situs characteristics such as location, amenities, surrounding neighborhoods and infrastructure provisions; and economic characteristics such as selling price and after-sale services offered by the developers.

Ranking of the importance of key new urbanist principles

During the interview, the respondents were asked to rank the significance of the following 10 key new urbanist design principles in contributing to the success of a township development in Malaysia based on the scale of 1–10, where 1 is the most significant and 10 is the least.

1. Walkability
2. Connectivity
3. Mixed-use and diversity
4. Mixed housing
5. Quality architecture and urban design
6. Traditional neighborhood structure
7. Increased density
8. Green transportation
9. Sustainability
10. Quality of life

However, it was not necessary for the respondents to rank each and every one of the above based on descending order. In other words, they might group a few of the attributes under the scale of 1 if they feel that they were of equal importance and could not be separated. They might also single out those attributes that they feel were not relevant.

The feedbacks were transformed into a Likert scale with the range from 1 to 5 in an ascending order where 1 = Not significant; 2 = Less significant; 3 = Neutral; 4 = Significant; and 5 = Most significant. Table 3 shows the equivalent of the ranking used in the interview vis-à-vis the Likert scale. Summarized in Table 4 are the results obtained.

It was expected not all respondents would provide their opinion with regard to the ranking owing to their busy schedule. However, it was hoped that data collected would be sufficient for study and analysis through the two methods

Table 3: Likert scale equivalent

Likert scale	Ranking equivalent in interview
1 = Not significant	9 and 10
2 = Less significant	8 and 7
3 = Neutral	5 and 6
4 = Significant	3 and 4
5 = Most significant	1 and 2

Table 4: The results obtained

Design attribute	Ranking by respondent									
	A	B	C	D	E	F	G	H	I	J
Walkability	3	1	5	5	3	5	2	5	3	4
Connectivity	3	2	5	5	3	5	5	4	3	4
Mixed-use and diversity	3	3	5	3	2	2	4	2	2	5
Mixed housing	3	3	5	3	2	2	3	1	2	5
Quality architecture and urban design	3	2	5	3	5	5	3	3	4	3
Traditional neighborhood structure	3	1	5	5	4	3	4	2	2	3
Increased density	3	4	5	5	1	4	1	1	1	2
Green transportation	3	4	5	5	1	3	5	3	3	4
Sustainability	3	5	5	3	4	4	2	4	4	5
Quality of life	3	5	5	5	5	5	1	5	5	5

suggested, those being Frequency Analysis and Relative Index (RI).

Frequency analysis, which depends on the percentage of respondents giving the same answer, was adopted in this study to measure the degree of agreement for the significance of the various new urbanist principles to township development in Malaysia. The formula is denoted below:

$$Percentage(\%) = (n/N) \times 100\%$$

where *n* is number of respondents; *N* is total number of respondents received.

To evaluate the ranking of the significance of each design attributes to the success of the township development, the rating made against the five-point scale described previously was combined and converted into relative significance indices for each attribute, adopting the *RI* ranking technique (Kometa *et al*, 1994). This determined the relative ranking of the different attributes by comparing the individual value of the relative significance indices for each attribute. The highest ranking referred to the highest *RI* value.

The individual numerical rating of each of the identified attributes (from the Likert scale)

Table 5: Significance of new urbanist principles to township development

Description	Likert scale					Frequency analysis		RI	Rank
	1	2	3	4	5	<3	>3		
	No. of respondents					%	%		
Quality of life	1	0	1	0	8	10	80	0.880	1
Connectivity	0	1	3	2	4	10	60	0.780	2
Sustainability	0	1	2	4	3	10	70	0.780	3
Walkability	1	1	3	1	4	20	50	0.720	4
Quality architecture and urban design	0	1	5	1	3	10	40	0.720	5
Green transportation	1	0	4	2	3	10	50	0.720	6
Traditional neighborhood structure	1	2	3	2	2	30	40	0.640	7
Mixed-use and diversity	0	4	3	1	2	40	30	0.620	8
Mixed housing	1	3	4	0	2	40	20	0.580	9
Increased density	4	1	1	2	2	50	40	0.540	10

Notes: (1) Total number of respondents was 10 out of 13 approached for interview, which represented 76.92 per cent. (2) Scale used: 1 – Most significant; 2 – Significant; 3 – Neutral; 4 – Less significant; and 5 – Not significant.

was transformed to relative factors, by using the following formula:

$$RI = \frac{n1(1) + n2(2) + n3(3) + n4(4) + n5(5)}{5N}$$

where *n1* is number of respondents for ‘Not significant’; *n2* is number of respondents for ‘Less significant’; *n3* is number of respondents for ‘Neutral’; *n4* is number of respondents for ‘Significant’; *n5* is number of respondents for ‘Most significant’; and *N* is total number of respondents.

The result of the analysis is tabulated in Table 5. On the basis of the analysis, the respondents agree that the most significant attribute is quality of life, which gives a RI of 0.880. It is then followed by connectivity and sustainability, both with an RI of 0.780. Following behind are walkability; quality architecture and urban design; and green transportation; all of which fair at a RI of 0.720. The bottom 50 per cent of the score are made of traditional neighborhood structure (RI 0.640); mixed-use and diversity (RI 0.629); mixed housing (RI 0.580); and increased density (RI 0.540).

One of the developer respondents was of the opinion that all the new urbanist principles are excellent and need to be continually promoted by both authorities and development organizations. He suggests that concerted efforts, continuous education and creation of awareness in the public in this area are certainly required to ensure more wide-spread success. In this light, he ranks all the principles of equal importance and significance. Another respondent who is an architect maintains that only six of the 10 principles are applicable

locally. Citing example of Singapore, he opines that community planning concept should also be included as one of the principles as it has been successfully proven in contributing to healthy environment, social obligation and society’s environment.

Some respondents point out to three controversial issues in the new urbanist principles, which are increased density, provision of low cost housing and quality of life. The first issue is with regard to increased density. While increased density leads to economies of scale to sustain the commercial component of the development, the ‘NIMBY’ phenomenon among the urban dwellers is not uncommon. On one hand, people love to have good amenities in the neighborhoods but on the other hand they want a quiet and serene living environment free from economic activities and traffic.

Second, low cost provision is a good concept from social point of view; however, because of social stigma, some may not prefer low cost housing to be located in the vicinity of high cost housing. In general, this respondent feels that New Urbanism is more suitable for medium to medium high cost development. It caters more to the general public rather than the elite super rich that constitutes a totally different sector from the marketing point of view. The third issue is pertaining to quality of life. Some of the respondents point out that quality of life should not be included as one of the principles. It should be regarded as the outcome of the combination of all the other new urbanist principles. Therefore, the quality of life should be viewed as a function

of an amalgam of product hardcore characteristics such as building architecture and layout design; the situs characteristics such as location, amenities, surrounding neighborhoods and infrastructure provisions; and economic characteristics such as selling price and after-sale services offered by the developers. On the basis of the list of principles provided, the respondents are of the opinion that quality of life should be singled out. It is an outcome rather than a principle.

Another respondent who is a real estate agent cautions that one should not generalize the applicability of new urbanist principles. It depends on individual lifestyle. Some yuppies may love to have shopping malls and shops located just at a walking distance from their residence or apartment. The middle age group may prefer housing location of at least a couple of kilometers away from the busy commercial hub in order to enjoy family life in a peaceful environment after a long-day work. The affordable ones or those above 40s may want to stay at a peaceful and quiet zone yet not too far from the commercial zone. All these boil down to individual preference and economic affordability.

Conclusion

On the question of what would be the future direction of township development concept in Malaysia, those respondents from property development companies concur that new urbanist principles are increasingly being adopted. According to them, the future trend will favor those who continue to concern about the society's changing needs and constantly striving to innovate and to fulfill the changing demands. In regard to the changing need of society, a respondent explains succinctly that social empowerment and concern for the environment are observable trends currently. Healthy living environment and social obligation may take center stage in future township developments.

One of the respondents who has experienced property development for the past 25 years asserts that developers are entrepreneurs and for the sake of sheer survival under intense competition, only the fittest will survive. According to him, the nature of free market economy has a tendency to filter out weaker players. The point he stresses is that to continue with the old way of doing things is a ripe recipe to doom. An architect who has been approached for the interview

expresses his opinion that the immediate future will likely be a continuation of what we are currently witnessing. There will be a continued evolution of innovative concepts to attract purchasers to fence off increasing competitions in the marketplace. However, he cautions that as some concepts are from overseas, the challenge is to adapt these concepts into new ways of living within our tropical climate and different cultures.

One of the respondents who is the principal of a private quantity surveying consultancy opines that the future direction of township development in Malaysia relates to liveability, connectivity, sustainability and value appreciation. While agreeing to this contention, another respondent who is also in private quantity surveying practice concludes that there is certainly a place for the New Urbanism movement in the future, nevertheless, the Malaysian buying power is still relatively low. Hence, new urbanist design principles may only be applied in selected locations owing to foreseeable higher cost.

A few real estate agents who have been approached for the interview suggest that the future direction is likely to reside with small neighborhood concept and emphasize on ecological friendly environment, global warming, greenery, garden concept, security and small club, such as Desa Park City, which is generally regarded as a good place to live despite higher prices. In this light, they clarify that it is by no means suggesting that there will be no large township development in the future. Large township development, particularly in suburban of Klang Valley, will still prevail but is likely to be segmented into small parcels that are individually gated and guarded for maximum security. The individual parcels are connected with linear green, pedestrian friendly walk path and so on. Within the overall township, there shall be public space at the center for park, lake, amenities and so on, which very much resembles the traditional neighborhood structure as advocated in the new urbanist concept.

There are potential applications of new urbanist principles to the local context, particularly in greenfield development. However, one has to be selective and critical in the application. The new urbanist principles are general statements of intent, which need to be incorporated physically into the master plan layout. In the local context, the new urbanist principles can be applied as long

as they comply with local planning laws and regulations. No paradigm shift is necessary to embrace the parlance of New Urbanism in our local context and our land use regulations, as the concepts were developed in advanced economies as a renaissance of the traditional neighborhoods, which have been destroyed a long history of industrial revolution that led to unprecedented urban sprawl and decay. The Malaysian economy is still at the development stage. The market is evolving and the practices in township development will continue to change for commercial survival. Nonetheless, the new urbanist concepts would appear to offer potential as a model for the local township concept, albeit only selective principles based upon certain parameters are applicable commercially. Notably, its applicability may be confined to medium to upper-medium cost developments due to the anticipated higher construction costs.

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