Topic: Future city scenarios for Malaysia

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2030 – 38 million!!!

1. When in 1957 we became independent, the population was only five million. Even after 1963 when Sabah and Sarawak joined the Peninsula to form Malaysia, the population was only slightly more than six million.

2. Today Malaysia’s population is 30 million.
Unique feature 1: very fast speed

Number of Years from about 10% to 50% of Urbanization Rate

Latin America and Caribbean: 10% → 49% in 210 years
North America: 9% → 51% in 105 years
Europe: 12% → 51% in 150 years
Asia and the Pacific: 11% → 51% in 95 years
Viet Nam: 12% → 50% in 90 years
Indonesia: 12% → 54% in 65 years
Lao PDR: 10% → 62% in 50 years
Bhutan: 10% → 51% in 55 years
China, People’s Rep. of: 11% → 51% in 61 years

When this photograph of Singapore was taken, the multi-storey Asia Insurance building to the left was the tallest in the city and the harbour was used by traditional sampans and rowing boats.

Although the Asia Insurance building still exists, it is no longer the tallest in the city. Singapore has expanded into a major commercial center. Even away from the business district much of the land of Singapore island is built up with the majority of Singaporeans living in high-rise flat.
PROBLEMS:
Rampant cutting down of trees
Car emissions
Energy from fossil fuels for
- domestic,
- commercial &
- industries
Human bad habits
SOLUTIONS:

- Reduce cutting and grow more trees
- Fuel Efficient cars – hybrid or electric
- Renewable Energy from sun, wind, hydro, biomass, etc for
  - domestic,
  - commercial &
  - industries
- Human green habits

NEW CONCEPT OF BUILT ENVIRONMENT WILL BRING BACK THE GREEN ENVIRONMENT
<table>
<thead>
<tr>
<th></th>
<th>Java</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total land area</td>
<td>128,297 km²</td>
</tr>
<tr>
<td></td>
<td>(1,919,440 km²)</td>
</tr>
<tr>
<td>Population</td>
<td>138,000,000</td>
</tr>
<tr>
<td></td>
<td>(249,865,000)</td>
</tr>
<tr>
<td>Density</td>
<td>1075/km²</td>
</tr>
<tr>
<td></td>
<td>(130/km²)</td>
</tr>
</tbody>
</table>

Can Singapore be used as a reference for Mega City or Compact City development?
## Summary of Kondratiev waves

<table>
<thead>
<tr>
<th>Wave 1: Cotton, Iron and Water Power</th>
<th>Wave 2: Railways, Steam Power and Mechanisation</th>
<th>Wave 3: Steel, Heavy Engineering and Electrification</th>
<th>Wave 4: Oil, Automobiles and Mass Production</th>
<th>Wave 5: Information and Communication Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Downswing</strong> 1815–1848</td>
<td>1873–1895</td>
<td>1918–1940</td>
<td>1973–?</td>
<td>2001–?</td>
</tr>
<tr>
<td><strong>Technologies</strong></td>
<td><strong>Technologies</strong></td>
<td><strong>Technologies</strong></td>
<td><strong>Technologies</strong></td>
<td><strong>Technologies</strong></td>
</tr>
<tr>
<td>Cotton-spinning and iron products,</td>
<td>Railways and railway equipment, steam</td>
<td>Electrical equipment, heavy engineering, heavy</td>
<td>Automobiles, trucks, tractors, tanks, diesel</td>
<td>Computers, software, telecommunication equipment,</td>
</tr>
<tr>
<td>water-wheels, bleach</td>
<td>engines, machine tools, alkali industry</td>
<td>chemicals, steel products</td>
<td>engines, aircraft, oil refineries</td>
<td>biotechnology</td>
</tr>
<tr>
<td><strong>Core inputs</strong></td>
<td><strong>Core inputs</strong></td>
<td><strong>Core inputs</strong></td>
<td><strong>Core inputs</strong></td>
<td><strong>Core inputs</strong></td>
</tr>
<tr>
<td>Iron, raw cotton, coal</td>
<td>Iron, coal</td>
<td>Steel, copper, metal alloys</td>
<td>Oil, gas, synthetic materials</td>
<td>Integrated circuits</td>
</tr>
<tr>
<td>**Transport and communications</td>
<td><strong>Transport and communications</strong></td>
<td><strong>Transport and communications</strong></td>
<td><strong>Transport and communications</strong></td>
<td><strong>Transport and communications</strong></td>
</tr>
<tr>
<td>infrastructure**</td>
<td>Canals, turnpike roads, sailing ships</td>
<td>Railways, telegraph, steam ships</td>
<td>Steel railways, steel ships, telephone</td>
<td>Radio, motorways, airports, airlines</td>
</tr>
<tr>
<td><strong>Corporate organisation</strong></td>
<td><strong>Corporate organisation</strong></td>
<td><strong>Corporate organisation</strong></td>
<td><strong>Corporate organisation</strong></td>
<td><strong>Corporate organisation</strong></td>
</tr>
<tr>
<td>Owner-manager</td>
<td>Hierarchy</td>
<td>Division</td>
<td>Matrix</td>
<td>Network linkages</td>
</tr>
</tbody>
</table>
After reading this book on microtrends and understanding the power of PULL, I can see new megatrends developing... from the physics and nature of the future and not convince I read more books written by other authors and realized that the ICT to be the new digital age.... that will be known as the Sixth Wave.

...and open up files for future use such as...

We must then strategise for Blue Oceans.

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1. SMART ENERGY
2. SMART MOBILITY
3. SMART TECHNOLOGY
4. SMART HEALTH CARE
5. SMART BUILDINGS
6. SMART INFRASTRUCTURE
7. SMART CITIZEN
KEY PARAMETERS THAT WILL DEFINE A SMART CITY IN 2020

1. SMART ENERGY
2. SMART MOBILITY
3. SMART TECHNOLOGY
4. SMART HEALTH CARE
5. SMART BUILDINGS
6. SMART INFRASTRUCTURE
7. SMART CITIZEN

- Infill and brownfield development can reduce up to 30% fewer greenhouse gases (GHG emission) compared to green field locations. (Source: Congressional Research Service, 2009)

- I person can save 2,700kg of CO₂ by living in a clustered-mixed use development. (Source: redevelopment economics.com)

- By using public transit, we can reduce daily CO₂ by 9kg per person. (Source: American Public Transport Association, APTA)

- By encouraging and allowing for higher density and commercial and residential centers near transit corridors, would help reduce 4.957 metric tons of GHG per year. (Source: www.transportation.org)
Ground level for:

- Garden parks preserving ecology and good for jogging and exercising
- Bicycles
- Motorbikes
- Carbon sink
- Add in more O2 and rapidly reduce CO2
- Rivers

Smart Energy
Renewable Energy

- Wind Turbines
- Photovoltaics

GREEN RESIDENTIAL
GREEN OFFICES
GREEN COMMERCIAL
Smart Energy
Renewable Energy

Smart mobility
Low emission advanced transportation – vertical and horizontal movement

Ground level for:
- Garden parks preserving ecology and good for jogging and exercising
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Smart Energy
Renewable Energy

Wind Turbines
Photovoltaics

Green Residential

Green Offices

Green Commercial

Skytrain

Elevated roads

Green vehicles

Car sharing

Fast and efficient lifts for vertical movement e.g. Taipei 101
From 5th flr to 89th flr in 30 seconds
Pedestrian tower bridges
Transcalators
Elevators
Escalators
Electric buggy cars
THE FIVE MINUTES CITY

With priority given to bicycles, pedestrians and public transportation, Nordhavnen has a strong focus on green mobility. The ‘five-minutes-city’ is a reference to the time it takes to walk four hundred meters, and the concept is to make it easier to walk, bike or use public transportation than to travel by car in Nordhavnen.

The ambition is that at least one third of all traffic in the area should be cyclists, at least one third should be covered by public transportation, while car traffic should account for no more than one third.
The Built-up Area of Atlanta and Barcelona Represented at the Same Scale

Atlanta:
2.5 million people (1990)
4,280 km² (built-up area)

Barcelona:
2.8 million people (1990)
162 km² (built-up area)
Smart Energy
Renewable Energy

Smart Mobility
Low emission advanced transportation – vertical and horizontal movement

Smart Health Care
e-Health

The future is now
Medical advances turn science fiction into science fact.
Ground level for:
- Garden parks preserving ecology and good for jogging and exercising
- Bicycles
- Motorbikes
- Carbon sink
- Add in more O2 and rapidly reduce CO2
- Rivers

Smart Energy
- Renewable Energy

Smart Mobility
- Low emission advanced transportation – vertical and horizontal movement

Smart Health Care
- e-Health

Smart Buildings

Smart Infrastructure
- ICT
- Fast and efficient lifts for vertical movement e.g. Taipei 101
- From 5th flr to 89th flr in 30 seconds

Elevated roads

Green vehicles

Green residential

Green offices

Green commercial
Ground level for:
Garden parks preserving ecology and good for jogging and exercising; Bicycles; Motorbikes; Carbon sink; Add in more O2 and rapidly reduce CO2; Rivers

Smart Energy
Renewable Energy

Smart Mobility
Low emission advanced transportation – vertical and horizontal movement

Smart Health Care
e-Health

Smart Buildings

Smart Infrastructure

Smart Citizen

Smart Energy
Wind Turbines
Photovoltaics

Smart Mobility
Green Residential
Green Offices
Green Commercial

Smart Health Care

Smart Buildings

Smart Infrastructure

Smart Citizen

Elevated roads
Green vehicles

Fast and efficient lifts for vertical movement e.g. Taipei 101
From 5th flr to 89th flr in 30 seconds

Skytrain
car sharing

Smart Technology
BIG DATA
For CONNECTIVITY & CONVERGENCE

Smart Health Care
e-Health

Smart Buildings

Smart Infrastructure

Smart Citizen

Shop online. We deliver
Enter no-touch computing

NEXT WAVE: Touchless control, a new way of interacting with computers, will make its way into devices, writes Chandra Devi Rengamcyar

THIS basic idea about touch computing has led to a couple of new innovations that offer new and sometimes greater options for touch-and-go applications and contexts than before.

You don't need to reach for the mouse or a dock to take control of your PC. The HP Envy 17 built-in Leap Motion can sense the movement of your hand and is designed to work with Snapfish to provide an ideal experience. It is the first PC to incorporate Leap Motion into its design, allowing users to experience the grace of motion with high precision.

Microsoft has been working on a sensor that can detect the movement of your hand and the Leap Motion sensor will help bring that functionality to the masses.

Microsoft has also been working on a sensor that can detect the movement of your hand and the Leap Motion sensor will help bring that functionality to the masses. The sensor can be used to control a computer or interact with a tablet, and it can also be used to control a game controller.
TOMORROW IS HERE

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THE POWER OF 3

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Fast-track your way to success. Call us today.

THE CITY OF TOMORROW
S’pore going ‘shoebox size’

RIGHT SIZING: CapitaLand to build smaller apartments to improve affordability and combat housing curbs

SINGAPORE

CAPITALAND Ltd, Singapore’s biggest developer, may alter the size of its apartments as it seeks to improve affordability to combat government measures aimed at curbing speculation and lowering prices.

The developer sold 139 residential units in the island-state in the three months ended June, 31 per cent fewer than in the same period last year, it said yesterday as it forecasts “headwinds” in the near term with the housing curbs.

After adding taxes on home sales and mortgage limits, the city’s central bank last month capped property loans repayments at 60 per cent of salaries, which the developer cited as an additional measure on home sales. Prices and sales of Singapore residential properties are expected to moderate because of the housing curbs, the company said.

“We are now looking at how we can respond to the current market situation,” Lim Ming Yai, president and chief executive officer at CapitaLand, said in a Bloomberg Television interview yesterday.

“We want the right sizing, put in the right layout, so our users will find it a lot more user-friendly and at the same time something they can afford. This is the direction we’re moving towards.”

Lim, who took the helm at the start of the year, didn’t elaborate on details for the change in apartment sizes.

Singapore home prices climbed to a record in the second quarter as gains in suburban housing values accelerated, leading to new government measures on property loans in June.

The price increases amid low interest rates raised concerns of a housing bubble and prompted the government to widen a four-year campaign in January to curb speculation in Asia’s second-most expensive housing market.

In January, the government increased stamp duties for homebuyers by five percentage points to seven percentage points.

CapitaLand will start selling two projects in the second half of the year, including Marine Point and its second condominium project in the central suburb of Bishan comprising 664 units, the developer said.

The plans for the new project in Bishan show that it will construct apartments with an average size of between 800 and 900 square feet, based on the number of units planned, according to Tricia Song, an analyst at Barclays Plc in Singapore. For previous developments, the average size was between 1,200 and 1,600 sq ft, she said.

“The fact that they are similar plots and that they are planning about 40 per cent more units means they are thinking of downsizing units,” she said. “It will make it more affordable and this is the trend of Singapore residential sales as we see it.”

Singapore decided to regulate the sale of smaller-sized residential units after developers sold a record number of so-called shoebox apartments last year. Shoebox apartments are those smaller than 50 sq m (538 sq ft).

It is the most-expensive residential market after Hong Kong, according to a Knight Frank LLP and Citi Private Bank report released last year that compared 63 locations globally.

The central bank estimates that between five and 10 per cent of borrowers have probably over-leveraged on their property purchases with total debt-service payments at more than 60 per cent of their income, Monetary Authority of Singapore Managing Director Ravi Menon said in a Tuesday Bloomberg Television interview.

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QUESTIONS?
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