

Received : June 30, 2022
Accepted : July 07, 2022
Published : September 30, 2022

Conference on Business, Social Sciences and Technology
<https://journal.uib.ac.id/index.php/conescintech>

Analysis of Delays in Development Projects View Unit Villa Marina Opus Bay

Irlas Helen Pakpahan¹, Mulia Pamadi²

Email Of Correspondence : 1911037.irlas@uib.edu, mulia.pamadi@uib.ac.id

^{1,2}Faculty of Civil Engineering and Planning, Universitas Internasional Batam, Batam, Indonesia

Abstract

Practical work is a mandatory course carried out by final year students before the thesis is completed, with the aim of gaining practical experience which is carried out for approximately 3 months in the field. Where practical work is carried out from October 25, 2021 to January 25, 2022. In carrying out practical work activities the author serves as a field supervisor and finds obstacles in a project for the construction of the Show Unit Villa Marina Opus Bay, there are several constraining factors during the project work process. This affects the implementation time which results in not being completed on time. The obstacles include material delays and lack of manpower. In carrying out these activities, data collection was carried out using field observations and field documentation.

Keywords: Time, project delay, building/Villa

Introduction

The word project comes from the Latin "projectum" from the verb "proicere" which means to throw something forward. According to the Dictionary Large Indonesian Language (KBBI), the project is a work plan with specific targets (irrigation, power generation, etc.) and with a fixed turnaround time. According to Kerzner (2009), a construction project is a series of activities to achieve a goal (building or construction) by Certain time, cost and quality limitations. Construction project requires resources (resources), namely man (human), material (building materials), machine (equipment), method (method of execution), money (money), information (information), and time (time). A construction project is a series of activities related to efforts to develop a building, covering the main work in the field of civil engineering and architecture, although not infrequently also involves other disciplines such as Engineering industrial, mechanical, electrical, geotechnical, and landscape. If you want a project to run smoothly, you must pay attention to several aspects that can affect the process of working on a development project. In general, in construction projects, there are several obstacles that hinder the project's execution on time, these constraints are: weather, cost, time, work safety and quality or material quality. Barriers like these severely affect construction projects and can cause construction projects to be delayed and fail. For this reason, it is necessary to investigate the cause of the delay in the construction of the Show Unit Villa Marina Opus Bay. This study aims to determine the mitigation factors that affect project delays. So in this practical work, the author will analyze project delays with the title "Analysis of Delays in the Construction Project of the Villa Marina Opus Bay Show Unit". The author is sure to get new lessons such as obstacles that may arise in the field and scheduling that can affect the schedule for implementing work in the field. In addition, the author can also provide better insight.

Based on the background above, therefore the questions that are used to formulate the problem include:

1. What is the work process for the Show Unit Villa Marina Opus Bay development project.
2. What caused the delay in the construction of the Show Unit Villa Marina Opus Bay project.
3. What is the relationship between the initial planning time and the implementation time in the field.

Literature Review Project

A project is defined as a sequence of tasks that must be completed in order to achieve a certain result. According to the Project Management Institute (PMI), the term Project refers to "any temporary endeavor with a definite beginning and end". Depending on the complexity, it can be managed by one person or hundreds. Four types of strategies for a project along these two dimensions: compliant stewards, independent innovators, flexible mediators, and strong leaders. Curve-S.

Project management

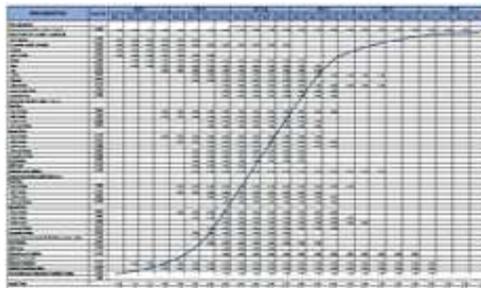
Project Management is a process of managing a project from the beginning to the end of the project so that the project objectives are achieved properly, on time, according to the required quality and in accordance with the given costs. A project is a one-time job process that is limited by schedule, budget, and quality. It can be concluded that construction management is a project work that is limited by scheduling, budget and quality and is carried out efficiently and effectively which is managed by experts with the aim of achieving a project.

Time Schedule

The time schedule is an important part of planning the implementation of a project because it can affect the work process, so it is necessary to provide a realistic schedule to facilitate the parties involved both in terms of timeliness and decision making during project work.

1. S-curve

S-curve is a type of schedule that is in the form of tables and graphs like the letter S. This type is used to determine work weights and monitor progress every time. Duty. Curve-S will be very helpful in creating evidence for project reports.

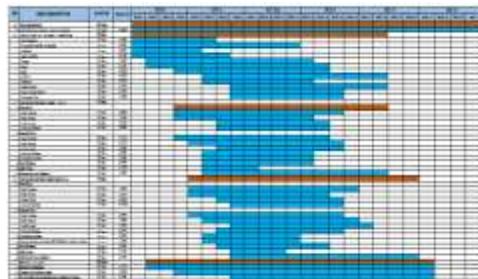


Source: Company Data

Figure 1. S-curve

2. Bar Chart

Bar Chart is an implementation chart to find out each task and the execution time. A Gantt chart displays a schedule in the form of a bar chart.



Source: Company Data

Figure 2. Bar Chart

Research Methods

To obtain clear and detailed data and information about the construction of the Barlang Housing Renggali Housing Project, the authors use the following data collection techniques:

1. Field Observation

The author directly reviews the ongoing project work and then retrieves the necessary data.

2. Field Documentation

The author collects data by collecting documentation (taking pictures) of objects or documents made by the subject or other people.

The location of practical work is located on Jl. Marina Waterfront City, Tj. Riau, Kec. Sekupang, Batam City, Riau Archipelago 29422 project name of the Show Unit Villa Marina Opus Bay development project

Results and Discussion

Currently, the construction project for the Show Unit Villa Marina Opus Bay project is not running normally. Work is currently being stopped. Some work was stopped due to material shortages which made it impossible to continue. Several other workers used the existing materials to continue the construction work of the Show Unit Villa Marina Opus Bay. In October 2021, the construction project of the Show Unit Villa Marina Opus Bay will proceed normally. But in the month of shortage of workers due to material delays in December 2021. With the arrival of materials, the weather supports the addition of workers at this time the construction project of the Show Unit Villa Marina Opus Bay is running well. The following is the Time Schedule update due to the delay in the construction project of the Show Unit Villa Marina Opus Bay.

1. S-curve



Figure 1. S-curve (Actual)

2. Bar Chart



Figure 2. Bar Chart (Actual)

Information :

- Green : Initial Plan
- Yellow: Done
- Red : Delay

The following data shows the cumulative percentage change in the weight of the plan and the actual weight.

Minggu	% Kumulatif Bobot Rencana	Minggu	% Kumulatif Bobot Aktual
1	0,34%	1	0,34%
2	14,6%	2	20,4%
3	25,7%	3	25,7%
4	45,4%	4	45,4%
5	69,7%	5	69,7%
6	11,0%	6	10,5%
7	17,4%	7	14,1%
8	27,3%	8	20,1%
9	37,1%	9	46,9%
10	46,9%	10	37,3%
11	56,7%	11	45,8%
12	66,5%	12	54,4%
13	76,0%	13	62,3%
14	84,2%	14	69,3%
15	90,3%	15	73,7%
16	92,6%	16	77,1%
17	94,7%	17	79,5%
18	96,4%	18	81,9%
19	97,4%	19	83,8%
20	98,5%	20	85,2%
21	99,5%	21	86,4%
22	99,7%	22	86,7%
23	99,9%	23	86,9%
24	100,0%	24	87,1%

Figure 3. Cumulative weight percentage

Show Unit Villa Marina Opus Bay, such as material delays such as cement that occurred in December 2021, which resulted in some workers being laid off. And when the situation is normal, the workers are already working outside the construction of the Show Unit Villa Marina Opus Bay, so it takes time to collect or find other workers to continue the implementation of the project. Therefore, the development is not in accordance with the schedule that was targeted at the beginning, due to several obstacles.

Conclusions

The results of this study can be concluded that the delay factor in the construction project of the Show Unit Villa Marina Opus Bay occurred due to several obstacles during the implementation of the construction work.

References

- Dharmayanti, GAP Candra, Dewa Ketut Sudarsana, and Ida Bagus Meranggi Guhyathama. "UPAYA PENANGGULANGAN KETERLAMBATAN PELAKSANAAN PROYEK KONSTRUKSI DI KABUPATEN BADUNG." *Jurnal Spektran* 10.1 (2022): 34-43.
- Hassan, H., Mangare, J. B., & Pratasis, P. A. (2016). Faktor–Faktor Penyebab Keterlambatan Pada Proyek Konstruksi Dan Alternatif Penyelesaiannya (Studi Kasus: Di Manado Town Square III). *Jurnal Sipil Statik*, 4(11).
- KHAIDIR, Indra. Faktor Penyebab Keterlambatan Pelaksanaan Proyek Konstruksi Di Sumatera Barat. *Jurnal Rekayasa*, 2018, 8.1: 32-49.
- MANUABA, Ida Bagus Gde. Kepemimpinan Dalam Manajemen Proyek. *Jurnal Analisa*, 2015, 3.1.
- UTOMO, ADHI PRIYO, et al. *PERANAN ANGGARAN BIAYA PROYEK DAN TIME SCHEDULING SEBAGAI PENGENDALIAN MANAJEMEN DALAM PELAKSANAAN PROYEK KONSTRUKSI PADA PT. TIANG KENCANA GRAHA*. 2007. PhD Thesis. UNIVERSITAS AIRLANGGA.