

East Rail Line

# KAI TAK

Reference: Le Billionaire



## HKIAAT

**ACCOUNTING AND BUSINESS MANAGEMENT  
 CASE COMPETITION 2008-2009 TERTIARY INSTITUTE GROUP  
 SCHOOL: HONG KONG COMMUNITY COLLEGE**

**(TEAM MEMBERS)**

**CHAN SIU LUNG, BLACK  
 LO LOK HIN, ENZO  
 NG WAI KA, RYAN  
 WONG CHUN FAT, HEERO**



DIAMOND HILL

Tseung Kwan O Line

MONG KOK

YAU MA TEI

Island Line

WHAMPOA

MA TAU WAI

TO KWA WAN

Tung Chun Line

HO MAN TIN

## **TABLE OF CONTENT**

<b><u>CONTENT</u></b>	<b><u>PAGE</u></b>
References.....	1
Introduction .....	2-4
Development plan.....	4-7
Project budgeting.....	7-8
Profit forecasting.....	8-10
Project financing .....	10-16
Marketing .....	16-20
Conclusion.....	20

### **References**

MTR Corporation <http://www.mtr.com.hk/>

Centraline property agency <http://www.centanet.com/index.aspx>

Capital Weekly

[http://www.capital-weekly.com/common/index\\_1.htm?topic\\_id=1802&ref=25423](http://www.capital-weekly.com/common/index_1.htm?topic_id=1802&ref=25423)

Property Finance by David Isaac

Financial Management by Joe K.Shim and Joel G. Siegel

South China Morning Post

## **Introduction**

### **Mass Transit Railway Corporation**

Being the only railway company in Hong Kong after the integration of 2 railway networks (KCR and MTR) on 2 December 2007, the Mass Transit Railway Corporation (the MTR) has actively ventured to other businesses like property development. These include the development of residential and commercial projects, property leasing, and revenue from advertising, telecommunication services and international consultancy services. Our properties like Elements, Coastal Skyline and LOHAS Park performed well in 2007 against a background of broad based growth in the Hong Kong property market. The profit from property development was \$8,304 million in 2007, while revenues from property rental, management and other businesses grew 24.3%. To expand our portfolio from the lucrative property business, new development opportunities like Kai Tak development project may be added as one of the portfolios in MTR.

### **Kai Tak Development Plan**

The 320-hectare Kai Tak site is the most valuable piece of vacant urban land, and one that does not have roads blocking access to the beautiful waterfront.

Kai Tak is named after two businessmen, Sir Ho Kai and Mr. Au Tak. In the

past, it housed Kai Tak International airport which named one of the busiest airports in the world. After shifting of airport to Chek Lap Kok, Kai Tak had undergone many transformations. In July 2004, The Government decided to carry on a "Kai Tak Planning Review" that planning to build cruise terminals, a luxury hotel complex, a giant sport stadium and Metro Park linking Kowloon City, Ma Tau Kok and Kowloon Bay. The site's development is important to the whole city, not only to those who will move to live there.

### **Benefits of Kai Tak project**

Before we draw the development plan, we must analyze the benefits and limitations arise in Kai Tak project. Benefits of developing in Kai Tak project are Kai Tak is situated in the heart of East Kowloon district and its neighborhood districts consist of To Kwa Wan, Kowloon City and Kowloon Bay. Residents living in these districts are middle class and likely to purchase new houses. With the development of Cruise Terminal on 2020, tourists and executive members will also be our target buyers. Also, the development project is fully supported by the government as the ten major infrastructure projects and many leisure facilities such as stadium, park and cruise terminal will be built with government's coordination. These facilities will enhance land price and value to potential buyers. Furthermore, Kai Tak is accessible to New Territories,

Hong Kong Island and Lantau Island coupled with the opening of Kai Tak station and Kai Tak expressway in the future.

### **Limitations of Kai Tak project**

However, some limitations will arise amid the participation of Kai Tak development project. Firstly, no further land reclamation was allowed after the protest by the environmentalists in 2003 so the future expansion will be restricted. Also, the phenomenon of wall effects and urban ventilation constrain the height of the building. It poses threat to our income earning from units sale as height restriction imposed. Last but not least, the government has fixed the proportion of residential, commercial and recreation in Kai Tak development project, addition request for having extra residential area will not be allowed.

### **Development Plan**

After analyzing the pros and cons of the development in Kai Tak, our development should align with our company missions and strategies that are focusing on social responsibilities, diversifying business portfolio and creating a better future. We consider developing residential project. The residential project is the fusion of leisure, grand and environmental elements. The pre-location will build above the Kai Tak MTR station to cater the convenience

for the owners. As the location has the magnificent Victoria Harbour's view with excellent facilities such as sport stadium, cruise terminal and green corridor, "Grand Harbour" will be the suitable name. Our proposed size is 100,000 s.q.m that includes 6 residential condos, a shopping mall and some leisure facilities. The residential area will occupy 70% of the site. Each residential condo has 50 stories compromised with the height restriction. The domestic gross area is 70,000s.q.m with average unit size ranging from 50 to 110 s.q meter. To oblige our social responsibility mission, each condo will be powered by solar power with solar panels installed above the roof. Also, fitting the buyers' income, each residential flat will be categorized into four different classes according to their sizes.

Classes	<b>SOHO</b>	<b>Harmony</b>	<b>Premier</b>	<b>Supreme</b>
<b>Floors</b>	1-15	16-40	41-45	46-50
<b>Number of units</b>	6	3-4	3	2
<b>Gross area (sq feet)</b>	600	800	900	1,200
<b>Saleable area (sq feet)</b>	500	700	800	1,100
<b>Target buyers</b>	Small-size family and visiting tourists	Medium income	High-income	Executives

Car park facilities are needed for each owner. We have calculated the estimated number of car parking lots is 504 if each flat needs 84 lots and additional 300 car parking lots will be retained for rental. These car park facilities will be located at each condo and shopping mall. Owners need balance in their life, facilities like shopping mall and fitness corner and recreation facilities such as tennis court, swimming pool and etc will be built.

### **Development Strategies**

To ensure the Kai Tak development project go smoothly, development strategies should be considered. MTR should look for possible land developers such as Cheung Kong (Holding) Ltd, Swire properties, Sino Land and etc by rewarding the developing rights to the winner in the bid. The potential developer will solely concentrate on construction of Kai Tak project whereas MTR will focus on designing, promoting and managing the properties.

By doing this, MTR will save the cost of constructing the structures and can allocate the resources in other areas. Upon the development period, we expect that the construction duration will be 5 years. The period breaks into 3 development phases. In the first phase, 1 condo and a shopping mall will be developed within two years. Second phase which is 2 years period develops 3 condos and recreation facilities. In last phase, we build the remaining 2 condos

within a year. Breaking the project into three development phases, MTR is able to utilize the cash flow and maximize the resources efficiently and effectively.

### **Price Strategies**

Market research is conducted on properties like Le Billionaire and the Latitude by obtaining information. Results had shown the average unit price is ranging from \$6,000 to \$13,000 per sq feet according to different sizes. We forecast that Kai Tak property value will show a strong upward trend in future if the leisure facilities have been completed. Hence, the prices of units are ranging from \$5,000, \$7,500 and \$12,000 per sq feet according to SOHO, Harmony, Premier and Supreme respectively.

### **Project Budgeting**

After careful and actuarial calculation, we estimated the total development cost of Grand Harbour in Kai Tak development plan will be \$4.522 billion. The table had shown the calculation of the total development cost:

<b>Development cost</b>	
Land price and land premium	1.5 billion + 0.2billion
Site formation and foundation	0.1 billion
Superstructure and substructure	2.5 billion
Professional fees 2%	0.05 billion
Promotion costs	0.015 billion
Sundries (handover expenses)	0.05 billion
Interest Expenses	0.107 billion
<b>Total development cost</b>	<b><u>4.522 billion</u></b>

Land cost and land premium is 40% of total development cost and site formation and foundation cost \$ 0.1 billion. Construction of superstructure and substructures cost \$ 2.5 billion which is 55% of the total cost. Professional fees calculated as 2 to 3% of the building cost that includes architect, engineers, surveyors and project manager outlay \$ 0.05 billion together with marketing costs like on site show flat, sales teams, commission to sales agents incurred \$ 0.05 billion.

<b>Interest Expense required to pay for project financing</b>					
	Billion	Unit price	No of shares /bonds	Dividend/Coupon /Interest rate	Total cost (5 years)
<b>Preferred stock</b>	1.5	17	8,823,529	1	44,117,647
<b>Common stock</b>	1	15.7	6,369,427	0.45	14,331,210
<b>Bond</b>	2	1189	168,209	30	25,231,287
<b>Syndicated Loans</b>	0.5			1.6% APR	24,250,000
Total Interest Expense					<b><u>\$107,930,144</u></b>

Adding interest expenses and sundries, our total development cost is around \$4.522 billion excluding the inflation rate.

### **Profit Forecasting**

Next, after estimating the cost incurred in the Kai Tak development project, we have to approximate the revenue received from condos, shops and car parking lots in three development phases within five years. The following table is selling prices of each class and sales proceeds if all the units are sold:

Classes	Gross Size(sq feet)	No of floor	No of units per sq floor	Total area(sq feet)	No of buildings	Selling price per sq feet	Sales Proceeds \$
SOHO	600	15	6	54000	6	5000	1,620,000,000
Harmony	800	25	4	80000	6	7500	3,600,000,000
Premier	900	5	3	13500	6	12000	972,000,000
Supreme	1200	5	2	12000	6	12000	864,000,000
							<b><u>\$7,056,000,000</u></b>

Assuming we sell all the units, \$7.056 billion will be earned. Besides, the parking lots will bring us additional source of income. The annual income from car parking lots is shown below:

Car parking lots(a)	Price per month \$(b)	No of buildings(c)	Annual income \$ (a <b>x</b> b <b>x</b> 12)
84	1000	6	6,048,000
300	1200	1 shopping mall	4,320,000

### In Millions

	Yr0	Yr1	Yr2	Yr3	Yr4	Yr5	Total
Land cost and land premium	(1,700)						(1,700)
Site formation and foundation	(100)						(100)
Superstructure and substructure		(312.5)	(312.5)	(625)	(625)	(625)	(2,500)
Professional fess	(5)	(5)	(10)	(10)	(10)	(10)	(50)
Marketing costs		(3.75)	(1.5)	(6)	(1.75)	(2)	(15)
Sundries		(4.3)	(4)	(15)	(10)	(16.7)	(50)
Interest		(21.59)	(21.59)	(21.59)	(21.59)	(21.57)	(107.93)
<b>Total cost</b>	<b>(1805)</b>	<b>(347.14)</b>	<b>(349.59)</b>	<b>(677.59)</b>	<b>(668.34)</b>	<b>(675.27)</b>	<b>(4,522.93)</b>

Revenue (flat)		588	588	1,764	1,764	2,352	7,056
Car park (flat)		6.05	6.05	6.05	6.05	6.05	30.25
Car park (shopping mall)		4.32	4.32	4.32	4.32	4.32	21.6
<b>Total revenue</b>		<b>598.37</b>	<b>598.37</b>	<b>1774.37</b>	<b>1774.37</b>	<b>2362.37</b>	<b>7,107.85</b>

**Profit (before tax) 2,584.92**

**Profit (after tax) @ 16.5% 2,158.41**

The condensed profit cash flow explains the revenue generated and expense incurred within five years. The break-even point will be in Year 4. The total development cost will be \$ 4.523 billion while the revenue will be \$ 7.108 billion. Hence, the development project will bring \$ 2.16 billion profits or 47.72% profit to MTR Corporation Limited as a developer.

### **Project Financing**

Project financing ensures the project have sufficient capital to develop , a lot of financing methods such as borrowing money from syndicated loan by few banks, requiring government funded, cooperating with other developers, reducing dividends and providing right issues, issuing common stocks, preferred stock or bonds, implementing REIT can be used.

Now, the table lists the advantages and disadvantages of different methods:

Method	Borrowing money from Syndicated Loan	Requiring Government Funded	Cooperating With other Developers
Advantages	<ul style="list-style-type: none"> <li>✓ Easier to raise large fund</li> <li>✓ Decreasing interest rate</li> </ul>	<ul style="list-style-type: none"> <li>✓ Easier to raise large fund</li> <li>✓ Lower interest rate</li> </ul>	<ul style="list-style-type: none"> <li>✓ Easier to raise large fund</li> <li>✓ Diversifying risk</li> </ul>

Disadvantages	<ul style="list-style-type: none"> <li>✗ Bankruptcy risk</li> <li>✗ Financial risk</li> </ul>	<ul style="list-style-type: none"> <li>✗ Government intervention</li> </ul>	<ul style="list-style-type: none"> <li>✗ Sharing profit with other developers</li> <li>✗ Conflict of interest</li> </ul>
---------------	---	---	--

Method	Issuing Common Stocks	Issuing preferred Stock	Issuing Bonds
Advantages	<ul style="list-style-type: none"> <li>✓ Easier to raise large fund</li> <li>✓ Dividend pay-out is not contractual</li> <li>✓ Common for public to purchase</li> </ul>	<ul style="list-style-type: none"> <li>✓ Easier to raise large fund</li> <li>✓ No voting right</li> <li>✓ Non cumulative and cumulative</li> <li>✓ Don't dilute earning per share(EPS)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Good credit rating</li> <li>✓ Easier to raise large fund</li> <li>✓ Relatively lower risk for public</li> </ul>
Disadvantages	<ul style="list-style-type: none"> <li>✗ Voting right for the shareholders</li> <li>✗ Diluting earning per share(EPS)</li> </ul>	<ul style="list-style-type: none"> <li>✗ Relative high dividends</li> </ul>	<ul style="list-style-type: none"> <li>✗ Coupon pay-out is contractual</li> <li>✗ Repay principle when maturity</li> </ul>

Method	Implementing REIT	Reducing Dividend	Providing Right Issue
Advantages	<ul style="list-style-type: none"> <li>✓ A lot of property can establish a portfolio</li> <li>✓ Providing direct investment in property</li> </ul>	<ul style="list-style-type: none"> <li>✓ Financing by equity only</li> </ul>	<ul style="list-style-type: none"> <li>✓ Easier to raise large fund without affecting the stock weighting</li> </ul>
Disadvantages	<ul style="list-style-type: none"> <li>✗ Difficult to raise large fund</li> </ul>	<ul style="list-style-type: none"> <li>✗ Lowering the stock price</li> </ul>	<ul style="list-style-type: none"> <li>✗ Need to discount the stock price</li> </ul>

With analyze the past MTR financing history and stock performance carefully, four possible ways can be executed for project financing on Kai Tak Development.

Firstly, MTR can borrow fund from syndicated loan by few banks around the world. We estimate about \$ 0.5 billion, 5-year revolving / term loan facility at

interest rate 1.6% per annual. MTR can borrow the money again during the repayment period, thus they will have sufficient cash to sustain their daily operations. Since MTR was the first Hong Kong corporate entity to obtain internationally recognized credit ratings and has maintained strong ratings on a par with the Hong Kong SAR Government, so the loan can be offered at a lower interest rate. Thus MTR can reduce interest expenses when raising syndicated loan.

Secondly, MTR should issue preferred stock. Preferred stock carries a fixed dividend that is paid annually. It is considered as a hybrid security because it possesses the features of common stocks as well as corporate bonds. Preferred stocks represent equity ownership and are issued without stated maturity dates, so MTR can avoid paying a lump sum. Preferred stock takes the advantages of not diluting the earning per share (EPS) and carries call and convertible features and sinking fund provision. Thus, MTR can easily control and manage the fund settlement for preferred stocks

Based on constant dividend of MTR company is \$1.7 per share and the required return is 10%, the preferred stock will be \$17 per share.

$$P = \frac{D}{R} = \frac{\$1.7}{10\%} = \$17 / \text{Shares}$$

Thirdly, MTR should also issue common stocks. It is an equity financing that represents the ownership of a corporation. Stockholders are able to elect the company's directors who in turn select officers to manage the business. The stockholders have the preemptive rights to purchase new stock. MTR is a defensive stock and its operating income will not correlate with the economic situation, so it provides a stable income. Many buyers will be interested. In addition, as dividend is not contractual, MTR can reduce the dividend liability and thus reserve funds for daily operations and investments.

Assume the required return is 10%, the issue price of common stocks is \$15.7 per share.

$$P = \frac{D_1}{(R - g)} = \frac{\$0.45}{(10\% - 7.14)} = \$15.7 / \text{Shares}$$

Remarks:  $g = \frac{D_1 - D_0}{D_0} = \frac{\$0.45 - \$0.42}{\$0.42} = 7.14\%$

$D_1$  = Current year dividend (2007)

$D_0$  = Last year dividend (2006)

Fourthly, bond can be issued by MTR. MTR has good credit ratings in Moody and S&P which are Aa2 and AA. Thus, many investors are interested to purchase the bond which issued by MTR. MTR has the value of about 50% in the debt to equity ratio, which means it is aggressive in financing its growth with debt. If more debts are used to finance the company, it could generate

more than it would have without the outside financing. However, the interest expense may affect the return on investment and business activities which may make MTR difficult to operate and even lead to bankruptcy. These are the advantages of long-term debt. First of all, interest is tax-deductible, while dividends paid to stockholders are not. Also, bondholders do not participate in the earning growth of the company. Next, debt is repaid in cheaper dollars during inflationary periods. Moreover, company's control remains undiluted. Finally, financing flexibility can be achieved by including a call provision which allows the company to repay the debt before the maturity date. However, MTR has to pay a price with higher interest rate for this advantage. Interest charges must be met regardless of the company's earning. Nevertheless, the debt must be repaid when maturity and higher debt implies greater financial risk, which may increase the cost of financing. The bond should be issued at \$1189 which is a premium bond.

Credit ratings	Short-term ratings*	Long-term ratings*
Standard & Poor's	A-1+/A-1+	AA/AA
Moody's	-/P-1	Aa2/Aa2
Rating and Investment Information, Inc.	a + 1+/-	AA/AA

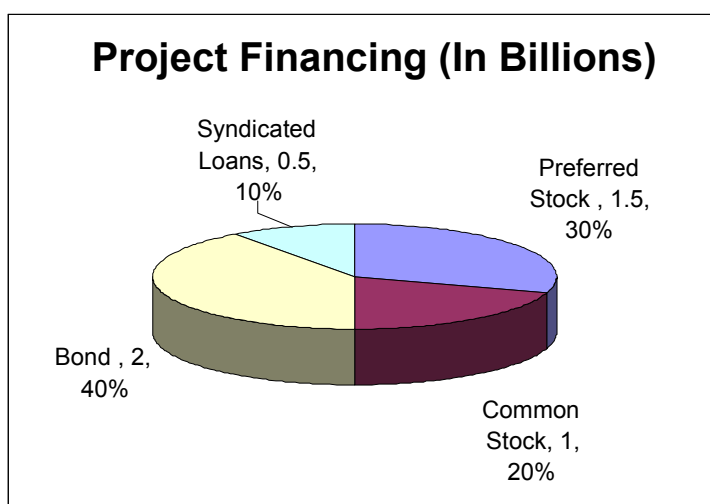
\* Ratings for Hong Kong dollar/foreign currency denominated debts respectively

Assume Market interest = 1 % (According to HIBOR 1 basis point), Coupon interest = 3% per annual, Par Value= \$1000, Coupon = \$30 and Year=10 years

$$\text{Annual Coupon} = \text{CouponRate} \times \text{Par Value} = 30\% \times \$1000 = \$30$$

$$\begin{aligned} \text{Bond Value} &= C \left[ \frac{1 - \frac{1}{(1+r)^t}}{r} \right] + \frac{F}{(1+r)^t} \\ &= 30 \left[ \frac{1 - \frac{1}{(1+0.01)^{10}}}{0.01} \right] + \frac{1000}{(1+0.01)^{10}} = \$1189 \end{aligned}$$

The graph had shown the percentage of each method financing the cost of Kai Tak development project that is \$ 4.522 billion. Bond and preferred stocks are major components in project financing that occupies 40% and 30% respectively.



After we have chosen the financing method, Weighted Average Cost of Capital (WACC) is calculating the interest paid for each dollar of financing. \$0.041 interest will be paid for each financing dollar.

Take the average current stock price (2007) is \$ 28.

$$WACC = W_E R_E + W_D R_D (1 - T_C) + W_P R_P$$

$$WACC = \frac{1}{5} R_E + \frac{2}{5} R_D (1 - 17.5\%) + \frac{1.5}{5} R_P$$

$$WACC = \frac{1}{5} \left( \frac{D}{P_0} + g \right) + \frac{2}{5} R_D (1 - 17.5\%) + \frac{1.5}{5} \frac{D_1}{P_0}$$

$$WACC = \frac{1}{5} \left( \frac{0.45}{28} + 7.14\% \right) + \frac{2}{5} 3.0\% (1 - 17.5\%) + \frac{1.5}{5} \frac{1.7}{28}$$

$$WACC = 4.0989\%$$

$W_E$  = Weighted of equity (E/V) ,  $W_D$  = Weighted of debt (D/V)

$W_P$  = Weighted of preferred stock (P/V)

$R_E$  = Cost of equity,  $R_D$  = Cost of debt,  $R_P$  = Cost of preferred stock

$T_C$  = Corporate tax rate

### **Project Marketing**

Marketing strategies are essential for the success of Kai Tak development project. Firstly, the major competitors of Grand Harbor are Grand Waterfront and Sky Tower. The target market of both condo is middle class or above buyers. These two residential properties are quite similar with our Grand Harbour in nature. Therefore, we choose Grand Waterfront and Sky Tower as our competitors.

## **Competitor Analysis**

### **Strengths of Grand Waterfront and Sky Tower**

Grand Waterfront is located at 383 To Kwa Wan Road, To Kwa Wan. It was completed in 2007. From 2007 onwards, the average price is \$5,000 per ft. It is relatively lower than us. Also, the Grand Waterfront has a 120,000 sq. ft. supreme class club house and contains 10 theme zones. Besides, a good school network which embraces 14 English medium secondary schools. For transportation, Grand Waterfront lies next to Kowloon City Pier and Bus Terminal; it offers convenient connections to all parts of Kowloon, Hong Kong Island and the New Territories.

Sky Tower is located at 38 Sung Wong Toi Road, To Kwa Wan. It was completed in 2005. From 2007 to now, the average price is \$4,500 per ft. It is lower than us and Grand Waterfront. The strength of Sky Tower is quite similar with Grand Waterfront, such as well school network and good transportation system connecting to all parts of Kowloon, Hong Kong and the New Territories.

### **Weaknesses of Grand Waterfront and Sky Tower**

However, both Grand Waterfront and Sky Tower lack community facilities. Even though To Kwa Wan recreation ground, To Kwa Wan Sport centre and Sung Wong Toi Playground are located nearby, the supply of those facilities

cannot meet the resident's needs. Many residences located in that area, such as Grandview Garden, Jubilant Garden, and Chun Seen Mei Chuen and hence create intense demand on leisure facilities. Besides, the club house of Sky Tower is 35,000 sq. ft that may not meet the resident's entertainment needs.

### **Opportunity and threat of Grand Waterfront and Sky Tower**

Now, financial tsunami strikes Hong Kong's economy, the property industry has declined recently. Most of the properties are offered at very low rate. This situation may attract those interest buyers who haven't been affected by financial tsunami. Financial tsunami is also affecting many medium-class people who are the potential buyers. These people may not intend to buy a new house or invest in property industry in the short run.

### **Marketing Strategies**

#### **Promotion Strategy**

As the target market, strengths, weaknesses, opportunities and threats are quite similar among Grand Waterfront, Sky Tower and Grand Harbour, we must develop excellent promotion strategy to compete against our competitors for potential buyers. We may hire a marketing expertise to develop a promotion strategy for Grand Harbour. The followings are our advices about promotion strategy.

Firstly, advertisement is the best way promoting Grand Harbour. We are not only using traditional channels such as television, magazine, internet, bus stop and billboard outside Hung Hom Harbour Tunnel, but also special and innovative channels. For example, we can rent a commercial building in Hong Kong Island which is near Victoria Harbour and lay the advertisement outside the building's wall. It is eye's catching especially in the night. In this type of advertisements, the content should be simple, plain and easy to understand, so we can show the appearance of Grand Harbour with a short slogan "Be Grand, live Grand Harbour".

For television and magazine advertisement, we should emphasis on Grand Harbor's strengths that our competitors may not have. For example, perfect community facilities in Kai Tak. There are shopping mall and recreation facilities such as underground shopping street, metropolis garden, multi-purpose sport centre and world-class cruise centre.

### **Pricing Strategy**

Our pricing strategy should be adjusted according to the current environment as well as to the price rate offered by the competitors. After the completion of development phase 1 , we shall sell the completed condo to the public for locating the acceptable price offered in the market and receiving public's

response about Grand Harbour property. After we collect the data, we can adjust the units' price and unit design according to the market and feedback from public.

### **Sale Strategy**

To ensure all our units are sold to the public, we cooperate with property agency and brokerage like Centraline, Midland and Ricacorp. Property agencies will attract potential buyers through in-house cruising and provides a platform for buyers to purchase our units. Commissions are paid to them for every units sold as an incentive

### **Conclusion**

Summing up our research on development plan, project budget, profit and financing, we recommend MTR should participate in the Kai Tak development project. Undoubtedly, to sustain our business operation and maximize our profit, MTR should venture their business in Kai Tak development that is both optimistic and lucrative business to invest on. We sincerely hope that you may carefully consider our proposal on participating Kai Tak development plan that guides MTR to a better future.