# THE FACTORS OF DELAY IN LOCAL AUTHORITIES' REAL ESTATE DEVELOPMENT APPROVAL

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UNIVERSITI TEKNOLOGI MALAYSIA

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A thesis submitted in partial fulfilment of the requirements for the award of the degree of Master of Science in Real Estate

Faculty of Built Environment and Surveying
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## **DEDICATION**

I dedicate my thesis work to my family. I would like to express my gratitude to my wife, Povy whose words of encouragement and my daughter, Kayla have never left my side.

Next, my parents who raised me, loved me and encouraged me to complete this Master of Science in Real Estate. They also supported me in financial whenever I am facing any troubles.

Thanks for all the guidance and support.

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#### **ABSTRACT**

The purpose of this study is to investigate the factors of delay in local authorities' approval process, average time taken in every approval process and to find out the authorities' departments that are facing delay issues in approval process. Delay issues in approval process are very critical to a success of a real estate development project. Finding out the factors of delay in local authorities' approval process can help to improve the delay issues and also improve the efficiency of the approval process. According to the respondents, there are two departments in Majlis Perbandaran Kulai (Mpku) which are Planning Department and Engineering Department facing serious delay issues. These two departments must look for new strategies to improve the current delay issues. 30 sets of questionnaires are analysed in this study. Descriptive and Mean analysis are used to analyse the questionnaires collected from land surveyor, town planner, architect, engineers, landscape architect and developer. From the analysis, the main factors of delay and the average time taken in every approval process are found out. The results from the analysis provide ideas to implement a strategy such as KPI system, digital platform, feedbacks from the applicants, training programs and hiring more manpower in some departments.

#### **ABSTRAK**

Tujuan kajian ini adalah untuk menyiasat faktor-faktor kelewatan dalam proses kelulusan PBT, purata masa yang diambilkan dalam setiap proses kelulusan dan untuk mengetahui jabatan-jabatan pihak berkuasa yang menghadapi masalah kelewatan dalam proses kelulusan. Isu kelewatan dalam proses kelulusan adalah sangat kritikal untuk kejayaan projek pembangunan hartanah. Mengetahui faktor kelewatan dalam proses kelulusan pihak berkuasa tempatan boleh membantu memperbaiki isu kelewatan dan juga meningkatkan kecekapan proses kelulusan. Menurut kepada responden, terdapati dua jabatan dalam Majlis Perbandaran Kulai (Mpku) iaitu Jabatan Perancangan dan Jabatan Kejuruteraan menghadapi masalah kelewatan yang serius. Kedua-dua jabatan ini mesti mencari strategi baharu untuk memperbaiki isu kelewatan semasa. 30 set soal selidik dianalisis dalam kajian ini. Analisis Deskriptif dan Min digunakan untuk menganalisis soal selidik yang dikumpul daripada juruukur tanah, perancang bandar, arkitek, jurutera, arkitek landskap dan pemaju. Daripada analisis, faktor utama kelewatan dan purata masa yang diambil dalam setiap proses kelulusan didapati. Hasil daripada analisis memberikan idea untuk melaksanakan strategi seperti sistem KPI, platform digital, maklum balas daripada pemohon, program latihan dan pengambilan lebih ramai tenaga kerja di beberapa jabatan.

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#### LIST OF ABBREVIATIONS

LAD - Liquidated Ascertained Damages

MPKU - Majlis Perbandaran Kulai

JKR - Public Works Department

JPS - Department of Irrigation and Drainage

JAS - Department of Environment

TNB - Tenaga Nasional Berhad

SKMM - Malaysian Communications and Multimedia Commission

BOMBA - Fire and Rescue Department Malaysia

IWK - Indah Water Konsortium

CCC - Certificate of Completion and Compliance

JPPH - Valuation and Property Services Department

NLC - National Land Code 1965

PTG - State Lands and Mine Office

MIP - Malaysian Institute of Planners

BEM - Board of Engineers Malaysia

OTTV - Overall Thermal Transfer Value

UBBL - Uniform Building by Law

CIDB - Construction Industry Development Board

CFO - Certificate of Fitness for Occupation

MSMA - Environmentally Friendly Manuals

C&S - Civil and Structural

M&E - Mechanical and Electrical

KPI - Uniform Building by Law

# LIST OF APPENDICES

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#### **CHAPTER 1**

#### INTRODUCTION

#### 1.1 Research Background

Real estate development is very important to a country because it contributes significantly to the country's economy by giving job opportunities, stimulating manufacture and service industries such as building material manufacturers and property agencies. A development project delayed is a major issue for developer because it can cause the companies over budget, miss the deadline, and sometimes when there is cash flow issue occurred due to project delayed, the companies will terminate future projects or even serious consequence which is bankruptcy. All of these eventually will damage the economy of a country if there are plenty of project got delayed. In this highly competitive era, completing a project on schedule within budget is becoming increasingly important.

The impact of delayed projects is tremendous and involved many related parties is like a chain of cause and effect and in the end is still about the cost. Delayed projects will cause time overrun, cost overrun, dispute, arbitration, litigation, total abandonment and bankruptcy. For an instance, the developer needs to pay liquidated ascertained damages (LADs) for project's late delivery. When the project is delayed for too long and the amount for LADs is increased enormous, the developer will abandon the project and wind up the company. The contractors will never get fully paid by the developer and the customers who bought the property will never obtain the property title due to incomplete project. The worst part is if the customers take loan from the bank, they still have to forking out monthly commitment to the bank without a property on hand. Besides that, if the contractors could not collect money back from the developer, not only the developer will be facing bankruptcy, but some of the contractors without strong cashflow will go bankrupt too due to the unsettled payments.

Construction industry in Malaysia is facing poor performance in time matter. According to Rahman (2012), shows that 92% of the construction projects in southern and central regions of Peninsular Malaysia were delayed and only 8% were on schedule and completed in the contract period. Besides that, he also stated that design and documentation related issues highly affected the time performance of a construction projects, According to Assaf & Al-Hejji (2006), research conducted in Saudi Arabia concluded that 70% of the projects experienced time overrun. Other research from Egyst shows that obtain permit from local municipal is one of the most important delay causes in smaller residential development. (El-Razek, Bassioni & Mobarak, 2008)

There are numerous researchers raised up the issue of delay to obtain approval from local authorities. Regulatory requirement is also one of the contributions in schedule overrun. (Mckim, Tarek & Attala, 2000) A research from China shows that obtain an approval from municipal to state and finally to federal is a very complicated and time-consuming process which delay the whole development and eventually affect the developer company's liquidity. (Wang, 2000) A study of Mitropoulos and Howell (2002) found that the process of obtaining approval from local authorities is the main reason for the delay in development projects. The delay in development project will also increase the cost of the projects. The cost involved in holding of land with mortgage loan, office rentals for sales gallery and also opportunity cost.

#### 1.2 Problem Statement

According to Miles (2000), real estate development process is very time dependent and straight forward. Time dependency is defined as one activity must be completed before another activity can be started. For an instance, a real estate development can only be started when they obtain approval from the local authorities. The outcome of an activity can highly affects the outcome of the next activity, so it means that if one process got delayed by any reasons, the next process will be delayed as well.

According to Faridi and El-Sayegh (2006), the project schedule is highly dependent on the regulations and requirements that set by the local government. A successful project usually takes 36 months to complete and they must complete the project in 2 years once the customers signed the Sales & Purchase Agreement (S&P) because the customers must receive the vacant possession within 2 years. If the vacant possession is delivered late, the liquidated damages (LAD) will be charged at 10% per annum of the property's purchase price. From author's experience, Pacific Star in SS17 developed by Jaks Island Circle Sdn Bhd is going to wind up the company due to enormous amount of LAD. Based on the buyer's S&P agreement, the vacant possession is late for 4 years, so they are going to pay 40% of the purchase price as LAD, so in the end the company is bankrupt. This is one of the most realistic examples which happening now in Malaysia, so timing and schedule is very important to a company.

Time overrun can lead to several more severe consequences such as budget overrun, dispute and claims, arbitration, litigation and the worst total project abandonment. A report from Gratwick, Ghandan and Eberhad (2007), a power plant project located on the Songo Songo islands required additional debt restructuring to complete the projects because cost was overrun of 50% of the budget due to project delays and 30% of cost overrun was due to increase in debt interest charges. A project delay can cause budget overrun due to inflation, changes in various material prices and currency exchange rate. Inflation will cause price increase in many building-related activities and material such as wages, machinery cost and building materials. Therefore, when a project delay and inflation occur, the initial budget will go to burst due to price increase in labour cost, building materials cost and machinery cost.

A study in Malaysia by Musarat, Alaloul & Liew (2021), inflation on building materials, wages and machinery cost is highly correlated to time duration of a real estate development. The price of building materials, wages and machinery cost are highly affected by the inflation, so there is no option to prevent cost overrun if the project got delayed. A study in United States by Caldas, Menches, Reyes Navarro & Vargas (2015) stated that 50% of project cost is made up from building materials in real estate development. It showed that the price increase in building materials can

highly impact the real estate development. Besides that, Musarat, Alalouol & Liew (2021) also stated that labour wages and machinery costs are strongly correlated with the inflation rate and can impact the cost of the project. Inflation deals huge impacts to a project if that project got delayed.

Besides that, the worst-case scenario for a project delay is total abandonment project. A study in Malaysia (Yap, 2013) defined abandoned project as a project has been totally abandoned or postponed indefinitely. According to Housing and Local Government Minister Datuk Seri Reezal Merican Naina Merican, there are 79 housing projects abandoned and involved 11,824 buyers. All these house buyers have to continue to pay interest for the house that is not completed and the house cannot be rented out. Therefore, this will only increase the burden of all the buyers indefinitely

## 1.3 Research Question

From the problem statements, there are two main research questions raised in this research which are :

- I. What are the factors of delay from real estate development approval process?
- II. How long does approval from different departments can be obtained after submission?
- III. Which authorities' departments are facing delay in real estate development approval process?

## 1.4 Objectives of the Study

The objectives of the study based on the research questions are:

- I. To investigate the factors of delay in real estate development process approval.
- II. To investigate the average time taken in every approval process
- III. To find out authoritires' departments that are facing delay issues in approval process.

#### 1.5 Scope of Study

The purpose of this research is to determine the factors of delays in local authorities and technical department, so they can improve the efficiency based on the findings that found in this research. This study is focused on the efficiency on approval process in Majlis Perbandaran Kulai (MPKU). MPKU is chosen because Kulai town is growing rapidly and urbanization in Kulai is taking action, so when the urbanization in Kulai takes place, the efficiency of local authorities on approval process can follow the pace. Residential, commercial and industrial development will be involved in this study.

## 1.6 Significant of Study

a. Knowledge contribution

This study may help to enhance knowledge in factors of delay in approval process, so that they can make improvements based on the factors of delay found in this study.

## b. Government

The approval process of a real estate development is very crucial to developers. Government can make improvements on the efficiency of the approval process and help the property developments on schedule. The improvements on the efficiency can help developers very much because one of the most important factors of successful development is the

projects on schedule.

1.7 **Structure of Dissertation** 

This study is focus on the factors of delay on approval process of development

projects. This research focus on both qualitative and quantitative research

methodology. There are 5 chapters in this study:

1.7.1

Chapter 1: Introduction

This chapter briefly describes an overview of the research topics starting with

background of study and followed by problem statements. Then, the research questions

are raised and the objective of the study are clear. Lastly, the scope of study,

significance of study and the methodology of study are also included.

1.7.2

Chapter 2: Literature Review

This chapter discusses the definition and concept to provide the existing

knowledge to the research background to achieve the objective of the study. Source of

the literature are ranging from journal article, newspaper, websites and books. Related

information will be cited and used in this study.

1.7.3 Chapter 3: Data Collection

This chapter will talk about how the data have been collected. Data collection

is a process of gathering all the data including observation and measurements from the

related parties to find the answers in order to achieve the objectives of the study.

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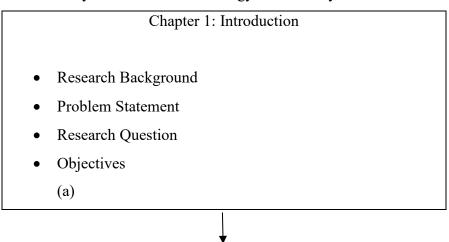
#### **1.7.4** Chapter 4: Data Analysis

This chapter will discuss the result that have been collected from the related parties and analyze the data to achieve the objective of study. After the data is being analyzed, the result will be recorded in this chapter.

## **1.7.5** Chapter 5: Conclusion and Recommendation

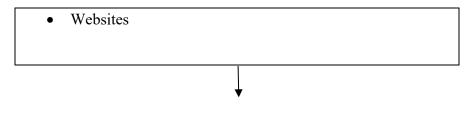
This is the last stage of the study where researcher will give an opinion based on the finding of the research and provides recommendation to improve the identified problem. The conclusion must be clear to help the readers understand why the research is important to them. New ways of approaching the issue will be introduced to offer new insights for the future research based on the result of this study. The limitation will be proposed in the last part of the chapter. Limitations of the study are the flaws or shortcoming such as small sample size, unavailability of resources and so on.

The summary of research methodology of this study is shown below:



Chapter 2: Literature Review

- Journal Article
- Books
- Newspaper



# Chapter 3: Data Collection

- Primary Data (Quantitative Questionnaire)
- Secondary Data (Article, Journal, Books, Census data, newspaper)

# Chapter 4: Data Analysis

- Identify the data collected from the primary data and secondary data
- Tools are used: Descriptive Analysis and Frequency Analysis

(b)

# Chapter 5: Conclusion and Recommendation

• Conclude the analyzed data and propose solutions to solve the issues

Figure 1.1: Flowchart of Research Methodology (UMP Institute Repository)

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