

SYARAHAN PERDANA

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**“Current Issues and
Challenges in
Real Estate Industry.
The Way Forward.”**

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SYARAHAN PERDANA

Current Issues and Challenges in Real Estate Industry: The Way Forward

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Faculty of Technology Management and Business

Universiti Tun Hussein Onn Malaysia



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PREFACE

Generally, the real estate sector has made a considerable contribution to a nation's economic growth. The economy of a nation is significantly impacted by favourable changes in the business and real estate markets. Similarly, the decline in the housing market has a big effect on the economy. Therefore, the real estate sector also has to deal with difficult problems that have a big impact on its ability to survive.

This book discusses five (5) significant problems that Malaysia's and the world's real estate markets are currently confronting. This book also discusses how the country's real estate sector may be threatened by the issues raised. The book's approach to offering ideas to meet this difficulty is equally intriguing.

Beginning with an overview of the history of the real estate industry, this book goes on to cover the characteristics of the Malaysian real estate market, the origins of the real estate and surveying professions, and various key real estate concepts like cost, value, and market value as well as the highest and best use.

This book also demonstrates how technology-based business tycoons have increasingly replaced real estate tycoons as the richest people over the past few decades. This occurs as disruption technology starts to replace conventional business practises throughout industries, including the real estate industry. The effect of COVID-19 on several real estate sectors, including housing, commercial, office, and the hospitality industry, is also covered in length in this book. This book focuses on the key concerns that, whether locally or globally, endanger the real estate business and is written in simple language.

Since all activities related to space and buildings, such as commercial activity, daily office activities, teaching and learning activities in institutions of higher learning, and all movements are subject to movement control, the Covid-19 epidemic that has halted all economic activity has also stopped the real estate industry's consistency against inflation. Due to the constraints imposed by this circumstance, there is now significantly less demand for space in the real estate market.

The book also discusses PropTech and technology disruption as threats to the real estate sector. The usage of modern technology has interrupted everyday routines, from using the internet to regular physical practises. This book also covers the economic bubble that developed as a result of overzealous real estate speculation. The topic of property overhang and market mismatch, which continue to be problems in the real estate sector, was also discussed. The discussion also illustrates the effects and outlines potential remedies for the threats mentioned.

CHAPTER 1

INTRODUCTION TO THE REAL ESTATE INDUSTRY

Introduction

The real estate sector is an industry that draws interests from people of every walks of life, regardless of whether they have any prior real estate experience or not. The sector has also long been associated with the world of luxury and considered as a symbol of wealth and affluence to its owner. A country's economy can be significantly impacted by the development of a real estate project, which can have various effects and influence up to 150 economic sub-sectors. Therefore, a development project is a tool that can spark economic activity in any sector in order to boost a nation's economy

The real estate industry is different from stock market investing in several aspects, including the requirement of substantial financial investments to buy a single real estate unit. Due to the various legal considerations and encumbrances, investing in the real estate sector typically requires a lengthy amount of time for a sale and purchase transaction to be finalized. However, because the real estate sector is thought to be inflation-proof, it has a direct impact on economic growth and makes a considerable contribution to the GDP of a nation and the world at large.

History of the Real Estate Profession

Land and Surveying is generally recognized as one of the oldest crafts in the world, existing from a time when the idea of a profession was never given a thought and may be considered as one of the oldest professions. The history of Ancient Egypt gives us the earliest references to land measurement and registration of title. Herodotus, lamented that the Nile was constantly overflowing and washing away landmarks. Consequently, this had given rise to disputes over taxes and property rights. These disputes had brought to the introduction of surveyors.

In the United States, the profession of real estate broker began around 1900. Since then, the profession has flourished in the country. The initial home sale records began in the United States in 1890. It was an attempt to create the first real estate association in the United States. This had set a base for the establishment which led to the creation of the National Association of Real Estate Exchanges in 1908.

The first real estate brokerage was established in 1855 and by 1908, the National Association of Real Estate Agents, the predecessor of today's National Association of Realtors, was founded. The association became the originator of the term “realtor” to distinguish members from non-member agents.

The oldest agents in the UK started life in the capital, with Chesterton’s when Charles Chesterton established the firm in Kensington in 1805. Charles was originally the agent for the Phillimore Estate and the Phoenix Insurance Group. Over the time, the business

expanded and grew, and the firm is still serving in the upmarket neighborhoods of London and globally more than 200 years after it was first founded.

In Malaysia, the real estate profession officially began in 1981 when the Valuers, Appraisers, and Estate Agents Act under the Ministry of Finance was established. As a result, the Board of Valuers, Appraisers, and estate agents was established under this act in 1981 to regulate the real estate profession in Malaysia. Currently, the Board is known as the Board of Valuers, Appraisers, Estate Agents, and Property Managers, Malaysia (BOVAEP).

Highlights of the origins of the Real estate and Surveying profession and its emergency in Malaysia

- The profession of a land surveyor is considered as one of the oldest and earliest professions when the Nile Boundaries changed frequently and needed special marking in tax disputes (RISM, 2021).
- Herodotus- (485 b.c.) (The history of Ancient Egypt gave us the earliest references to land measurement and registration of title to land) and told us that the Nile was constantly overflowing and washing away landmarks. Consequently, this gave rise to disputes over taxes due and property rights. This brought to the formation of a craft of surveyors (Sr).
- In Malaysia, the real estate profession has only officially existed after the passing of the Valuers, Appraisers & Estate Agents Act of 1981.

Characteristics of Real Estate Market

To effectively understand the real estate industry, there is a need to examine the characteristics of the real estate market which is often different from the stock market because of its uniqueness. The followings are some of the characteristics of the real estate market as compared to others.

- **Durability:** Real estate investments can be extremely durable and build multi-generational wealth.
- **Lack of Transparency:** Some markets, such as stocks and commodities, are regulated to be as transparent as possible. Investors have access to real-time market information and are able to make immediate changes to their portfolios
Real estate works very differently. When an investor buys a property, there is a risk that the seller is withholding information, or that the seller is unaware of problems.
- **Heterogeneity:** All real estates are local, with every property being unique in terms of location, physical structure, and financing.
- **Illiquid:** Real estate is considered illiquid because it cannot be easily sold without a substantial loss in value.

- **High Startup Costs:** The costs of acquiring real estate investments are higher than many other types of investments. Typical costs include purchase and closing costs, rehabbing, and financing. It takes money to make money” applies to real estate investing but, the reward is high in the form of cash flow and profits.
- **Investment Vulnerability:** Risks associated with real estate make investments in this asset class very profitable for savvy investors who have a proven plan for success. Real estate investments can be fluid at times, change as cities and neighborhoods change. Therefore, real estate is not a hands-off static investment, but one that requires constant attention.

Real Estate Vs. Real Property

Real estate means land and all things that are a natural part of the land such as trees, minerals, and things that have been attached to the land including buildings and site improvements and all permanent building attachments, such as mechanical electrical plants providing services to a building, that are both below and above the ground (MVS,2019).

Property is a legal concept encompassing all the interests, rights, and benefits related to ownership. The property consists of the rights of ownership, which entitle the owner to a specific interest in what is owned.

Real property means all rights, interests, and benefits related to the ownership of the real estate. Real property can be classified according to its general use as residential, commercial, agricultural, industrial, or special purpose.

In Malaysian context, real estate and real property are used interchangeably and considered the same. The main reference used is the National Land Code 1965 (amended) which defines land as the surface of the earth and all substances forming that surface and all things attached to the earth or permanently fastened to anything attached to the earth, whether on or below the surface and land covered by water.

Price, Cost, And Value

Price is a term used for the amount asked, offered, or paid for an asset, liability, or service. The sale price is a historical fact. Price is an indication of a relative value placed upon the assets, liabilities, or services by the particular buyer or seller under particular circumstances.

Cost is the price paid for assets, liabilities, or services or the amount required to create or acquire the asset, liability or service. When the asset, liability, or service has been completed, its cost is a historical fact. The price paid for an asset, liability, or service becomes a cost to buyer.

Value is an economic concept referring to the price most likely to be concluded by the buyers and sellers of an asset, or service that is available for purchase. Value is not a fact, but an estimate of the likely price to be paid for assets and services at a given time

in accordance with a particular definition of value. The economic concept of value reflects a market's view of the benefits that accrue to one who owns the assets or receives the services as of the effective date of valuation.

Highest and Best Use Concept

The highest and best use is a premise of value which assumes that the asset is put to a use that maximizes its potential in continuation of its existing use or for some other alternative use assuming that the user is physically possible, legally permissible, and financially feasible.

Market

A market is an environment in which goods and services trade between buyers and sellers through a price mechanism. The concept of the market implies that goods and services may be traded among buyers and sellers without undue restrictions on their activities. Each party will respond to supply and demand relationships and other price-setting factors as well as to the party's own capacities and knowledge, understanding of the relative utility of the goods or services, and individual needs and desires. A market can be local, national, or international. Although over a period of time, the markets will influence each other.

Market Value

Market value is the estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction after proper marketing and where the parties had each acted knowledgeably, prudently, and without compulsion.

Understandably, the real estate industry is closely related to the economic situation of a country. The real estate market also has a significant impact on the economic growth of a country. The rise of the real estate market also has a significant impact on the level of household affordability as almost every individual dream of an affordable dream home. In fact, most of the time, individuals are in real estate whether at home, office, shopping complex, factory, and so on.

Therefore, it is important to understand the important issues that are closely related to the industry and the real estate market as it has a significant impact on the economy of a country.

This paper will discuss the most important issues that are closely related to the industry and real estate market and at the same time also will discuss strategies how to overcome these challenges.

Current Issues and Challenges in Real Estate

Real estate investment receives special attention around the world because of its vital function and contribution to national economies and socioeconomic growth.

Real estate investment contributes significantly to job creation and employment, housing provision, and income enhancement and redistribution, and poverty alleviation. An effective real estate investment can ensure adequate housing provision, which includes security of tenure, social amenities such as water and electricity, a good sanitary system, and high environmental quality.

Real estate’s potential responsibilities and contributions derive from the business's wide variety of operations, which include the purchase, development, ownership, management, rental, and sale of real estate and connected properties for profit. The responsibilities also include single and multi-family residential residences, mercantile and agricultural lands, water houses, office spaces, shopping complexes, malls, and wholesale and retail stores, among other property types.

Who are The Richest in The World 2022

ChinaDaily.com (2022) lists the 10 richest individuals as real estate industry billionaires with Li Ka-Shing (\$33 billion), Lee Shau-Kee (\$27 billion) and Yang Huiyan & Family leading the list with assets worth \$26 billion.

While CEO World Magazine (2022) lists the richest technology billionaires in the world by listing Elon Musk (twitter) with assets worth \$219 billion, followed by Jeff Bezos (Amazon) - \$171 billion and Bernard Arnault (LVM) \$158 billion followed by Bill Gates (Microsoft) \$129 billion.

Top 10 Real Estate Billionaires 2022		Top 8 Technology Billionaires 2022	
1 Li Ka-shing & family (Cheung Kong): \$33 billion		1 Elon Musk - \$219 billion (Twitters).	
2 Lee Shau-kee (Henderson Land): \$27 billion		2 Jeff Bezos \$171 billion(Amazon).	
3 Yang Huiyan & family (Country Garden): \$26 billion		3 Bernard Arnault & family \$158 billion (LVM).	
4 Peter Woo Kwong-ching & family (Wheelock): \$18 billion		4 Bill Gates \$129 billion (Microsoft).	
5 Wang Jianlin & family (Wanda) : \$17 billion		5 Warren Buffet \$118 billion (Berkshire Hathaway).	
6 Wu Yajun & family (Longfor): \$17 billion		6 Larry Page \$111 billion (google).	
7 Hugh Grosvenor (Grosvenor) : \$16 billion		7 Sergey Brin \$107 billion (google).	
8 Donald Bren (Irvine Company): \$15 billion		8 Larry Ellison \$106 billion (Software).	
9 Joseph Lau Luen-hung & family (Chinese Estate)- \$14 billion			
10 Li Hua (Excellence) \$11 billion			

Source: ChinaDaily.com (2022)

Source: CEO World Magazine (2022)

Recent trends show how the world's wealth previously passed down from owners and players in the real estate industry has shifted to technology-based industries.

The rapid development of technology has had a significant impact on all industries including the real estate industry. For example, major players in the hospitality real estate industry such as AGODA and TRIVAGO do not own a single hotel. Similarly, one of the largest accommodation providers AIRBNB owns no real estate.

Rapid development in the delivery industry such as Food Panda, Grab Food, Shoppe, Lazada and TitTok platforms have made restaurants and sales warehouses receive a very significant impact on the demand for commercial real estate.

Despite the abundance of potential and contributions of the real estate sector to the growth of global and national economies, the industry is still facing numerous challenges that cut across the entire real estate world. The degree or magnitude of the challenges might vary amongst nations but most of the challenges of the sector remain the same globally.

Various studies in recent times revealed some of the challenges facing the real estate industry including the issue of COVID-19 pandemics; issues relating to the real estate sector and the emergencies of digital technologies; issues relating to housing and affordability; housing bubble and housing overhang; land scarcity; the problem of public housing maintenance, demand, and supply of housing mismatch among others.

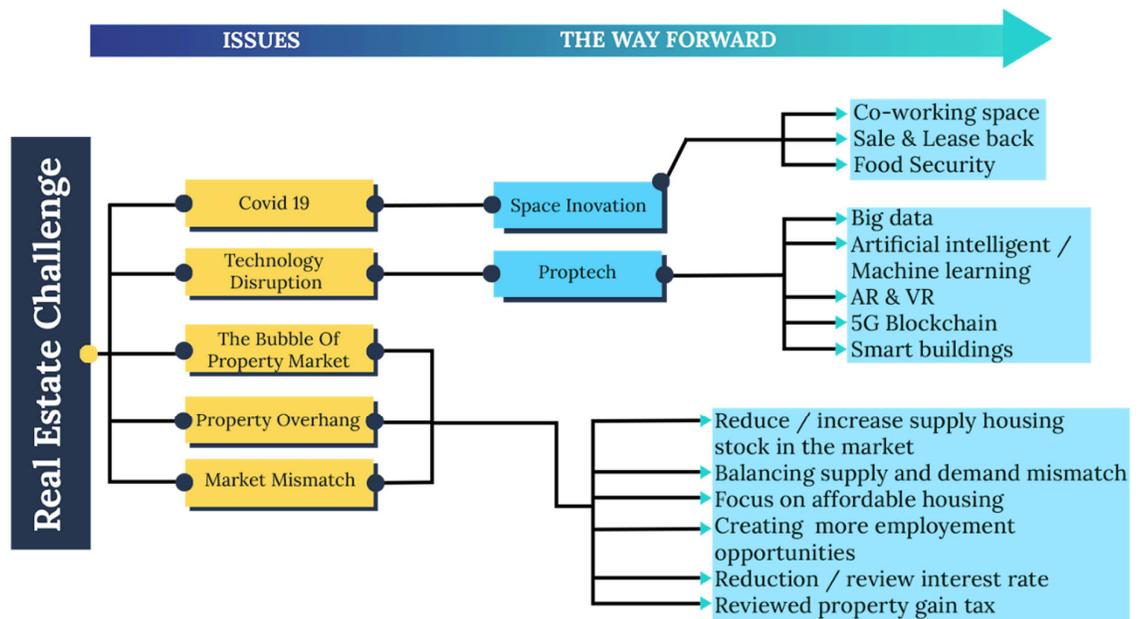


Figure 1.0: An Overview of some of the current issues in real estate, challenges, and the way forward. Source: Wan Yusoff WZ, (2022).

Figure 1.0 above is a recap of the authors’ discussions on the current issues in real estate, challenges, and the way forward. The remainder of this paper thoroughly hinges on the above figure.

CHAPTER 2

IMPACT OF COVID-19 ON THE REAL ESTATE MARKET

INTRODUCTION

The global lockdown of all economic activity because of the COVID – 19 pandemics has given devastating and consequential effects on almost every sector of the global economy, including the real estate industry, and this trend will continue to generate crises that will undoubtedly have a negative impact on the global gross domestic product (Nicola et al, (2020).

The outbreak has sent a powerful, external, and adverse health shock through the global economic system, affecting both demand and supply. Government-imposed measures to prevent the pandemic, such as corporate closures and curfews, have caused growth rates to plunge to new lows.

The lockdowns and travel bans appear to have resulted in labor shortages, supply chain interruptions that resulted in building material shortages, and increased health and security procedures.

Even though several countries have taken initiatives to alleviate the crisis, it is far from over and continues to have a domino effect on many sectors. The pandemic's impact on the global economy and almost all business sectors, including real estate, has recently become a matter of debate among industry watchers and academics.

Travel restrictions, lockdown, social distance, and the inability to communicate in person have all had a detrimental impact on real estate transactions, particularly in purchasing and selling real estate items.

Apparently, the pandemics have created a lot of uncertainty in the real estate business, resulting in thousands of people being laid off, placed on a temporary basis, or taking unpaid leave around the world.

This has undoubtedly had a negative impact on people's living standards and made the real estate sector vulnerable (Savills, 2020).

Due to the recent performance of the global economy brought about by the negative consequences of the COVID – 19 pandemics, many commercial activities, including real estate in Malaysia and many other parts of the world, have still been as successful as they used to be.

COVID-19 Pandemic Impact on the Economic of ASEAN Countries

In the economic context, the effects of the COVID 19 pandemic can be clearly seen when Real GDP Growth fell significantly in 2020 for all ASEAN countries.

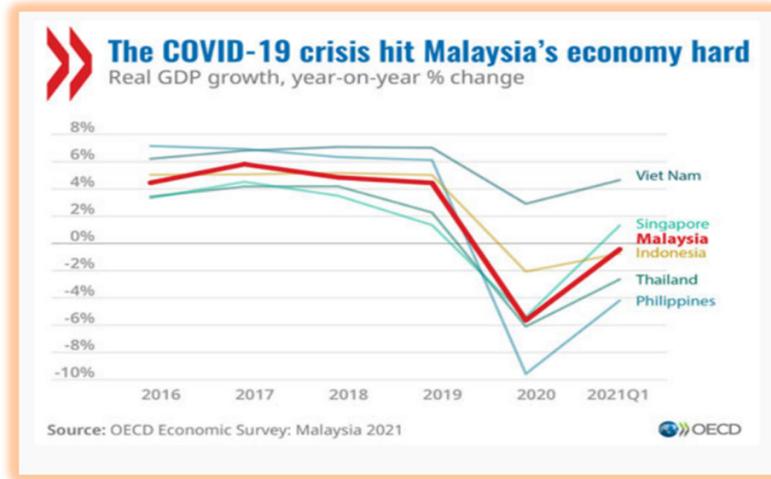


Figure 2.0: COVID-19 Pandemics' impact on the GDP of ASEAN Countries
Source: OECD Economic Survey: Malaysia, 2021

As shown in Figure 2.0, ASEAN countries recorded GDP growth of between 2.5 to 6.5% in 2016-2017. Significant impact can be seen for all Asian countries when there is a sharp drop of about -9%

Asia-Pacific coronavirus exposure heat map, by industry

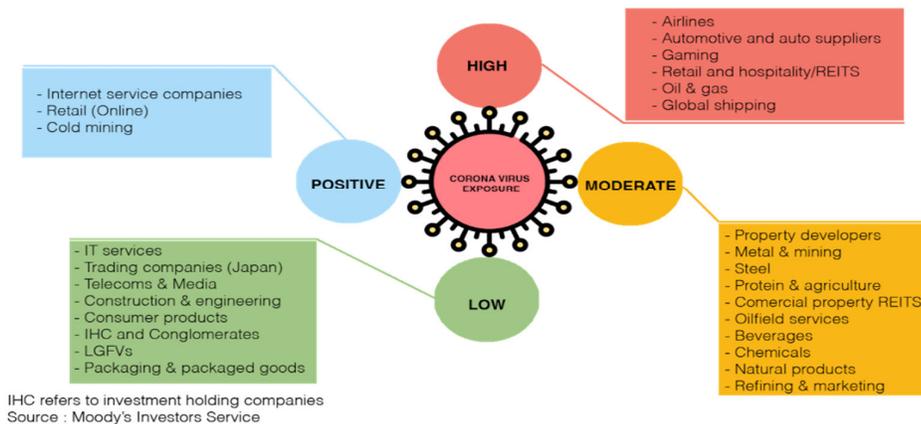


Figure 2.1 Asia Pacific Corona Virus Heat Map by Industry
Source: Moody's Investor Services (2021)

Figure 2.1 above shows the magnitude of the pandemic's effect on various sectors of the Asia-Pacific economy. The worst heat sector as can be seen above were the Airlines, Automobile and auto suppliers, and Gaming. Retails, and hospitality, oil & gas, the global shipping. These are closely followed by real estate and other related sectors. However, internet service companies, retail online, and cold mining recorded positive effects.

THE MALAYSIAN SCENARIO OF COVID-19 PANDEMICS IMPACT ON THE REAL ESTATE SECTOR

Malaysia, like many other countries, has seen an increase in virus cases since the fatal COVID-19 epidemic began in 2019. A total of 9316 cases and 314 COVID-19 clusters have been discovered, according to Malaysia's Ministry of Health, with a prevalence of 38.55-48.06 percent for factories, 12.55-15.29 percent for community spreading, 8.6-11.56 percent for construction sites, 5.53-7.96 percent for educational sites, and 7.01 percent for shopping areas (Jagun et al., 2022).

Considering the rate at which the pandemic spread across various sectors in the country, the governments decided to apply lockdowns, mobility restrictions, social distance, and proximity restrictions with a view to curtailing the further spread of the pandemics. These regulations though very effective in curtailing and reducing the spread of the pandemic, however, have had a substantial influence on the various sectors of the national economy including the real estate and construction industry. Manufacturing costs have increased, project completion timelines were extended, and the operational challenges and policy concerns have all risen, thus leading to negative consequences on the real estate development, housing, and property market transactions performance (Jagun et al., 2022).

For instance, the NAPIC (2021) annual property market status report indicated that prior to the pandemic outbreak between 2017 - 2019, the annual property transaction volume and value have recorded positive changes but in the year 2020, when the pandemic was at its peak coupled with the lockdown rules and mobility restrictions, the volume and value of property transaction have recorded a significant drop at 9.9 and 15.8 respectively. See Table 2.0. The impact of the pandemic on the overall property market transactions and on various subsectors of the real estate market in Malaysia is presented in Figures 2.2 – 2.13 respectively

The impact of the pandemic was even more significant on the leisure sector as many hotels/resorts were compulsorily made to lock temporarily or permanently due to operational costs that were well above their ability to sustain them. The average occupancy rate as reported by NAPIC (2021) fell to 21.8 percent from 31.6 percent in 2020, according to Tourism Malaysia.

In a nutshell, the impact of the pandemic is apparently visible in the real estate sector base on the significant changes recorded in the sector's contribution to the national Gross Domestic Products (GDP) from the year 2019 to the year 2021. In 2019, the sector contribution to GDP was RM68,843B which is 7.3% higher than the year before 2019. In 2020, sector's contribution to GDP recorded a decline of 16.1% (RM58,395B) from the previous year's contribution. A further decrease from the year 2020, was recorded in the year 2021 by 11.6% (RM51,968B). The fall in the sector contribution to GDP could be attributed to the negative impact of the COVID-19 pandemics.

According to NAPIC, the property market environment "remains tough" in 2022. However, being that the COVID-19 reached its endemic phase, and with the reopening of the border and the removal of restrictions anticipated to boost domestic economic activity, there is every chance that things will improve significantly. Thus, with the economy on track, the performance of the real estate market will significantly improve.

Table 2.0 shows the volume and the value of transactions as well as the percentage change from 2017 to 2021.

Table 2.0: An Annual Change in Volume and value of property transactions between 2017-2021

Volume and Value of Property Transaction Annual Changes 2017 - 2021				
Year	The volume of Transaction ('000)	Change in Volume of Transactions (%) yr-on-yr	Value RM Million)	Change in Value (%) yr-on-yr
2017	311.824	-2.7	139.839.72	-3.8
2018	313.710	0.6	140.326.70	0.3
2019	328.647	4.8	141.403.22	0.8
2020	295.968	-9.9	119.075.12	-15.8
2021	300.497	1.5	144.867.94	21.7

Source: (NAPIC, 2021) Annual property market status report

From Table 2.0, the Malaysian property market transaction volume recorded a total sale of 311,824 properties worth RM139.839.72 million in 2017. In 2018 and 2019, the volume of transactions was 313,710 and 328,647 value at RM140,326.70 and RM141,403.22 respectively. The volume of transactions changes saw an increase of 0.6% and 4.8% between the preceding years respectively. However, in the year 2020, it was an entirely different scenario. A significant drop in both volume and value was recorded. The NAPIC report (2021) clearly shows that Malaysia recorded 295,968 transactions worth RM119.075.12 million, in the year 2020, which was a significant drop of about 9.9% and 15.8% respectively in volume and value from the previous year before the pandemics. This drop is attributed to the effects of the COVID-19 pandemics according to NAPIC.

Although the year 2021 saw an increase in the volume of property transactions to the tune of 300,497 worth RM144.867.94 million recording an increase of about 1.5% and 21.7% y-o-y respectively, however, the total transactions remain below pre-pandemic levels recorded in 2019, according to the National Property Information Centre (NAPIC). For total transactions, the 2021 tally was still down by about 8.57% from 328,647 transactions in 2019, but the total transaction value in 2021 exceeded the 2019 levels of RM141.403.22 million by 2.69%, as the records show.

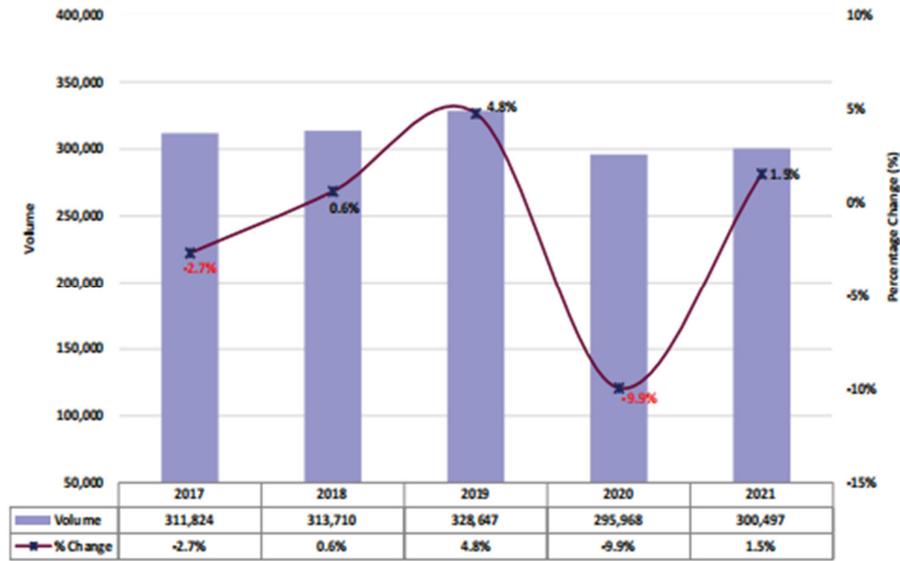


Figure 2.2. Summary of Overall Volume of Property Transaction From 2017 - 2021

Source: NAPIC (2021) Annual property market status report.

Evidence from Figure 2.2 shows that in the year 2020, the pandemic heats the real estate market in Malaysia with a significant drop of about 9.9% in the volume of property transactions.

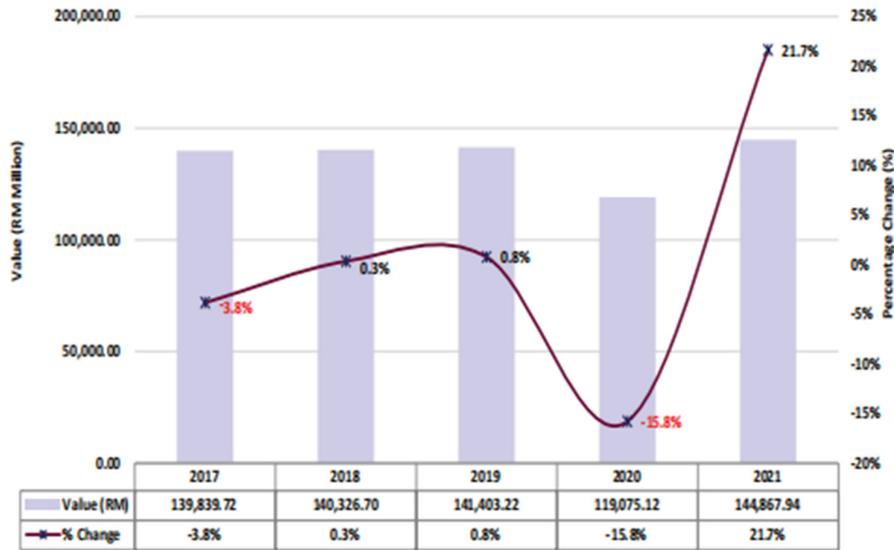


Figure 2.3 Summary of overall Value of Property Transactions from 2017 - 2021

Source: NAPIC (2021) Annual property market status report.

Figure 2.2 and 2.3, briefly explain the impact of COVID-19 pandemics in the year 2020-2021 on the real estate market. The highlight of transaction volume and value over a period of 5 years from 2017 to 2021 presents the comparative analysis. There was a trend of increase in terms of volume and value of transactions between 2017 to 2019, however, during the pandemic period in 2020, there was a significant decrease of about 9.9 % and 15.8% in volume and value respectively. The year 2021, however, recorded a slight increase of 1.9 % in volume and a significant increase of 21.7 % in terms of the overall transaction value.



Figure 2.4 Residential New Launches and Sales performance 2017-2021

Source: NAPIC, 2021

The residential sales performance in terms of units launched as indicated in figure 2.4, shows a record high of 40.4% in 2019, however, due to the negative effect of the COVID-19 pandemics, the sales performance dropped significantly to 28.7% in 2020, though later recorded a significant increase to 39.3% in 2021. The later boom might be attributed to the temporary reopening during the said period.

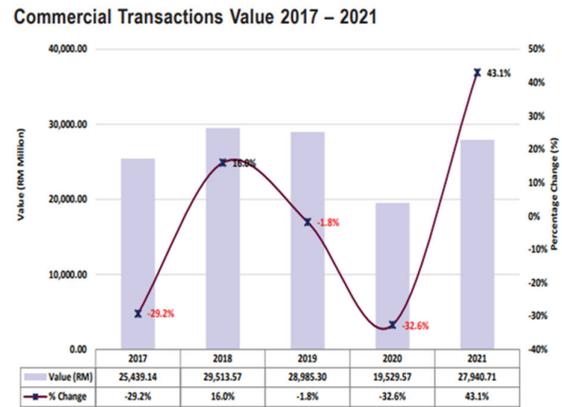


Figures 2.5 & 2.6: Residential transaction performance in volume and value for 2017-2021

Source: NAPIC, 2021

The residential real estate sector was affected by the pandemic in 2020 as shown by the volume and value of transactions in Figures 2.5 & 2.6, however, the effect was not significant compared to other real estate sectors

Commercial Real Estate Sector

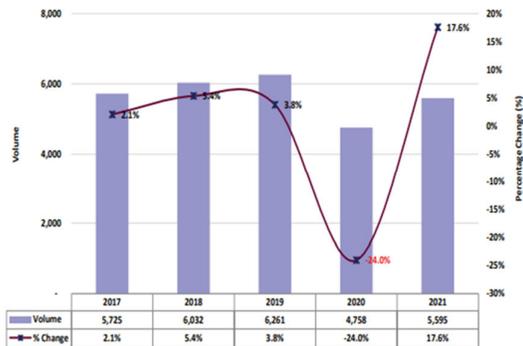


Figures 2.7 & 2.8: Commercial transaction performance in volume and value for 2017-2021

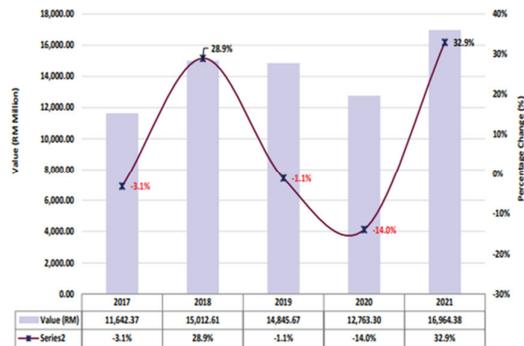
The commercial real estate sector was very much affected by the pandemic in the year 2020 as most of the shops and other business activities were ordered to close down in order to curtail the spread of the pandemic. See Figures 2.7 and 2.8 for the level of decline.

Industrial Sector

Industrial Transactions Volume 2017 – 2021



Industrial Transaction Value Trend 2017 – 2021



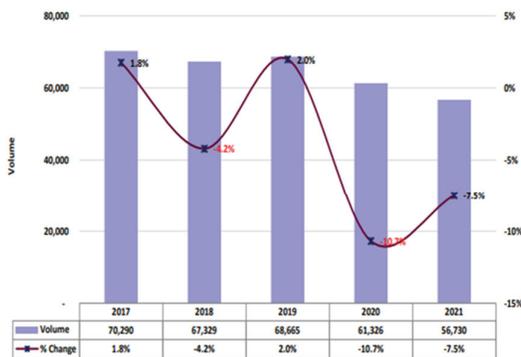
Figures 2.9 & 2.10 Industrial Transactions Volume and Value 2017-2021

Source: NAPIC, 2021

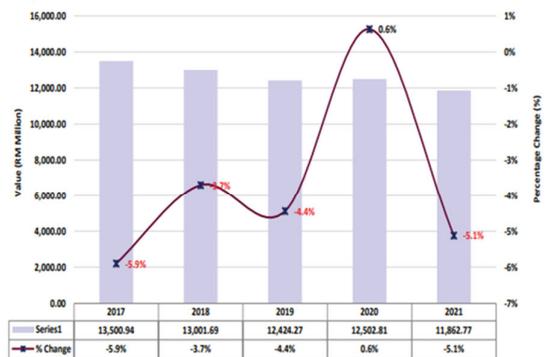
Evidence from figures 2.9 and 2.10 shows that the industrial sector of real estate was also affected in the pandemic year (2020) with a significant decline in both volumes and value of transactions.

Agricultural Sector

Agriculture Transactions Volume Trend 2017 – 2021



Agriculture Transactions Value Trend 2017 – 2021



Figures 2.11 & 2.12: Agriculture performance 2017-2021

Source: NAPIC, 2021

The agricultural property transaction in the height of the pandemic period (2020), dropped in volume but recorded an increase in terms of value as seen in Figures 2.11 & 2.12 respectively.

Dissection of the NAPIC report on the volume and value of property transactions by subsectors from 2019 to 2021 has equally revealed the impact of the pandemics base on the year-on-year (y – on - y) change. The residential and commercial property subsectors for instance in 2019,

recorded a transaction volume of 209,295 and 25,654 worth RM72,421.19M and RM28,985.30M respectively. In the same year, industrial, agriculture, and development land recorded a volume sale of 6,261, 68,665, and 18,757 worth RM14,858.17M, RM12,515.13M, and RM12,611.25M respectively. The impact of the pandemic was however visible in 2020 as the volume of sales in respect of the above subsectors decreases significantly as follows: Residential – 191,354 worth RM65,873.70M; Commercial – 20,255 worth RM19,529.57M; Industrial – 4,758 worth RM12,763.30M; Agriculture – 61,325 worth RM12,502.81M and Development Land – 18,271 worth RM8,401.90M. See Figures 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11 and 2.12

Comparison of the statistics of both the sale transaction volume and value in 2019 and 2020, it is obvious that the pandemic has had an impact on the year 2020. The year 2021 saw an increase in the volume of sales in the residential, commercial, and industrial subsectors but the agricultural sector and development land further recorded a decline. All the subsectors except for agriculture, however, recorded higher transaction values above values in 2020 and 2019 respectively. Although, the transaction value recorded in 2021 for development land is significantly higher than that of 2020 but is less than the value recorded in 2019. Transaction volume and value in 2021 for the various subsectors highlighted are as follows: Residential – 191,812 (RM78,901.86M), Commercial – 22,428 (RM27,940.71M), Industrial – 5,595 (RM16,964.38M), Agriculture – 56,730 (RM11,862.77M) and Development Land 16,921 (RM11,179.98).

Occupancy Rates in Leisure Sector

Table 2.1: Malaysian Average Occupancy Rate January – September 2020/2021 for Leisure Sector

State	2020 (%)	2021 (%)	Difference
Kuala Lumpur	26.7	16.9	-9.8
Putrajaya	46.0	21.4	-24.6
Selangor	30.7	26.8	-3.9
Penang	24.9	11.9	-13.0
Perak	26.4	15.0	-11.4
Kedah	27.6	11.6	-16.0
Perlis	22.6	13.0	-9.6
Negeri Sembilan	27.5	14.6	-12.9
Melaka	21.6	14.8	-6.8
Johor	32.9	16.9	-16.0
Pahang	41.8	13.5	-28.3
Terengganu	32.7	35.5	2.8
Kelantan	34.4	27.4	-7.0
Sabah	28.2	10.8	-17.4
Labuan	44.9	28.4	-16.5
Sarawak	26.3	49.6	23.3
Malaysia	31.6	21.8	-9.8

Source: Tourism Malaysia (2021)

The impact of the COVID-19 pandemic on the leisure sector as shown in Table 2.1 was a catastrophe as many hotels and resorts had been forced to temporarily shut down or permanently closed because the operating costs were way beyond their sustenance. According to Tourism Malaysia, the average occupancy rate dropped to 21.8% (January to September 2021) from 31.6% in 2020.

Looking at the occupancy rate between 2020 to 2021, there was an average decline at the national level of 9.8% overall, where Pahang, Putrajaya, and Sarawak recorded the highest percentage of change in the fall -28.3%, -24.6%, and 23.2% respectively.

Shopping Complex

Supply and Occupancy of Shopping Complex 2017 – 2021



Figure 2.13: Shopping Complex performance 2017 - 2021
Source: NAPIC, 2021

Purpose-built office

Supply and Occupancy of Purpose-Built Office (Private & Government) 2017 – 2021



Figure 2.14: Purpose Built office performance 2017 - 2021

In Figures 2.13 and 2.14 respectively, the occupancy rate for shopping complexes and purpose-built offices recorded a slight decrease in the pandemic years both in 2020 and 2021.

The Way Forward

The spectacular role performed by the Malaysian government in causing the unanticipated and unprecedented economic shock caused by the COVID-19 pandemic has confirmed the government's role as the primary promoter and preserver of the economy. On record, the Malaysian government has initiated and implemented several economic stimulus initiatives that have resulted in the rapid recovery of many sectors of the national economy, including the real estate sector.

To fully recover from the pandemic's consequences and overcome future emergency issues, the real estate business and its stakeholders must fully embrace worldwide innovative technological innovation that is aligned with the real estate profession. Players in the real estate business must be proactive in embracing technological application to real estate practice, not only as a cure for preventing COVID-19 pandemics and future emergency health and related shocks, but also to raise the level of practice and ensure global competitiveness.

To stay relevant in the face of an emergency, real estate enterprises must embrace digital. Rather than seeing clients face to face to introduce items, the real estate industry must adapt to online channels such as social media and the creation of websites for marketing and various business operations. Customers can now efficiently inspect the property from their own comfort zone using technology such as Virtual Reality (VR) and Augmented Reality (AR), rather than having to visit the property personally.

The real estate industry needs a post-COVID recovery strategy that will allow it to comfortably stabilize the market and grow faster, more responsibly, efficiently, and sustainably. The performers must abandon short-term thinking, change their habits, improve their efficiency, and become true professionals.

Furthermore, players in the real estate sector must be willing to learn new and relevant skills that will allow them to quickly adjust and adapt to any situation, accept changes that will improve the quality of practice, and not always rely on the old way of doing things.

Finally, the industry should conduct training and retraining for all key players, including real estate enterprises and their employees, as soon as possible to increase professional knowledge and acquire new necessary skills in accordance with international standards.

Conclusion and Remarks

The impact of the COVID-19 pandemics has affected all the sub-sectors of the Malaysian real estate market's performance both in volume and value. The annual property market transaction performance in 2020 recorded a deficit of -9.9% and -15.8% in volume and value respectively.

The volume of market transactions for agricultural property also saw a decline in 2020, it was however observed that the value of transactions for the sector during the said period went up. The commercial and industrial sectors experienced the worst heat during the pandemic period. This might not be unconnected with the sit-at-home policy and movement restrictions that leave many business premises and construction sites in temporary lockdown during the period.

The demand for office space and shopping complexes had also witnessed a slight fall which led to a record of low occupancy rate resulting in many vacancies in these regards.

The real estate market is expected to recover in 2022 despite the still challenging environment. The 'Transition to Endemic' phase of COVID-19 starting April 1, 2022, has seen the lifting of restrictions on business operating hours and the reopening of the country's borders, which is expected to further boost domestic economic activity.

Given that the economy is set on the right trajectory, the performance of the real estate market is expected to be on the same track. Accommodative policies continued government support, implementation of all planned measures outlined in the 2022 Budget, and implementation of the right strategies and initiatives under the 12MP are expected to support growth in the real estate sector.

CHAPTER 3

TECHNOLOGY DISRUPTION AND PROPTECH

INTRODUCTION

The information age has been formed by competitive globalization, virtualization or digitalization facilitated by information technology, and the transition to a knowledge-based economy. Today, almost all organizations are making a tremendous attempt to keep up with the information area to become knowledge-based organizations (Gitau, 2014). Digital technologies are at the vanguard of global innovation and disruption in a range of industries in today's world. Disruptive digital technologies can be found in a wide range of fields, from nanotechnology to quantum biology and nutrigenomics to ordinary hobbies and pastimes like cell phones and smart gadgets. However, while digital disruptions are affecting the entire world, businesses like real estate are more than five years behind the technology curve, according to Ullah et al (2018).

The ongoing technological innovations in recent time, coupled with globalization, and increased urbanization, is triggering a shift in the real estate practice. At present technological developments have altered real estate management and valuation procedures. The rising complexity of real estate management and valuation practices, as well as global scale competition, necessitate the implementation of novel technologies. These technological advancements have the potential to make the real estate management and valuation profession more efficient and data driven.

Therefore, for the real estate industry actors to continue to maintain their relevancy and to remain competitive in the global economy, as well as add value to the practice, the adoption, and application of various digital technologies relevant to their professional calling becomes imperative.

Various technologies such as property technology (PropTech), information and communication technology (ICT), which includes application software, geographic information systems (GIS), drone technology, wireless sensor networks, cloud computing, artificial intelligence, virtual reality (VR), augmented reality (AR), blockchain technology, Internet of Things (IoT), are some of the emerging tools today for the real estate actors to enhance their skills for better output.

Disruptive Technology and PropTech

Disruptive technology according to Smith (2022) is an innovation that significantly alters the way consumers, industries, or businesses carry out their operations. Christensen et al, (2015) earlier defined disruptive technology as a technology that affects the normal operation of the market or the industry. It displaces a well-established product or technology, thereby creating a new industry or market. Digital disruption is visible in virtually all industrial sectors of the

global economy including the real estate sector. See figure 3.0 on digital disruption in various sectors of the world economy.



Figure 3.0 Digital disruption in various sectors

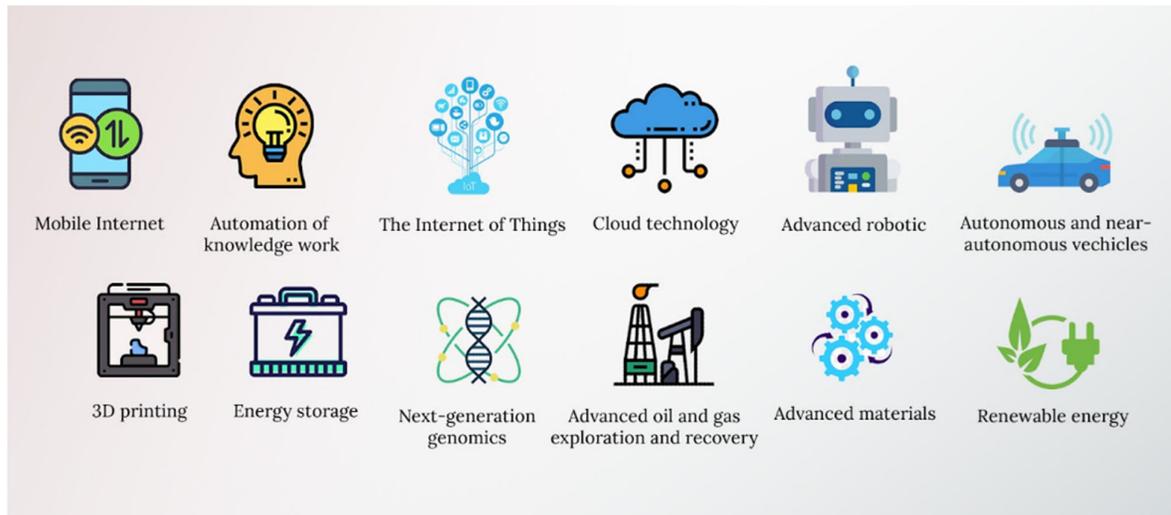


Figure 3.1: Various technologies of disruption
Source: Mckinsey Global Institute (Manyika et al., 2013)

Illustrative timeline of disruptors to commercial real estate

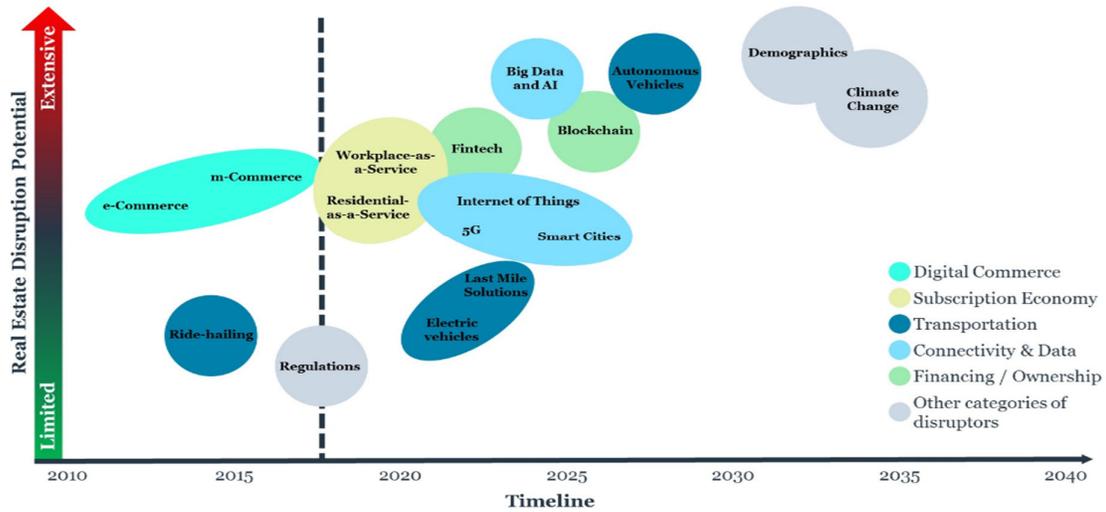


Figure 3.2: Disruption potential and timeline of disruptors in commercial real estate

Gartner's Action Model (A6) — Six Choices to Deal With Disruptions/Change

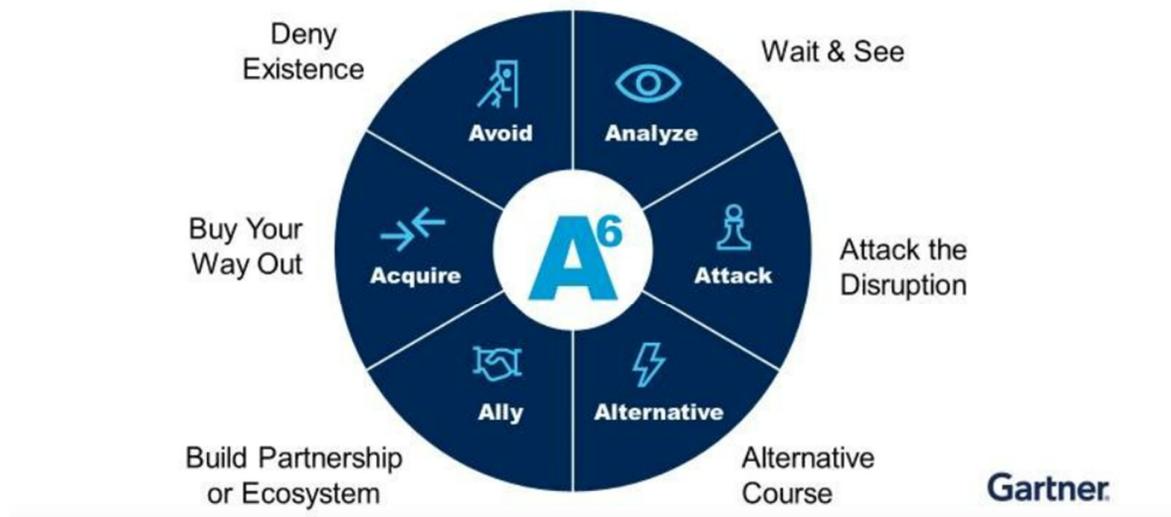


Figure 3.3: How Disruptions can be tackled.

The above figure presents Gartner's six Action Models to deal with digital disruptions. Gartner suggests that the first instance is to analyze the disruption - wait and see. He suggested further the choice of attacking the disruption or providing an alternative course of action or building a partnership or better still finding your way out or completely avoiding it.

The best choices for the real estate sector to make to stay relevant, competitive, and more productive in this regard are to attack, build a partnership, and or find a way out.

The development of property technology is one area in which COVID-19 has a favorable impact on the real estate industry. The outbreak changed the world's attention away from face-to-face contact and toward a more digital way of living. As a result, 3-D virtual home tours are now required, online bots have been developed to answer inquiries, and home buying and leasing are now entirely performed online. The real estate sector has effectively grown into a place where buying, selling, and renting homes is simple and efficient.

Technology is altering virtually every element of business and redefining the traditional business paradigm. The real estate industry is no exception to this new trend, which is already affecting how business activities are carried out across the industry's supply chain. It may offer a threat to incumbent industry players that have failed to adapt to the new business model, while simultaneously giving opportunities for start-ups to produce efficient and low-cost technology. PropTech is considered a challenge to the current real estate business paradigm, with the potential to disrupt several industry companies' activities (Lizam, 2019).

The introduction of digital technology to the real estate sector will revolutionize the real estate practice in numerous ways. The technologies will most certainly make real estate practice more efficient, fast, accurate, and reliable as well as significantly reducing the cost incurred in the employment of personnel involved in carrying out various activities, the technology may at the same time be a threat to the industry actors in many ways. To employers, for instance, technology application means additional costs to be incurred for employees' training, licensing, organizational restructuring, and upgrading of existing facilities. To the employees, however, it may mean loss of job especially when not competent enough to meet the current trend of challenges associated with the application of technology. Besides, a lot of real estate activities will be automated and that implies that the manpower need will be reduced.

Most of the activities of the real estate industry such as agency services, and property and facilities management may be carried out technologically. Unless proper efforts are taken to handle the problems of the impending disruption, the change may have disruptive effects on industry actors. With so many property listings and websites readily available, buyers and sellers can interact directly and bypass the middleman, i.e., the real estate agent. However, if agencies and real estate agents pursue these chances to expand their market reach through digital marketing and offer personalized services based on analytics to understand customer needs, the agency, and real estate agent services may not be completely undermined.

In the area of property and facilities management, it is now evident that the way properties are conceived, created, and then managed can be revolutionized. The Internet of Things is now widely used in various nations. Smart sensors, for example, use data to guide and assist in the management of all types of buildings. Smart sensors and mobile technology are being used by realtors, agents, and owners in New York to monitor commercial and residential complexes. These sensors transmit real-time information about equipment status, service interruptions, security scenarios, and even building temperature. IoT adoption has made scheduling maintenance, managing fires, and decreasing resource waste like water and power easier.

Real estate professionals and other industry players must therefore be prepared to keep up with advances in innovative technology, become specialized, and master new information and practices to be relevant and compete favorably in the global market.

What is PropTech?

PropTech is a combination of the phrase's property and technology and is being defined by RICS to include "all areas of innovation and how this influences the built environment." This broad term encompasses software, hardware, materials, and manufacturing created by small businesses. PropTech start-ups are popping up across the real estate value chain, and it refers to the use of technology in the property industry in general. PropTech strives to use technology to make property buying, selling, owning, renting, and management easier and more efficient.

PropTech refers to the use of technology to solve difficulties in the real estate sector. Fintech in real estate, crowdfunding, the sharing economy, and artificial intelligence are all options. All of these innovations, as well as propTech in general, are deemed "disruptive". The Internet of Things (IoT), 5G, and blockchain are among the technologies that are driving propTech and have the potential to disrupt the industry.

PropTech is the latest buzzword on everybody's lips today and is often called the new disruption power and innovation driver. It is also said to be the modern remedy for real estate specialists suffering from piles of paperwork and loads of disassembled records across multiple spreadsheets.

PropTech, or property technology, is all the tech tools Real Estate experts use to optimize the way people buy, sell, research, market, and manage a property. These innovative technologies are sometimes called Real Estate Tech, ReTech, or RealTech and mean the robust alignment between Real Estate and Tech

Two types of PropTech

There are two domains of the PropTech Real Estate Sector:

1. Residential Property Tech

Residential Property Tech is all the digital products developed by real estate tech companies to facilitate the way people own or rent apartments and houses, e.g., short-term rental platforms, like Airbnb or Lyric).

The landscape of Residential Property Tech is defined by:

- Property Search Platforms (listing and marketplaces, real estate agent tools, etc.)
- Property Sale Tools
- Financing Tools (digital lenders & brokers, alternative financing, etc.)
- Mortgage Lender Software (loan application and management)
- Real Estate Closing Tools (insurance, transaction management tools)
- Property Management Tools (IoT-powered tools)
- Loan Management Systems (loan securitization, etc.)

2. CRETech

CRETech is short for Commercial Real Estate (CRE) technology or commercial property technology. This realm of PropTech Real Estate covers all the innovative tools companies and individual CRE professionals use to efficiently run, search, rent, and sell office, industrial, and retail property assets. The brightest illustrations of CRETech in action are marketplaces for brokers like LoopNet and Biprox.

The CRETech space is shaped by:

- Property Search Platforms (listing and marketplaces, Brokerage CRM, etc.)
- Constructions Planning and Management Tools
- Evaluation and Financing Tools (transaction underwriting & management, debt financing platforms, etc.)
- Property Management Tools (IoT-powered tools)
- Asset Utilization (co-working & co-living spaces management, retail and industrial buildings management, etc.)

PropTech disruption has brought innovation into the daily routine of almost every player in the Real Estate market, including landlords, tenants, investors, brokers, etc. For instance, the adoption of PropTech as a solution for the real estate broker implies:

Easier data collection & AI-driven marketing to screen and evaluate the development, investment, leasing, buying, and selling processes. Pair this up with the ever-expanding potential of PropTech Big Data Analytics for structuring and documenting large data sets, and you'll find yourself fully equipped for conquering more deals.

Automation of paperwork and cost reduction streamline your brokerage back-office processes and save much time & resources on more important tasks, like market research, communicating with customers, and closing deals.

Secure remote transactions and digital contracting for a faster and easier buying experience. No more tons of paper to read and sign at closing!

Direct digital engagement and reduced physical contact limit physical interactions with both high-use surfaces and people alike. Since the onset of COVID-19, PropTech contactless solutions like facial & touch recognition have become the new normal in the digital world.

Property technologies have also changed the way landlords and tenants interact. Here is what PropTech has brought for both parties:

Detailed 24/7 insights into how tenants utilize the space, enabled by networks of smart devices and sensors (IoT). Property owners do not need need to go and check their properties personally, as all the data about building security and maintenance are available on the go from a mobile screen.

Quality communication with tenants, repair workers, maintenance teams, and any other parties involved. With information caching and data storage, no detail from previous conversations will fall through the cracks!

There is no geographical boundaries with Virtual Reality. Home inspections, house tours, and viewings transition to the virtual world, meaning that property owners and tenants can do all this from the comfort of their homes.

What has positively changed for Real Estate investors:

Accurate planning of construction reduces if not eliminates the chance of critical mistakes or failure to meet a deadline, which may result in millions lost.

Improved market research to track the development, investment, leasing, buying, and selling opportunities.

Secure contracts with no “middleman” that might have misaligned interests in the property purchase and sale process.

Various Technologies Available to Real Estate Practice and Their Applications

Drone Technology – This technology is otherwise called Unmanned Aerial Vehicle (UAV). The technology has a variety of novel uses in real estate, including property management, marketing, and appraisal (Radzali & Tahar, 2018). Most recently, drone technology is being employed by real estate brokers to carry out advertisements of property transactions while providing potential purchasers with a realistic view of the home and acreage from above. Drone technology simplifies and improves valuation processes, makes property inspections easier, especially in high-rise buildings, aids in property measuring, and provides a variety of other benefits.

Geographical Information System (GIS) - GIS is a set of tools for gathering, storing, querying, analyzing, and displaying geographical data from the actual world for a certain set of uses. Property management, geographical property value assessment, property taxes, and other facets of real estate have all benefited from the use of geographic information systems.

Wireless Sensor Network (WSN) – According to Matin and Islam (2012), a Wireless Sensor Network is a self-configuring network of small sensor nodes that communicate using radio waves and are used to sense, monitor, and understand the physical world in large numbers. WSN technology is used in real estate to provide effective, efficient, low-cost, and smart property maintenance and management while spending less energy and time. Property returns can also be correctly estimated with this method.

Internet of Things - The Internet of Things (IoT) is a new global information architecture built on the Internet that facilitates the interchange of commodities and services. The Internet of Things aims to provide an IT architecture that allows for the secure and reliable interchange of "things." The primary goal of the technology is to bridge the gap between physical items and their representation in computer systems (Weber & Weber, 2010). IoT uses sensing devices to connect all things to the Internet and integrates intelligence for identification and management (Li & Yu, 2011). Owing to the dynamic nature of the technology, it can be used in a variety of real estate practices, including property management, facilities management, infrastructure management, and construction management, among others. IoT potentials in real estate management and valuation have recently been demonstrated in smart buildings and smart houses.

Internet of Things & 5G



Figure 3.4 shows how IoT operate

How Can the Real Estate Industry Use IoT?

- RE is the world's biggest industry and touches virtually every individual on the planet.
- IoT Applications in real estate promise to change how business is conducted in the industry.
- The way people relate to their home & work environments
- Smart City
- Smart Homes
 - Enhanced security
 - Saving time and energy
 - Increased resale value



Figure 3.5 shows areas of usage of IoT and its benefits in the real estate industry

Artificial intelligence and robotics - Artificial intelligence (AI) is the process of simulating human intelligence in machines that are trained to think and act like humans. Any machine that demonstrates human-like characteristics like learning and problem-solving falls into this category. The computer system is able to perform tasks normally requiring human intelligence such as visual perception, speech recognition, decision-making, and translation between languages. Both analytical techniques and robotics are used to implement AI. According to

Conway (2018), AI may be utilized to help real estate investors in a variety of ways, spanning all elements of the industry — from property management to investment decisions to development processes – transforming real estate into a more efficient and data-driven industry. AI technology is transforming real estate in a variety of ways. See figures 3.6 & 3.7 respectively.



Figure 3.6: Benefits of Artificial Intelligence in Real Estate

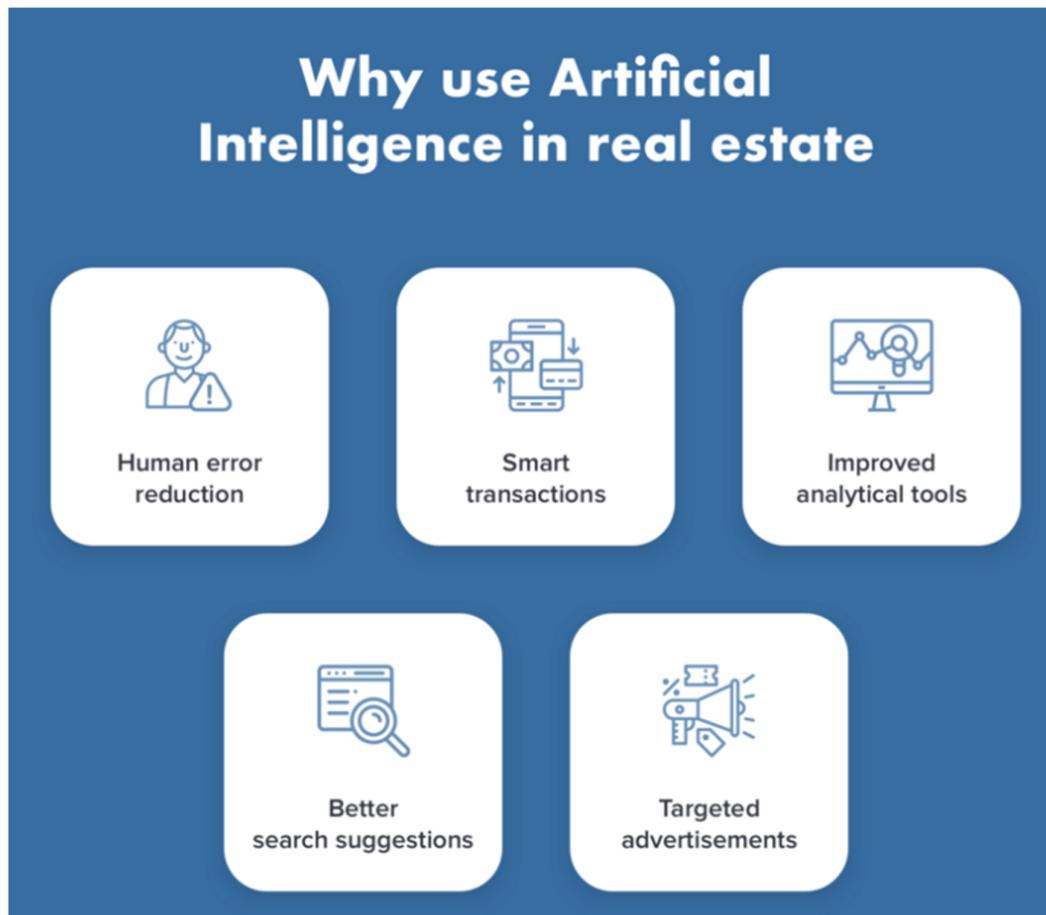


Figure 3.7: Rationale for the use of Artificial Intelligence in Real Estate

Cloud Computing - Cloud computing is a concept that allows businesses to access computer resources (such as software and data storage) over the Internet. Documents, e-mails, and other data will be kept "in the cloud," or on the internet, and will be accessible from any computer or mobile device (Weber & Weber, 2010; Maggiani, 2009). In real estate management and valuation, cloud computing serves as a storage component for the increasing data generated from smart technologies in the real estate industry. The real estate portfolio can be managed, monitored, and controlled from a location with the aid of cloud computing. Others include: Big data, Augmented Reality (AR), Virtual Reality (VR), and block chain among others.

How Technology is impacting the Real Estate Sector

The real estate sector has historically been stable as an investment class, and many believe it is immune to the rapid adoption of new technology.

A 2013 study by Oxford University estimated AI has a 98 percent chance of replacing estate agents. In the US alone, by late 2016 US\$1.8 billion had been invested in real estate tech start-ups, and it hasn't slowed up since.

Block chain, big data, and artificial intelligence hold significant upside potential for real estate markets. Real estate has always been an industry dependent on technological developments, but the past few years have held some major breakthroughs. Technological advancements have

resulted in significant advances in the functioning of buying and selling platforms. Their operations and accessibility have grown considerably easier and more user-friendly for everyone involved in the industry.

Data analysis and big data

The greatest approach to deciding in real estate investment is through data-driven facts that can be used to make informed judgments. The new real estate technology leverages both historical and current-time data to give insights into patterns, trends, prices, associations, demographic data, and prospective value in specific places. The price swings are typical in the real estate sector and the risk is quite significant. Big data reduces risk by forecasting future pricing. It teaches us how to promote and sell a property more effectively using data insights. It reduces the possibility of selecting the incorrect property. And finally, it improves the efficiency of the real estate industry's operations by recommending profitable initiatives.

Traditionally, real estate firms have made decisions based on professional experience, and historic trends. Today, big data analysis makes it possible to get accurate data in real-time. This in turn empowers real estate companies, investors, and developers to have a clear picture of prime opportunities, as well as accurate risk assessment.



Figure 3.8: Uses of Big Data Analytics

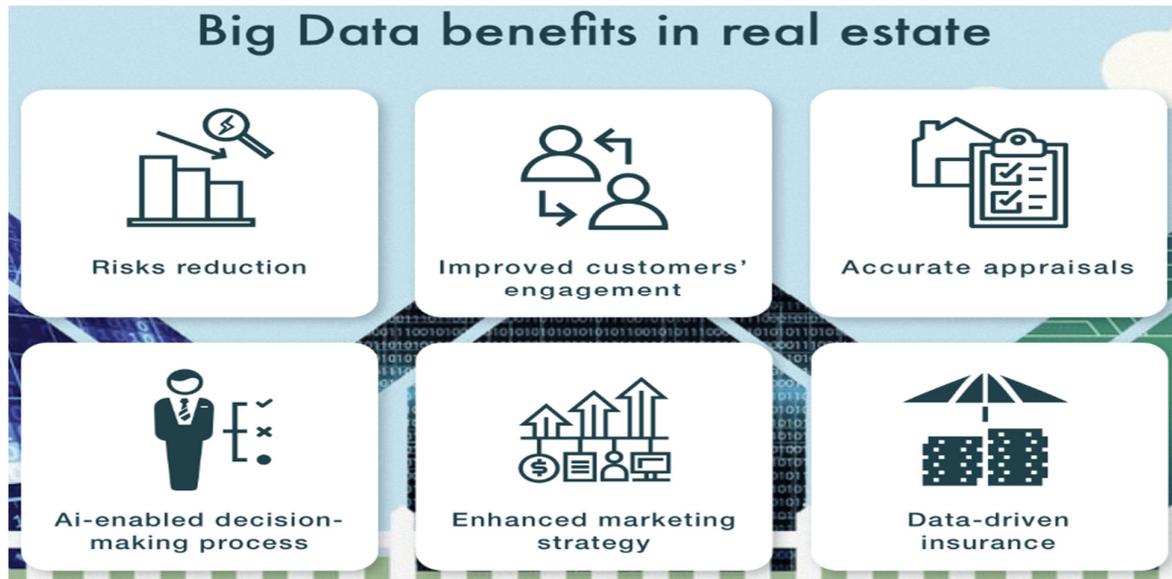


Figure 3.9: Benefit of Big Data in real estate

Virtual Reality Walkthrough Headsets

Normally, people connect virtual reality by gaming. However, it has a wide range of practical applications and has made its way into a variety of professional sectors, including real estate. It allows potential tenants and purchasers to examine a home at any time and from any location.

VR is a computer-generated environment with scenes and objects that appear to be real, making the users feel they are immersed in their surroundings.

For agents and brokerage companies, virtual reality has the potential to speed up sales cycles by allowing clients to get a better sense of property and putting agents in touch with buyers.



Figure 3.10: Showing VR/AR operation

The advantages of using VR/AR in real estate are in the following ways:

- Virtual tours for advanced remote property viewing.
- Property marketing has become more efficient.
- Accessibility via mobile and online applications.
- A chance for clients to save time and thoroughly examine a property.
- The ability to span many phases of the sales, purchasing, and even decorating processes

Automation for the Management of Repetitive Tasks

Property owners, property managers, and other real estate professionals are often burdened by doing repeated duties daily. They must do the same paperwork for each home. It's also tough to keep all of the data in one place and get useful insights from it.

The typical method of maintaining real estate data is inefficient and time-consuming. Nevertheless, there are technological solutions available to assist in making these repetitive activities more efficient.

There are several software choices available to assist in managing marketing campaigns, appointments, real estate portfolios, and other tasks.

Integration of Smart Home Technology

Smart home technologies are transforming homes for the better. The following are some of the most common built-in smart home technologies:

- Security measures
- Television sets
- Sound systems
- Home appliances
- Lighting
- Thermostats

Buyers will be more inclined to pick a place with these amenities if it becomes the standard for new buildings. While you may think that these sorts of features are primarily popular among younger people, this is not the case.

Many middle-aged purchasers want to acquire a home that is completely equipped with smart technology that will allow them to save time and live a more convenient lifestyle.

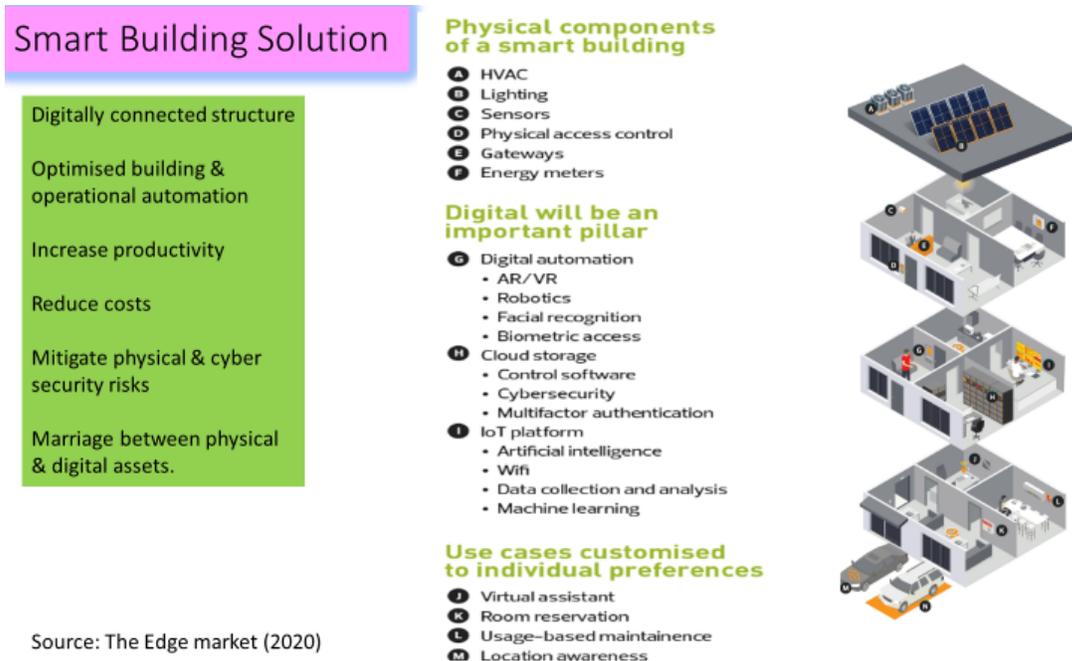


Figure 3.11: Smart Building Solution

Integration of the Cloud

One of the most significant technical advances in recent years has been the cloud. It is now utilized in a variety of real estate applications, including lending and closing.

Since the beginning of the epidemic, cloud technology has been employed for remote closings and other operations that were previously carried out in person. Who knows, when the pandemic threat has passed, we may continue to witness remote closings and an increase in electronic document signatures.

The cloud is popular no matter what it is used for since it makes operations easier and more efficient, whether you are performing internal business or renewing a lease with a renter. It is also frequently quicker and more secure than alternatives.

The power of geolocation and localization

More agents are expected to go hyperlocal than ever before. One of the reasons for this is that property owners are becoming estranged from real estate agents. As a result, more real estate brokers are focused on what may increase the value of offered services – local property marketing.

Geolocation, as one of the trendiest real estate technology developments, can assist agents in focusing on this market need. There is a service to be provided at a reasonable fee that includes knowledge of local marketplaces and aid in getting one's bearings.

In reality, there are several things that may go wrong without the assistance of a real estate agent, and a wise professional must ensure that the information they provide is exclusive and extremely relevant.

In turn, geolocation technology assists in not only pinpointing the actual location of the chosen property but also visualizing factors such as property data, county maps, terrain, flood zone maps, and soils in order to estimate the land value.

It is a good idea to have a personal real estate management software solution designed and deployed in order to have the data and aforementioned services supplied in the most convenient method for all parties concerned. Then, as long as an agent can give his or her services while fully using all that the advancement of real estate technology implies, they all and their services will stay in great demand.

Conclusion

The technologies in the real estate sector will influence the future of the real estate. These high-level patterns give a kind of blueprint for the real estate industries near future. Unfortunately, as usual, it's difficult to forecast exactly how new technologies will develop and how they'll affect the real estate sector in the future.

PropTech, or property technology, is all the tech tools Real Estate experts use to optimize the way people buy, sell, research, market, and manage a property. These innovative technologies are sometimes called Real Estate Tech, Retech, or Realtech and mean the robust alignment between Real Estate and Tech.

Real Estate has always been a stranger in the world of innovation and technology. However, property tech startups, popping up here and there over the last decade, started to bridge the gap between Real Estate and Tech.

Remarks

The real estate industry must address the challenges of sustainability, innovation, and technology, especially in the post-pandemic era. The housing and property industry needs to address the key challenges of sustainability, innovation, and technology in the recovery of the industry and economy in the post-pandemic era.

Regarding sustainability, it is important to make sure that the sector stays sustainable. The development of the housing and real estate industries depends on sustainability. Secondly, the sector needs to innovate. The real estate business must embrace technology to stay relevant, maintain its glory, cost- and time savings, and decrease waste on building project sites. Innovation is the key to transforming the industry. Finally, technology is a huge game changer in nearly all global economic sectors.

CHAPTER 4

THE BUBBLE IN THE PROPERTY MARKET

Introduction

In the property market, a housing bubble is described as a situation where prices are rapidly driven up due to artificial and speculative demand.

A housing bubble occurs when real estate demand outpaces supply, causing the average price of properties for sale to rise, often at a high or alarming rate. What's more, the phenomenon can also impact home buyers and sellers when it occurs, as they consider whether now is a good time to buy or sell a house.

Issues of Housing Price Bubble

Malaysia has achieved rapid economic growth over the last 2 decades, accompanied by the rapid development of the real estate market. Though the Asian financial crisis which occurred in 1997 affected the real estate markets in Southeast and East Asia, the Malaysian real estate market to some extent had also been affected. However, with aggressive government commitment coupled with rapid economic growth and urbanization, demands for urban land, and a rapid increase in new dwellings, the situation was overcome but also led to a housing prices bubble.

Housing bubbles are short-term periods of high demand, little supply, and inflated prices above fundamentals. Home bubbles, or real estate bubbles, are defined as a run-up in housing values spurred by demand, speculation, and extravagant spending to the point of collapse. A housing bubble also could be defined as a situation in which prices of housing rise fast mostly due to artificial and speculative demand in the real estate market. Housing bubbles are typically characterized by a spike in demand in the face of limited supply, which takes a long time to replace and increase. Speculators inject money into the market, inflating demand even further.

Factors that Cause House Price Bubble

Due to the high transaction and carrying costs associated with owning a home, housing markets have historically been less prone to bubbles than other financial sectors. However, a rapid rise in credit supply, along with extremely low-interest rates and relaxing credit underwriting criteria, might attract borrowers and feed demand. The rule of supply and demand governs the price of housing, as it does the price of any item or service in a free market. Prices rise when demand exceeds supply. Prices rise when demand outpaces supply trends in the absence of a natural disaster that could reduce the immediate supply of dwellings.

The following were identified as factors capable of causing the housing prices to bubble.

- An increase in overall economic activity and prosperity, which provides consumers with more disposable income and encourages homeownership.
- A short-term connection between a mortgage broker and a borrower in which the latter is occasionally persuaded to take unnecessary risks.
- Mortgage debtors who lack financial understanding and take unnecessary risks.
- Home purchasers and property investors engaging in a speculative and dangerous activity motivated by exaggerated and unsustainable home price appreciation projections.
- A rise in the number of people who are flipping houses.
- An increase in the number of persons entering the housing market, or a demographic component of the population.
- Low interest rates in general, particularly short-term interest rates, make houses more affordable.
- New or innovative mortgage products with low initial monthly payments that make homes more accessible to new demographic groupings.
- Buyers are drawn to the market by easy credit (often with lenient underwriting criteria).
- High-yielding structured mortgage-backed securities (MBS), which boost borrowers' access to mortgage credit, as demanded by Wall Street investors.
- Potential risk mispricing by mortgage lenders and mortgage bond investors, resulting in more credit availability for borrowers.

The Housing Bubble Scenario in Malaysia

According to home market indicators and reports from the national property information center, Malaysia's housing market is not currently bubbling or showing symptoms of the bubble. Although the current residential market situation appears to favor buyers, it may not lead to a bubble. According to available sources, Malaysia last witnessed a housing bubble between 2012 and 2014, resulting in a significant supply-demand imbalance. Since then, Bank Negara Malaysia has implemented several cooling measures as well as prudent lending criteria, which have aided the housing market's recovery. The market is currently experiencing consolidation or adjustment, as seen by recent changes in transaction activities and pricing. To safeguard the market's long-term viability, Bank Negara has implemented check and balance procedures.

Rather than a bubble, Malaysia's housing market is still beset by unaffordability, notwithstanding recent discounts on new releases. The pursuit of affordability in terms of housing continues for purchasers and renters as the cost of living remains high with the unemployment rate and income security remains a struggle.

Factors That Affect the Housing Market

The housing market is influenced by the state of the economy, interest rates, real income, and changes in the size of the population. As well as these demand-side factors, house prices will be determined by available supply. With periods of rising demand and limited supply, we will see rising house prices, rising rents, and an increased risk of homelessness.

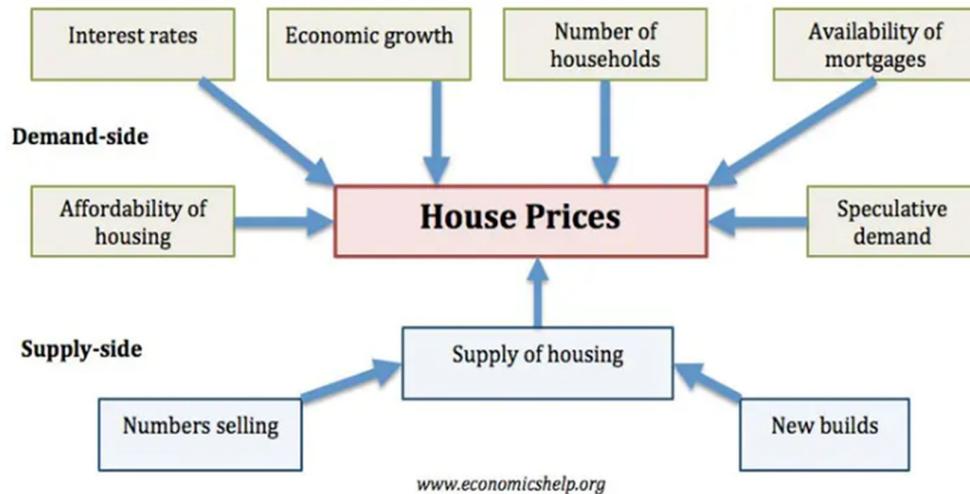


Figure 4.0: Factors that affect the Housing Market
Source: Pettinger (2019)

Main factors that affect the housing market

Economic growth

Economic growth is contributing to the demand for housing, with higher economic growth and rising incomes, people will be able to spend more on houses, then which will increase demand and push up prices. In fact, demand for housing is often noted to be income elastic, rising incomes leading to a bigger portion of income being spent on houses. Otherwise, in a recession, falling incomes will mean people can't afford to buy and those who lose their job may fall behind on their mortgage payments and end up with their homes repossessed.

Unemployment

The other factor is unemployment, and it is related to economic growth. In the situation unemployment is rising, not many people will be able to afford a house, and even the fear of unemployment may discourage people from entering the property market.

Interest rates

Interest rates affect the cost of monthly mortgage payments. A period of high-interest rates will increase the cost of mortgage payments and will cause lower demand for buying a house. High-interest rates make renting relatively more attractive compared to buying. Interest rates have a bigger effect if homeowners have large variable mortgages.

Consumer confidence

Confidence is important for determining whether people want to take the risk of taking out a mortgage. Expectations towards the housing market are important; if people fear house prices could fall, people will defer buying.

Mortgage availability

In the boom years, many banks were very keen to lend mortgages. Banks will have allowed people to borrow large income multiples up to five times income. Also, banks required very low deposits or maybe 100% mortgages. This ease of getting a mortgage meant that demand for housing increased as

more people were now able to buy. However, since the credit crunch of 2007, banks and building societies struggled to raise funds for lending on the money markets. Therefore, they have tightened their lending criteria requiring a bigger deposit to buy a house. This has reduced the availability of mortgages and demand fell.

Supply

A shortage of supply pushes up prices and excess supply will cause prices to fall. When the property market collapsed, the market was left with a fundamental oversupply. Vacancy rates will be higher and with supply greater than demand, prices fell.

The 20-Year Residential Property Market Performance

The study focuses on a growth analysis of average house prices over 20 years for eight states in Malaysia from 2000 to 2021. These eight states analyzed were Kuala Lumpur, Selangor, Johor, Penang, Perak, Pahang, Sabah, and Sarawak as shown in Figure 4.1

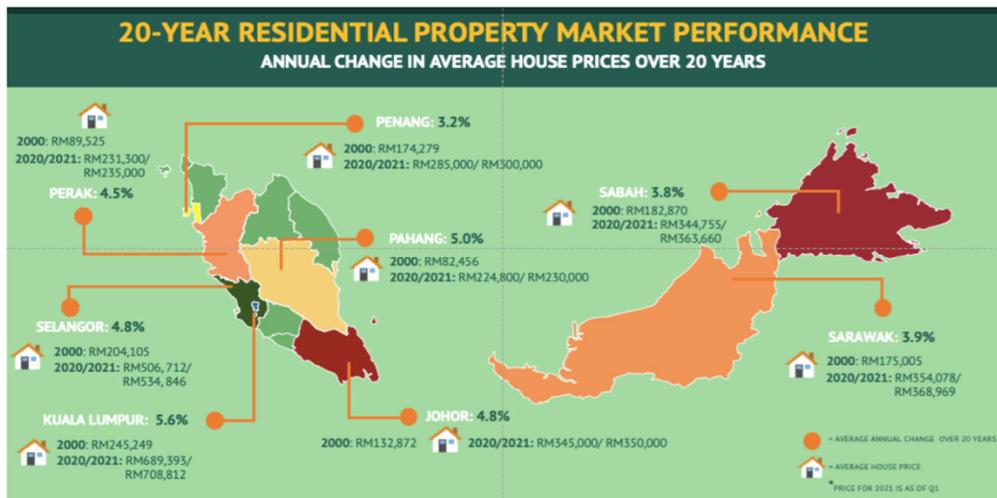


Figure 4.1: The 20-Year Residential Property Market Performance
Source: The EdgeProp (2021)

In Kuala Lumpur, the results show that the average house price in Kuala Lumpur for the year 2000 was RM245,249 and RM708,812 in 2021, with a 5.6% average annual change over the 20 years.

While Selangor’s average house price in 2000 was RM204,105 and RM534,846 in 2021. The average annual change over the 20 years was 4.8%. while the annual change in 2020 increased by 3.63% and recorded an impressive growth of 5.55% for 2021. Being the most populous state in Malaysia and the highest contributor to the nation's gross domestic product with a large proportion of manufacturing, warehousing, and port-related activities, Selangor has been able to sustain the demand for residential properties over the years and provided a buffer against any drastic price drop in the state.

The average house price for Johor in 2000 was RM132,872, whereas, in 2021, it was RM350,000. The average annual change between the 20 years was 4.8%. There was a slight decline in the price growth in 2020 (-1.43%) due to the high overhang property in Johor, which caused developers to offer more discounts to clear the unsold units.

Johor recorded the highest property overhang in 2020, where most of them were condominiums or serviced apartments. Most of the overhang property was in the Iskandar Region where developers originally built the house units targeting the foreign market.

The average house price for Penang in 2000 was RM174,279 and RM300,000 in 2021, with an average annual change of 3.2% over the 20 years. There was a decline in 2018 and 2019 by 16.1% and 5.60% respectively, while prices stabilized in 2020.

The decreasing average house price in 2018 and 2019 might have been due to developers offering more affordable house units to reduce the property overhang in Penang. As a result, most property prices in Seberang Prai dropped by 5% to 10% in 2020. The increase in average house prices in 2021 could be due to a positive response from the reintroduction of the Home Ownership Campaign (HOC).

In 2000, Perak's average house price was RM89,525, which increased to RM235,000 in 1Q2021. The average annual change was 4.5%. The state recorded double-digit growth of yearly change for two years which were 2011 with 10.50% and 2014 with 11.88%.

The affordable prices offered for most properties in Perak matched the general public's income levels, which have contributed to the steady increase in Perak's average house price. This circumstance has led to the rise in demand for properties, especially landed properties, despite the effect of the COVID-19 pandemic.

Pahang

The average house price for Pahang in 2000 was RM82,456 and RM230,000 in 1Q2021. The average annual change was 5.0%. The highest yearly change recorded was in 2015 with 20.73%, followed by 2011 with 14.63% as the second highest. The annual increase for 2020 was 3.12% and 2.31% for 1Q2021.

The majority of the price growth was from landed properties as the purchasers in Pahang prefer landed over high-rise residences. The price growth in 2020 and 1Q2021 could be due to the boost given to home sales under the HOC or Short-Term Economic Recovery Plan (PENJANA).

Sarawak

The average house price in Sarawak in 2000 was RM 175,005 and RM368,969 in 1Q2021. The average annual change over the 20 years was 3.9%, with the most significant annual change of 20.52% in 2012.

Despite the falling of house prices in 2019 (-0.29%), they rose gradually in 2020 and 1Q2021 by 3.83% and 4.21% respectively. Purchasers enjoyed the HOC and low bank interest rates offered by the government, which helped contribute to price growth in 2020 and 1Q2021. The low loan interest of 1% provided by the state government for house buyers from the B40 group helped maintain positive annual growth.

Sabah

The average house price for Sabah in 2000 was RM182,870 and RM363,660 in 1Q2021. The average annual change was 3.8% over the 20 years, and the most significant yearly change was in 2012 with 13.11%. There was a slight decrease for the yearly change in 2019, with -3.63%, and 2020 with -11.20%. Nevertheless, it increased steadily by 5.48% in 1Q2021.

Owing to the COVID-19 pandemic, developers had to lower their house prices by 20% as they focused on pushing existing projects in 2020. On the other hand, the HOC 2021 campaign helped rebound the market for 1Q2021.

Median House Price in Malaysia 2010-2021

The median house price is the sale price of the middle home in a list of properties ranked from the highest sale price to the lowest over a set period. That means if 71 houses were sold, the sale price of the 36th house would be the median house price.

The advantage of the median as a measure of central tendency is that it is not adversely influenced by extreme values. Conversely, the disadvantage of average prices can be influenced by extreme values, which can lead to major distortions that bias data interpretation.

Figure 4.2: shows the median house price in Malaysia for the year 2010- 2021. From the Figure, it can be observed that house prices continue to increase every year in any situation, including during the COVID- 19 pandemic in 2020. A significant jump occurred in 2012-2013 from RM170, 000 to RM250,000 which is an increase of 47%.

SUMMARY OF MEDIAN HOUSE PRICE IN MALAYSIA 2010 - 2021

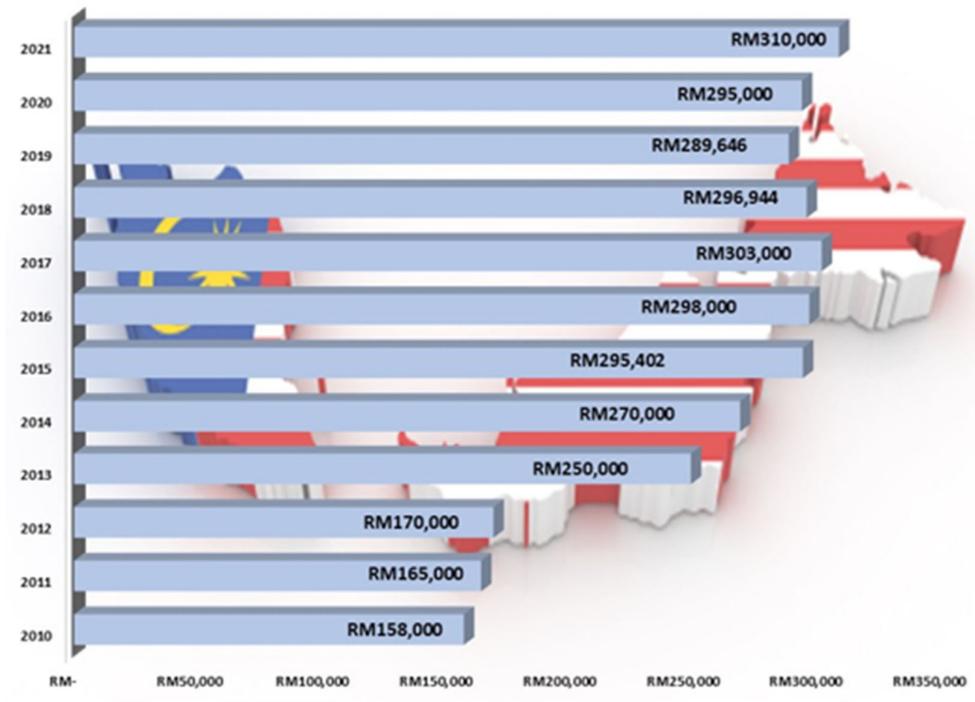


Figure 4.2: Median house price in Malaysia 2010-2021

Interrelation Between Economic and Real Estate

The current development of a country's economy is closely related to a country's real estate market. When there is an economic slowdown for a certain period of time, there will be a slowdown in the real estate market. As the economy grows, then the real estate market also increases after a certain period of time. This situation is shown in Figure 4.3.

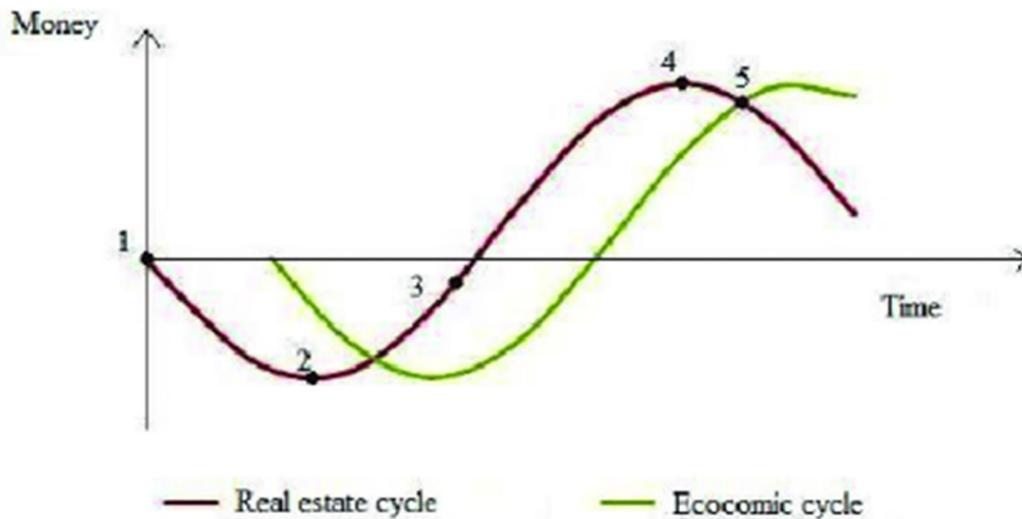


Figure 4.3. Economic Cycle vs Real Estate Cycle

Four (4) Phases of the Property Cycle

The property cycle can be divided into four (4) main phases, namely recovery, explosive, recession, and stabilization. This is illustrated in Figure 4.3.

The property cycle happens from time to time but it does take quite a long time to complete a perfect cycle which can range up to 10 – 30 years in some countries and this is the reason no one ever notices it or forgets as it usually takes quite a time, and an amateur investor could turn into professional investor during such a long period of investing.

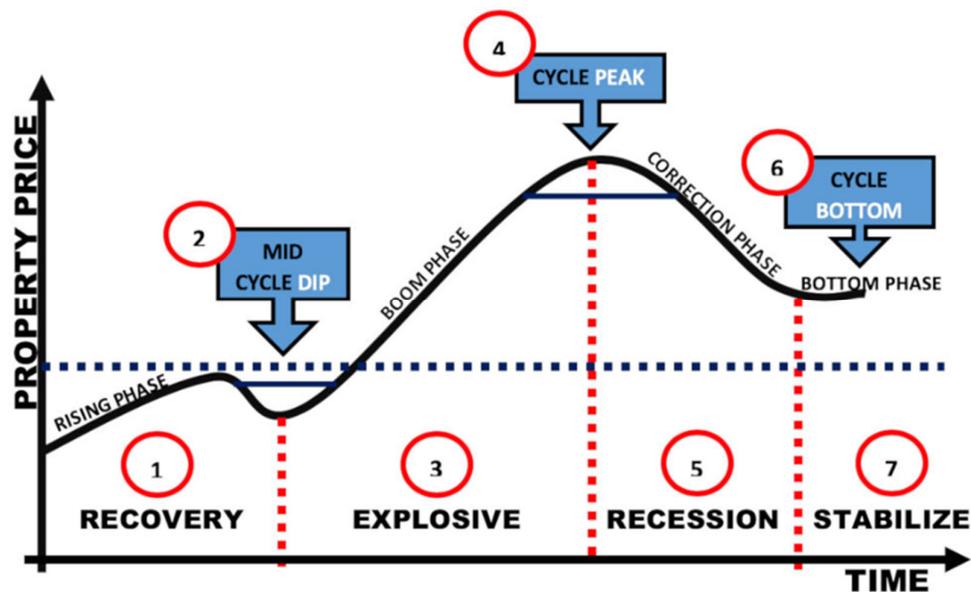


Figure 4.4. four (4) Phase of the Property Cycle

In relation to this cycle, some investors have earned millions, and some investors said property investment is not profitable. This goes to the simple theory of the Property Cycle; it is the periodical and sequential cycle of the property where its price goes up and goes down. The property cycle happens due to the economic principles of supply and demand influenced by the political, demographic, economic, and social economic factors. The demand for property will always increase in the current era due to the growth of population and the limited supply of land for property development.

From the previous study, there are two (2) trends and four (4) stages of property cycles: -

Up – Cycles Trend

Recovery of Market – During this stage, the market is gaining more confidence in the property buying market. Rental rates started to rise, the time it takes to sell off property was reduced, and property price and property value increased. Banks are hungry and ease their lending criteria and approve more credits.

Mid Cycle Dip – Once the market started to recover there will be a small mid-cycle dip as some earlier investors take profit before the explosive phase of the market.

Explosive of Market – Bank interest is low and easier for approval, buyer sentiment increases, media perception is positive, property prices increase at a more rapid rate, and rentals continue to increase. The property will be sold above its market value and vendor keep on increasing their prices for more profits. Every explosive stage also brings in more new young generations of investors into the market.

Cycle Peak – This is the final few years of the explosive phase, where price had to reach the peak of the property cycle which the economist Fred Harrison named the “Winners’ Curse”. It is not lucky to buy the highest-priced property during the peak as the next phase of the cycle will be a downturn phase. Most property bought at this peak will be valued lower or worth less than the price paid later. This happens due to property prices rising too quickly or unaffordable to the market, high growth of liability and credit due to heavy borrowing, the overconfidence of developers in sales, and led to oversupply, and more speculators who are looking for a quick property flip of fortune.

Down – Cycles Trend

The recession of Market – The market stage is characterized by oversupply, decreasing growth, price plummeting, more sellers and fewer buyers, harder to get a loan, homes harder to sell, past buyers over-leveraged, increased vacancies, increase auction market, reduced cash flow or rental, and bad media perception with a daily dose of oversupply and auction news. This is also the result of a rapid supply of developers’ stocks and sellers in the boom phase. Property prices could stagnate or even drop due to purchases during the boom period which people could not afford so they had to sell at depressed prices.

Cycle Bottom – This stage of the property cycle reflects the lowest stage of the cycle where most property prices are low, stagnant, and rock bottomed but no one is buying due to the negative sentiment, oversupply, and loss of money from sales during the recession.

Stabilize of Market – Falling bank interest rate and Bank Negara Over Night Policy rates, ease of lending rules and policy, prices may remain flat and move up slowly. There are more and more government initiatives and interventions on the property market to encourage take-up rate, economy, and homeownership.

The Ups and Downs of the Investment Cycle

The investment cycle's ups and downs, which are based on the ups and downs of the real estate cycle, are clearly depicted in Figure 4.5 below. Peak pricing represents the point at which an investment faces the greatest financial danger. This stage of the property cycle corresponds to the lowest point in the cycle when most property prices are low and stagnant. Investors have the greatest financial opportunity at this point.

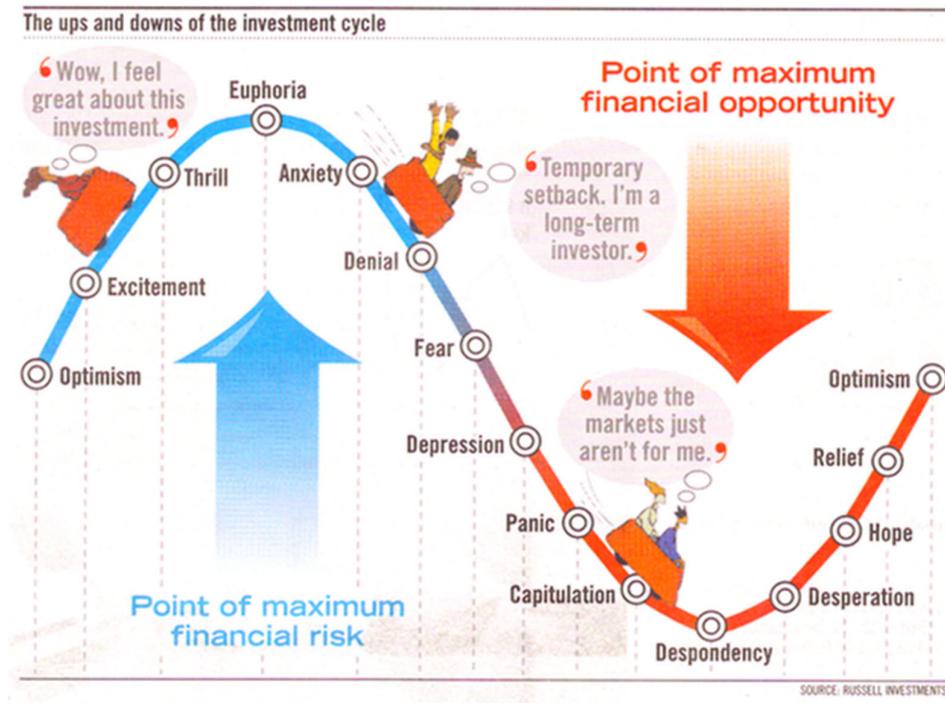


Figure 4.5: The Ups and Downs of the Investment Cycle

What Causes a Housing Bubble?

Traditionally, housing markets are not as prone to bubbles as other financial markets due to the large transaction and carrying costs associated with owning a house. However, a rapid increase in the supply of credit leading to a combination of very low-interest rates and a loosening of credit underwriting standards can bring borrowers into the market and fuel demand. A rise in interest rates and a tightening of credit standards can lessen demand, causing the housing bubble to burst.

Many investors began buying homes as speculative investments. Housing bubbles don't only cause a major real estate crash, but also have a significant effect on people of all classes, neighborhoods, and the overall economy

This flood of money and credit met with various government policies designed to encourage homeownership and a host of financial market innovations that increased the liquidity of real estate-related assets. Home prices rose, and more and more people got into the business of buying and selling houses.

Real estate prices are inflating rapidly over a short period without the support of underlying fundamentals or demand

They do not provide any standard characteristics for early detection. A bubble will form when there is excessive liquidity

Extreme price escalation of properties to an unjustifiable level, leading to the disproportionate valuation of the property. Everyone wants to ride on a once-in-a-lifetime opportunity, further

pushing prices up. Oversupply will cause the dumping of properties which would drastically pull-down property prices.

This happen because the housing demand was driven up as people bought the house as investments, leading to price heating

This will create a surge of supply that will pull down property prices. Panic selling is when investors start to sell their investment property all at once. It is irrational decisions that many end up regretting.

The last housing bubble burst in Malaysia happened around 1997, which we all know was the Asian financial crisis. It lasted about two years and the transaction value and volume during that year.

People should be wary when the value of an asset bloats to a level where the expectation of the economic returns is unjustifiable or has an unfounded basis. If a bubble is forming and when it “bursts”, it will probably lead to sharp drops in asset prices where it will trigger an economic downturn or a recession.

Why is the real estate market in a bubble?

Housing bubbles are temporary periods of months or years characterized by high demand, low supply, and inflated prices above fundamentals.

These bubbles are caused by a variety of factors including rising economic prosperity, low-interest rates, wider mortgage product offerings, and easy-to-access credit.

Forces that make a housing bubble pop include a downturn in the economy, a rise in interest rates, as well as a drop in demand.

Demand further increases when speculators enter the market, making the bubble bigger as they snap up investment properties and fixer-upper flips. With limited supply and so much new demand, prices naturally rise

Housing bubbles have a direct impact on the real estate industry, but also on homeowners and their personal finances.

The solution to the Problem of the Housing Bubble

A housing bubble collapses when excessive risk-taking pervades the housing system and prices no longer reflect anything near to fundamentals. This usually happens when the housing supply continues to rise despite the preceding demand boom. For instance, when there is a fall in the demand for housing and the supply continues to increase or even remain stagnated, the tendency for a sharp drop in prices is obvious, because there exists a demand and supply mismatch. The natural law of demand and supply automatically takes effect.

The strategy is to increase bank interest rates coupled with procedural difficulties in accessing bank loans. If there is an increase in the interest rate and access to loans becomes very tightened, the quest for homeownership now will invariably become unsustainable for

prospective buyers and, in other cases, makes a person's current house unaffordable. This frequently leads to default and foreclosure, which eventually adds to the market's existing supply.

A drop in overall economic activity, results in lower disposable income, job losses, or fewer available positions, lowering home demand. A recession poses a special threat.

Increasing the supply of housing in the market to match the demand. By bringing supply and demand back into balance and limiting the high rate of home price increase that some homeowners, especially speculators, rely on to keep their purchases reasonable or lucrative.

In a nutshell, when losses increase, credit standards tighten, easy access to mortgage borrowing becomes plainly unavailable, demand falls, and supply increases. Speculators eventually leave the market, and prices fall naturally.

CHAPTER 5

OVERHANG PROPERTY AND MARKET MISMATCH

INTRODUCTION

According to the definition by the National Property Information Centre (NAPIC), the overhang is defined as residential units which have received a Certificate of Completion and Compliance (CCC) but remained unsold for more than nine months after launch.

An area of the market where there are more available properties than there are buyers displays a property overhang. This may happen for a variety of reasons, from shifting economic conditions to a straightforward mismatch in anticipated demand for the sort of delivered property unit.

The Issue of Housing Overhang in Malaysian Urban Areas

The issue of property overhang in Malaysia remains very significant despite having a relatively brighter property market performance in the first quarter of the year 2020. NAPIC revealed that in the 1st quarter of the year 2020, residential overhang units stood at 31,661 constituting an estimated total value of RM20.03 billion. This figure is greater than the total number of overhang residential units in the 2nd quarter of 2019 which stood at 30,664 as reported by NAPIC. The continuous rise in property overhang in Malaysia is alarming and therefore calls for urgent attention.

What Causes Housing Overhang?

Several factors may be responsible for housing overhang among which includes:

Supply and demand mismatch

The increased incidences of the overhang are frequently due to a mismatch between demand and supply. When the supply of a specific property in a specific region at a given point in time exceeds the demand for that specific property in that specific place, an overhang will unavoidably occur.

Lower household income earning

When a substantial number of households' average income level in each location is insufficient to cost them a minimum apartment, the people in this category will inevitably rely on rental apartments that are in line with their earnings. As a result, most available properties will remain unsold.

Economic recess

When there is little money in circulation even if the property prices crash, most people will still not be able to afford it because the money is not available. This can then lead to a housing overhang scenario.

Government policies

Unfavorable government policies such as high property taxes, capital gain tax, and other related policies might affect housing sales and purchases.

Increase in the rate of unemployment

When the unemployment rate is high, property sales and purchases are likely to be affected. The majority of those who are expected to buy have no means of doing so because they do not have a job that can provide them with the necessary funds or guarantee them a home loan.

Emigration

When many individuals leave a given location or leave a certain city or town for apparent reasons, the property market in that area will almost definitely get saturated and eventually overflow.

The astronomical increase in housing prices

When the available dwellings are too expensive for most people to afford, the outcome is an overhang.

MALAYSIAN REAL ESTATE MARKET OVERHANG STATUS 2021 REPORT

In 2021, the Malaysian property market displayed property overhang status in the various subsectors of the market with a value of RM51.90 billion in a total of 71,174 units unsold. The residential sector recorded the highest overhang of 36,863 units with a value of RM22.79 billion followed by the commercial sector 33,181 units (RM27.52 billion) and the industry sector 1130 units with a value of RM1.58 billion. The high and persistent dumping of unsold property illustrates an unhealthy situation in the real estate market. This explanation is depicted in figure 5.0 below.

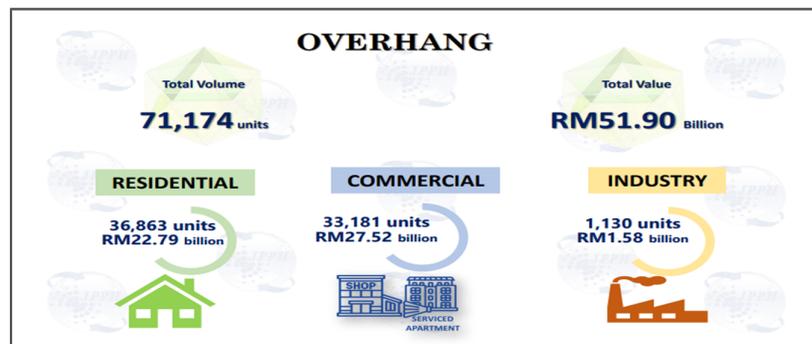


Figure 5.0: Overhang Property in all sectors 2021.

Source: Naptic, 2022

Residential Overhang Trend 2017-2021

The trend of residential overhang volume from 2017 – 2021 was displayed in figure 5.1. A total of 24,738 units of unsold residential properties were recorded in 2017, it increases to 32,313 in 2018. However, a decrease in 2019 and 2020 by 30,664 units and 29,565 units respectively were recorded. The number of unsold residential properties increased significantly in 2021 by 24.7% compared to the previous year.

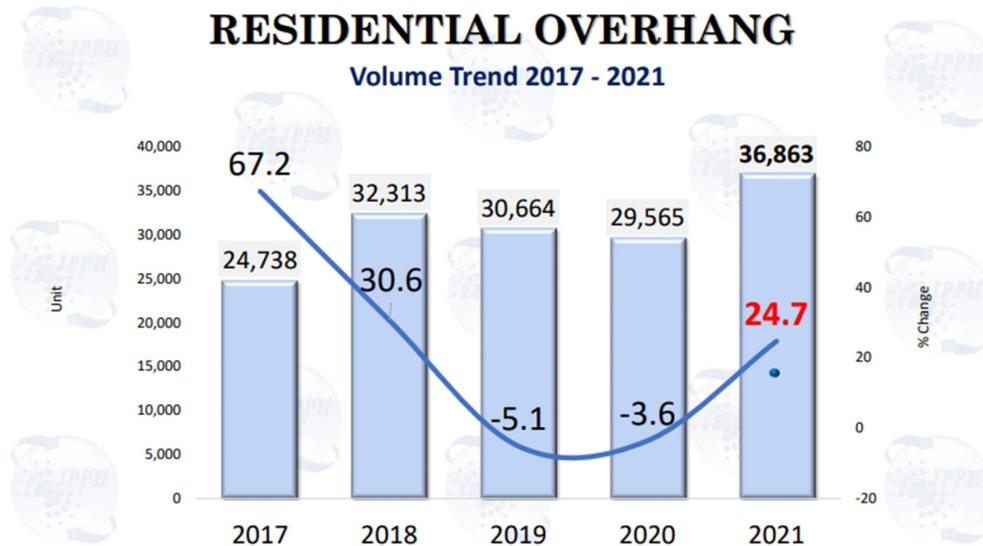


Figure 5.1: Residential overhang trend 2017-2021

Source: NAPIC, 2022

Residential Overhang by Price 2021.

The overhang of Residential properties by price range which is shown in figure 5.2 indicated that properties valued at RM300,000 and below recorded the highest portion of overhang at 31.5%, followed by RM500,000 -RM1,000,000 (30.2%) and RM300,000 -RM500,000 (25.7%). However, Residential properties above RM1 million accounted for only 12.6% but recorded the highest market value of RM9.22 billion.

Most of the overhang units were observed to be highest in the states of Selangor (6095 units), followed by Johor 6089 units, and Penang 5,493 units.

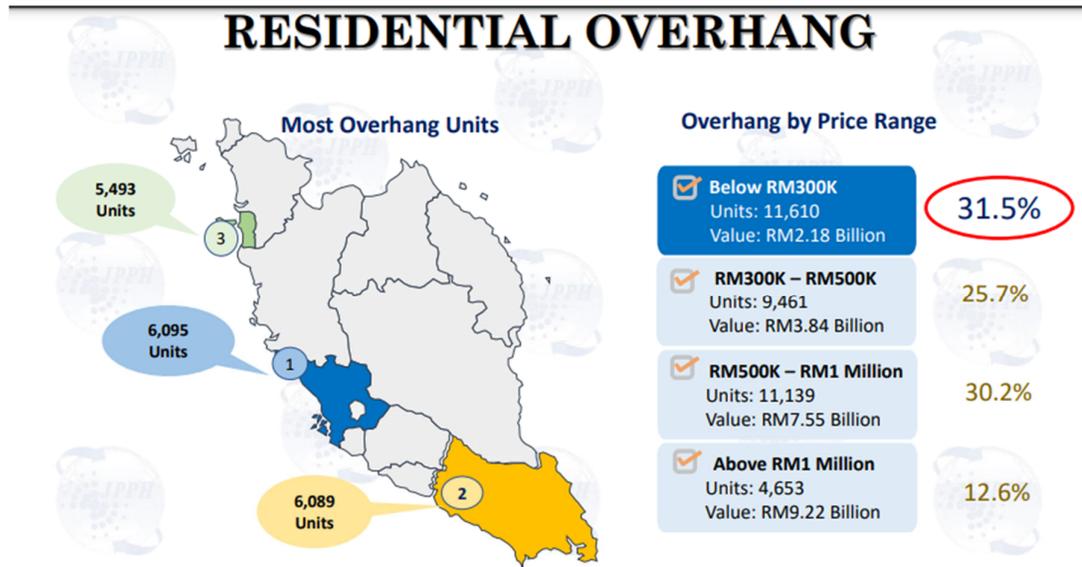


Figure 5.2: Overhang by price and most overhang units according to state

Source: Naptic, 2022

Residential Overhang by Type

The Residential overhang case by type revealed that the High-rise category recorded the highest overhang at 55.6% with a value of RM12.86 billion, terraced houses at 21.3% (3.95 billion), and others at 23.1% (RM5.98 billion). This is shown in Figure 5.3 below.

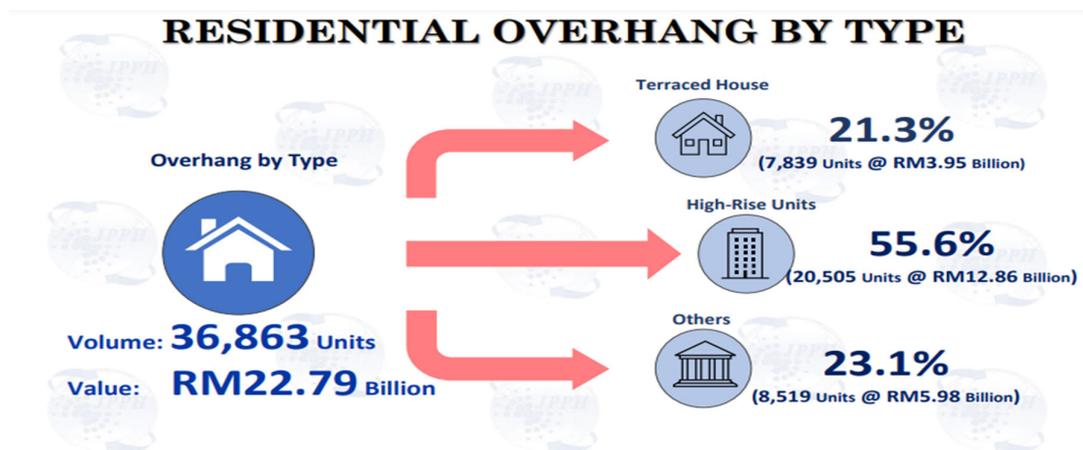


Figure 5.3: Residential overhang by Type

Source: Naptic 2022.

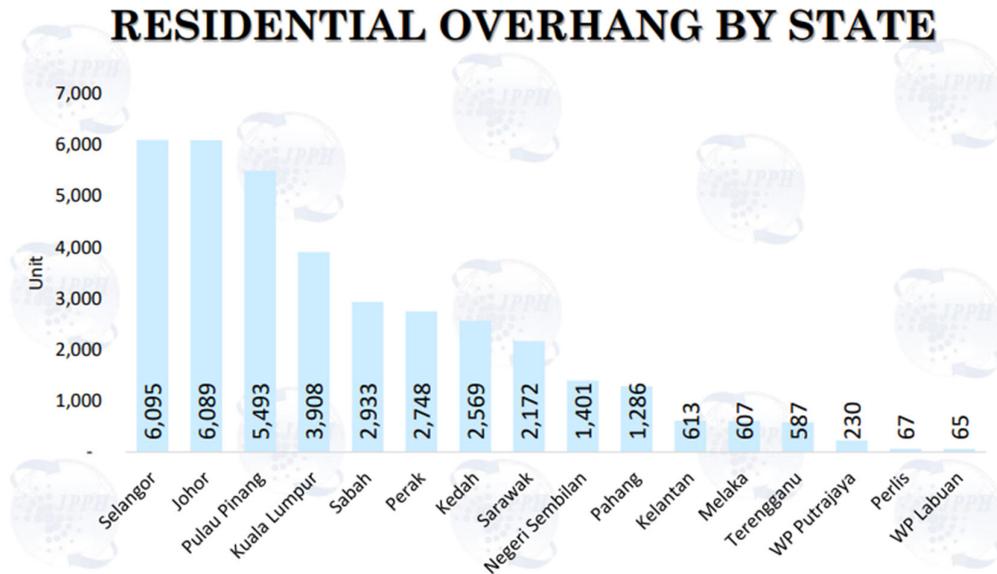


Figure 5.4: Residential Overhang by State

The states of Selangor, Johor, Penang, Kuala Lumpur, and Sabah are the top 5 states with the highest number of unsold residential properties in 2021, with 6095 units, 6089 units, 3,908 units, and 2933 units respectively. The states of Perils and WP Labuan recorded the lowest number of unsold units with just 67 and 65 units respectively.

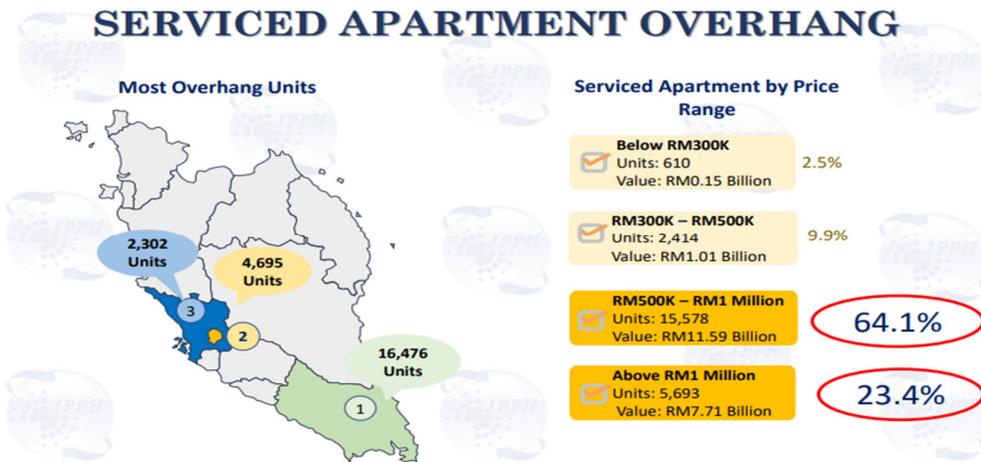


Figure 5.5: Serviced Apartment overhang by price range

As shown in figure 5.5 above, serviced apartment overhang by price range in the category between RM500,000 and RM1,000,000 contributed the most, with a percentage of 64.1 percent (15,578 units: RM11.59 billion), followed by the group above RM1,000,000, with a percentage of 23.4 percent (5,693 units: RM7.71 billion).

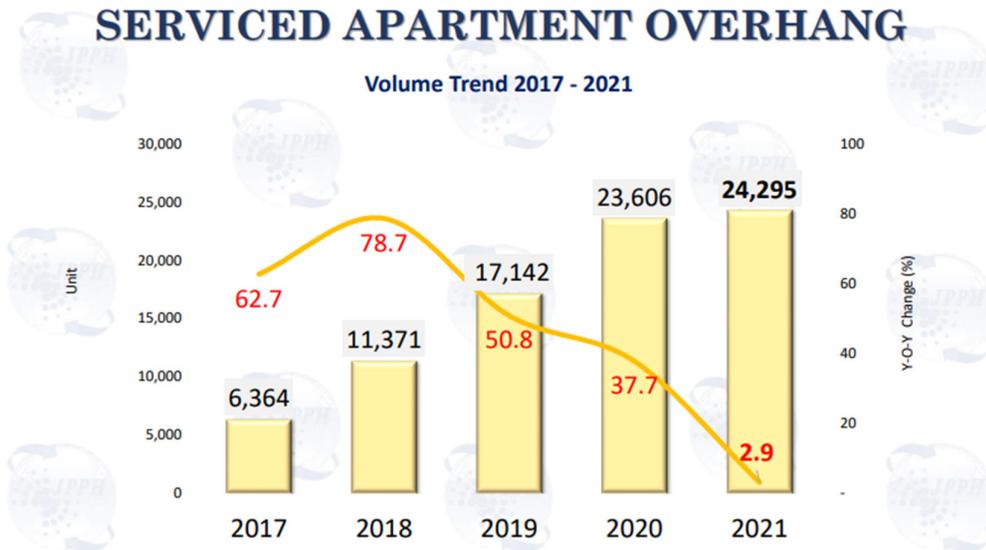


Figure 5.6: Service apartment overhang volume trend 2017-2021

Evidence in Figure 5.6 amply demonstrates that the number of service apartment overhangs increased continuously from 2017 to 2021, with 6,364 units recorded in 2017, 11,371 units in 2018, and 17,142 units in 2019, 23,606 units in 2020, and 24,295 units in 2021.

Residential Unsold Status Unconstructed 2017 - 2021

Residential properties with an unsold status as indicated in figure 5.7, increased from 12,626 in 2017 to 21,960 in 2021. The biggest percentage of unsold volume is in high-rise buildings, which account for 12,036 (54.8%), and terraced buildings, which account for 5,676. (25.8 percent). The remaining 19.3 percent was taken up by others (4,284). By price range, those under RM300k had the most unsold units at 9,641 (43.9%), followed by those between RM300k and RM500k at 6,144 (28.0%), RM1 Million at 4,900(22.3%), and over RM1 Million at 1,275. (5.8 percent).



Figure 5.7: Residential Unsold Status Unconstructed by Volume Trend, Type, and Price Range 2017 – 2021. Source: NAPIC, 2021

Serviced Apartment Unsold Under Construction and Units not Constructed

In 2017 the number of services apartment units unsold under construction stood at 45,955 but recorded a significant decrease to 37,285 and 33,827 in 2018 and 2019 respectively. However, the figure raised up by about 4.2% (35,258) and 19.4% (42,094) in 2020 and 2021 respectively.

Services apartment units unsold not constructed in 2017 were very low with a figure of 5,185 (-61.2%) from the previous year but jacked up to 12,864 units which is an increase of 148.1%. The figure decreased by 40.5% (7,659) in 2019 but rose again by about 6.4% (8,153) and 2.6% (8,361) in 2020 and 2021 respectively.

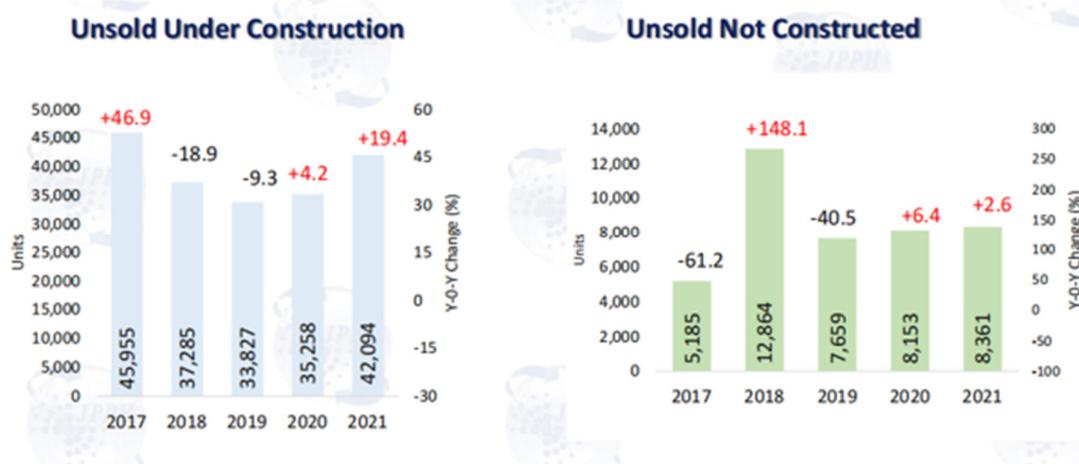


Figure 5.8: Serviced Apartment Unsold Under Construction and Units not Constructed Volume Trend 2017 - 2021

Residential New Launched Units.

Residential new releases in the RM300,001-RM500,000 price group had the most units launched (15,723), according to figure 5.9 above (35.8 percent). With 15,332 units, the category below RM300,000 comes in second (35 percent). Other categories are RM500,001-RM1,000,000 with 11,875 units (27.1%) and RM1,000,000+ with 930 units (2.1 percent). Most units have been launched in Selangor (9,827), followed by Johor (5,513) and Perak (5,239).

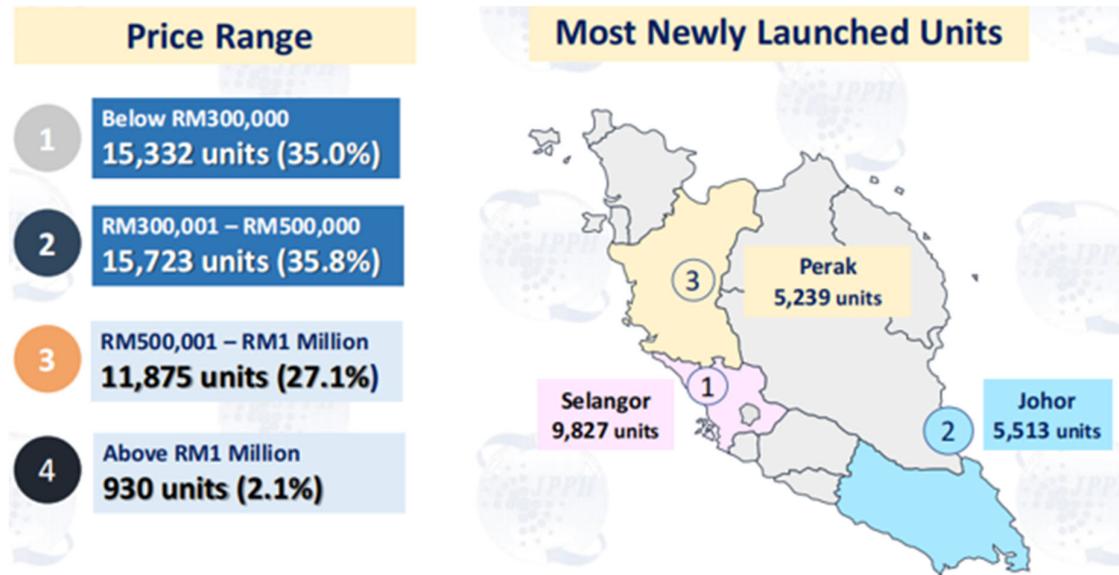


Figure 5.9: Residential New Launches by Price Range and States with Most Units – 2021 Source: NAPIC, 2021

The solution to the Problem of Housing Overhang

According to a report by Rahim & Co, one of the causes of cases of property overhang is that buying incentives have not had a significant enough impact, given that discretionary income levels are still low and the state of the economy is still uncertain. This creates the issue of completed units competing with newer units that are arriving, and the longer a home is unsold after completion, the less attractiveness it retains for purchasers.

Because of the pandemic, wage levels have changed over the past year, which has made home affordability a persistent problem and made it a major concern for overhang properties today. In Kuala Lumpur, it typically takes a household 6.9 years to accumulate enough money to purchase a home. Penang takes the longest at 6.4 years, Johor at 5.8 years, and Selangor at 5.7 years.

According to many, the construction of exorbitantly priced homes by "profit-seeking" developers has worsened the affordability of housing in the nation, thereby increasing the number of overhangs in the market.

Housing overhang problems can, however, be addressed by taking the following measures:

Balancing of supply and demand mismatch

This measure can be taken by reducing the supply of housing stock in the market. This is to allow the housing supply to equate with the current demand.

Focusing more on the lower and middle-class affordable housing scheme

Housing developers should be encouraged to embark and concentrate more on building houses that are easily affordable to low-income earners.

Reduction of bank interest rate and ease procedure of accessing mortgage loans

The bank interest rate should be reduced to the barest minimum in order to encourage low- and medium-income earners to obtain loans for housing purchases. The bureaucratic procedures involved in accessing mortgage loans for housing procurement should as well be made easy

Creating more employment opportunities for the citizenry

Government and other key stakeholders should do more to create job possibilities for the country's teeming youth, who make up a higher percentage of the overall population and who demand adequate and cheap housing for the sake of national security and safety. More employment opportunities for the youth will go a very long way in addressing the problem of overhang.

Property gain tax and other associated property taxes should be reviewed by the government and either relaxed or reduced for a limited time

This will encourage developers to lower property prices, enticing potential purchasers to purchase. High housing prices are one of the characteristics of housing overhang; as a result, if house prices are dropped to a certain extent, a greater number of people will be encouraged to buy, alleviating the overhang problem.

What is a Market Mismatch?

The term "housing mismatch" refers to an imbalance between housing supply and demand. It is a discrepancy in the housing market caused by differences between the supply and demand for houses. It happens when either the supply of housing stock exceeds the demand or vice versa.

To define housing market mismatch, various situations may be employed. A mismatch might occur in relation to affordability, regulatory requirements, or spatial geographic regions.

According to Bank Negara (2017), supply-demand imbalances in the property market have increased since 2015. The supply-demand imbalances in the residential and commercial property segments have increased. Residential Market: Total unsold residential properties currently stand at a decade-high, primarily on account of the

mismatch between the prices of new housing launches and what the households can afford to pay.

- Unsold residential properties are at a decade-high, with most unsold units being in the above RM250,000 price category.
- The oversupply of office space and shopping complexes in the major states will be exacerbated by incoming supply, potentially becoming more severe than during the Asian Financial Crisis.

The Implication of Property Market Mismatch

Severe property market imbalances can pose risks to macroeconomic and financial stability. History has shown that excesses in the property market can pose risks to the wider economy. According to the IMF (2011), historically, housing booms have been followed by busts about 40% of the time, with housing busts being associated with longer economic downturns and larger output losses compared to equity price busts. Given that there are imbalances in both the residential and commercial property markets in Malaysia, this is a source of concern as the property sector has linkages to more than 120 industries, collectively accounting for 10% of GDP and employing 1.4 million Malaysians.

Suggested Ways to The Problem of Property Market Mismatch

There is an urgent need at the level of policymakers and relevant agencies to create an integrated database whose role is to collect all data and market information of property types that are in the market, in planning, and under construction by location. The information must include the supply side and demand side that can be accessed by all parties including developers and other related parties. The role of NAPIC in this matter can be further expanded for the above purposes.

At the developer level, it is urged to conduct sufficient research on their targeted buyers, particularly in understanding the demand and purchasing power of the population.

Past efforts include the Housing Ownership Campaign (HOC) issued in 2019 to enhance sales of overhang units. From this campaign, 31,415 housing units worth RM23.3 billion were sold. such an initiative could further encourage the sale of the remaining overhang units available.

Through government efforts and more focused property development projects, the housing market in Malaysia could be improved, providing affordable homes for all at the same time can reduce market mismatch.

Over the past decade, property-related investments have risen significantly (2016: 25% share of total investments; 2005: 18%). Currently, the property market is characterized by an oversupply of no affordable housing and idle commercial space, and conversely, an undersupply of affordable homes. This situation could worsen if the current supply-demand conditions persist. Within the country, Johor is poised to have the largest

property market imbalances (highest number of unsold residential properties and potentially the largest excess supply of retail space). As such, it is time for all parties to act now to mitigate any potential risks to macroeconomic and financial stability.

CHAPTER 6

CONCLUSION

This inaugural lecture booklet discusses current issues and challenges in the real estate industry and the way forward. The five main issues discussed are related to the impact of the COVID-19 pandemic on the real estate market, technology disruption, the bubble of property market, property overhang and market mismatch. The issues mentioned above are identified as the latest issues that have the most impact in the real estate industry.

The discussion started with the real estate industry as one of the oldest professions in the world where it started with the history of ancient Egypt Herodotus (485 b.c) discussed that the Nile River constantly overflowing and washing away landmarks and need special marking in tax disputes and property rights. This led to the formation of a craft of surveyors (Sr). In Malaysia, the real estate profession has only officially existed after the passing of the Valuers, Appraisers & Estate Agents Act 1981.

The booklet also touched on the world's top 10 real estate billionaires by listing the 10 richest individuals in the world with Li Ka-Shing and Lee Shau-Kei occupying the top list with assets valued at \$33 billion and \$27 billion respectively. The discussion continues to show how real estate wealth is gradually shifting to individual technology-based tycoons where Elon Musk (Twitter) - \$219 billion, Jeff Bezos (Amazon) \$171 billion, Bernard Arnault (LVM) \$158 billion and Bill Gate (Microsoft) \$129 billion ranked at the top of the chart far surpassing the real estate tycoon's wealth.

The discussion continues with chapter 2 which focuses on the Impact of COVID-19 on The Real Estate Market. A significant impact can be seen among all Asian countries when there was a sharp drop of up to -9% in 2020. Airlines see COVID-19 related losses Exceeding \$200 billion. Almost overall sectors of real estate saw a fall in transactions and real estate values. It includes commercial, residential, shopping complexes, purpose-built office, industrial also including leisure sectors.

However, COVID- 19 has witnessed various innovations and new concepts in the use of space including co-working space, transformation of building space to food security production and vertical farming.

Chapter 3 discusses technology disruption and PropTech. Disruptive technology is an innovation that significantly alters the way consumers, industries, or businesses carry out their operations. Disruptive technology also affects the normal operation of the market or the industry. It displaces a well-established product or technology, thereby creating a new industry or market.

PropTech, or property technology, is all the tech tools Real Estate experts use to optimize the way people buy, sell, research, market, and manage a property. These innovative technologies

are sometimes called Real Estate Tech, Retech, or Realtech and mean the robust alignment between Real Estate and Tech. It discussed in detail the implications of technology disruption and Proptech.

The next chapter continues with the discussion on the bubble of property market, overhang, and market mismatch. The three phenomena above are serious matters that have a significant impact on the national economy. The discussion also presents the causes of the property bubble, property overhang, and the causes of market mismatch.

The top 5 main issues in the real estate industry that highlighted were discussed in depth, and the discussion also presented the way forward, recommendations, views and solutions to the issues raised.

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