

Optimization Analysis of the Use of Vacant Land for Geintec Patient for Treatment at Komplek Taman Setia Budi Indah I Medan

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Abstract

Komplek Taman Setia Budi Indah 1 Medan Sunggal (Tasbih 1) around 98% of both empty lots and houses have been sold, but it is necessary to think about improving the comfort of the residents by maximizing the assets that are still there and have not been managed such as the utilization of vacant land. For that, there is a need for infrastructure improvements and the addition of new attractive facilities that can be enjoyed by the residents of the complex, which can increase the comfort of living in the complex. In Medan's Taman Setia Budi Indah housing estate, it currently has an asset in the form of empty land that has not been utilized at all with an area of -/+ 36,000 m2. It is necessary to analyze the Highest and Best Use of the utilization of the empty land, the result of which is expected to be a win-win solution that can meet the needs of the developer and the residents of the complex. The type of research conducted is quantitative descriptive research where the data obtained from the research population sample is analyzed according to the statistical methods used and then interpreted. The research starts from December 2021 until April 2022. The data analysis on the alternatives selected in this research uses the principles of Highest and Best Use, namely (1) Analysis of the types of alternatives viewed from the legal aspect. (2) Analysis of alternative types viewed from a physical aspect. (3) The analysis of alternative types is reviewed from the aspect of maximum productivity. (4) Analysis of financially eligible use (Capital Budgeting) Capital Budgeting is the entire process of planning and decision-making regarding the release of funds where the return period of the funds exceeds one year (capital expenditure). . From the results of the analysis of the legal aspect and the analysis of the physical aspect, there are 2 alternative properties, namely the first Convention and the

second Convention & Food Court. From the results of the Highest and Best Use analysis that has been done between the first alternative of the Convention and the second alternative of the Convention & Food Court, the first alternative of the Convention's land value is IDR. 4,288,079/m2 with the highest productivity of 86.11%,. It can be concluded that the allocation of land for property development in the Komplek Taman Setia Budi Indah 1 area with the Convention building is the best use alternative for the residential land of Komplek Taman Setia Budi Indah 1.

Keywords: Geintec, Gestao, Highest and Best Use, Legal Aspect Analysis, Physical Aspect Analysis, Financial Aspect Analysis, Maximum Productivity Aspect Analysis

1. INTRODUCTION

1.1. Background

Komplek Taman Setia Budi Indah 1 Medan Sunggal (Tasbih 1) round 98% of both empty lots and houses have been sold, but it is necessary to think about improving the comfort of the residents by maximizing the assets that are still there and have not been managed such as the utilization of vacant land. From observations in the field and data from initial interviews with several residents, the current problem in Tasbih is complex related to comfort including public facilities, among others

- 1. Road infrastructure that needs to be repaired, because many roads are damaged.
- 2. Drainage infrastructure that needs to be widened, because it is currently less capable of channeling water discharge, especially during heavy rains. This is also due to the lack of water absorption by the soil due to the reduction of open green land in the Medan Sunggal area. In line with the rampant development of housing complexes in the surrounding area.
- 3. There is no new innovation from developers either in terms of home design, the development of new cluster development or new marketing strategies. Currently, there are 2 new clusters being developed, but they are managed by the second party, not by the developer directly, and the price offered is quite expensive and less competitive considering the current condition of the Tasbih complex.
- 4. Peace, which used to be a problem for the residents a few years ago, had time to make the community consider buying a house in this complex. But for now the security conditions have improved with the availability of new security management vendors.
- 5. Public facilities that have not yet been newly developed.

For that, there is a need for infrastructure improvements and the addition of new attractive facilities that can be enjoyed by the residents of the complex, which can increase the comfort of living in the complex. At Taman Setia Budi Indah Medan housing currently has assets in the form of empty land that has not been utilized at all with an area of -/+ 36,000 m2

From the background of some of the problems that have been presented then:

- 1. There is a need for infrastructure improvements.
- 2. There is a need for innovation and the development of new objects that can be enjoyed by the residents of the complex in order to improve comfort and meet the needs of the residents of the complex.
- There is a need for maximum utilization of abandoned vacant land with an area of -/+ 36,000 m2 to finance operational/maintenance as well as additional income for the Developer.
- 4. The utilization of this land must also consider the wishes of the residents of the complex.

Based on the background of the problem that has been described and the existence of vacant land belonging to the Developer whose use has not been optimal. Therefore, the formulation of the problem that can be presented is necessary to analyze the Highest and Best Use of the utilization of the vacant land, the result of which is expected to be a win-win solution that can meet the needs of the developer and the residents of the complex.

1.2. Library Review

1.2.1 Understanding The of Concept of Highest and Best Use

The highest and best use (HBU) is defined as the most possible and optimal use of a property, which is physically possible, has been adequately considered, legally permitted, financially feasible, and produces the highest value of the property (which is summarized as 4 (four) criteria, which are as follows [1]:

- 1. Legally permissible (legally permissible),
- 2. Physically feasible
- 3. Economically / financially feasible (financially feasible)
- 4. Provide the highest value / maximum productivity (maximally productive).).

1.2.2. Understanding Property Appraisals

In property valuation, what is actually valued is "real property". That is the legal right that is based on the possession of land or land with all other derivative rights that are attached both on the land and under the land. And the physical construction that is above or below the ground is called real estate according to the Indonesian Appraisal Standard SPI Year 2015 [2]. According to KPSPI [3], the market value of a property or asset reflects its use according to the market and not purely from its physical status. This usage will of course be different for each user depending on the effort made.

Appraisal, is a work process carried out by an appraiser in providing an estimate and opinion (opinion) on the economic value of an object (property) whether tangible or intangible, based on an analysis of objective and relevant facts using certain methods at a certain time [3], [12].

Appraisal is a combination of knowledge or science and art (science and art) in estimating the value of an interest found in a property with a specific purpose and at a set time and by considering all the characteristics of the property including the types of investment that available on the market [4]. Assessment is called science because it performs calculations using formulas or formulas,

1.2.3 Assessment Approach

According to Stephen F. Fanning in Kustamar et al [5], to perform the Highest and Best Use analysis, the following analysis tools are also used

- Market data approach (Market Data Approach)
 This approach is done by comparing the property to be evaluated with other similar properties whose selling value is already known.
- Cost Approach (Cost Approach)
 SPI Edition VI 2015 explains in the cost approach, appraisers estimate the value by comparing the costs required to build a new property to replace the existing property [2].
- Income Approach (Income Approach)
 This approach is also called the investment approach, is one of the approaches that can be used in the evaluation of properties that produc

1.2.4 Facilities

Housing infrastructure includes roads, drinking water channels, rainwater channels, electricity networks, telephone networks and optical cables. Housing environment facilities include environmental equipment in the form of educational facilities, health, spending and business, government and public services, worship, recreation and culture, sports and open fields. Environmental means are [6]:

1. Facilities of worship

The facilities of worship, type, type and size depend very much on local conditions.

2. Sports facilities and open spaces

Sports facilities and open spaces in addition to their main function as parks, children's playgrounds and sports fields will also provide freshness and neutralize air pollution as the city's

lungs. Due to its very important function, these facilities must be properly maintained both in size and condition. In addition to parks and open sports fields, green lanes should still be provided.

1.2.5 General Facilities

. Facilities are anything that is physical equipment provided by the service seller to support consumer comfort [7]. Facilities are ease, lightness, relaxation that can be done to do something or do a task [8]. Facilities here include public facilities and social facilities, including infrastructure, educational, health, religious, and transportation facilities [9]. The infrastructure that must be provided in the housing complex is as follows

- 1. Roads, the classification of roads in the housing environment can be divided into several types, namely (Sastra and Marlina, 2006):
- Clean / Drinking Water, a housing environment must provide a source of clean water for its residents, this source of clean water can be provided per unit or even centrally for the entire residential area.
- 3. Wastewater, a good housing environment should have wastewater treatment facilities, because it functions as a residential area, some of the wastewater is domestic, which is treated enough to provide septic tanks and seepage wells.
- 4. Rainwater disposal, for the disposal of rainwater, seepage wells can be provided in open areas within the housing area or in the form of sewers that are managed together for the entire housing area.
- 5. Garbage disposal, garbage disposal facilities are the most important equipment related to environmental health requirements.
- 6. The electricity network, according to current needs, electricity is an important means of lighting. In housing, electricity supply should consider minimum standards.

1.2.6 Environment

A residential neighborhood is a group of houses with environmental facilities [10]. For most of the community, the environment has an important role in determining purchasing decisions. In addition, the busyness of modern society with work, of course to eliminate boredom and routine can only be realized in the housing environment, because home is a place to rest as well as spend time with the family [11].

1.2.7 Design

The design of public facilities tends to be welcoming or that can attract people to be able to enjoy and be interested in wanting to use and come to the facility. Design elements that are attractive, fun, cheerful and not boring are very densely applied in the design for public facility properties. The amount of space needed should also be considered for the concept of the property that will be proposed. Is it able to accommodate the quantity according to the occupancy conditions of the complex where the object is planned. In this case, property design is one of the important things in this research that must be analyzed

1.3. Conceptual Framework

Based on the explanation in the conceptual framework using the Highest and Best Use analysis or the highest and best use can be illustrated in Figure 3.1 as follows

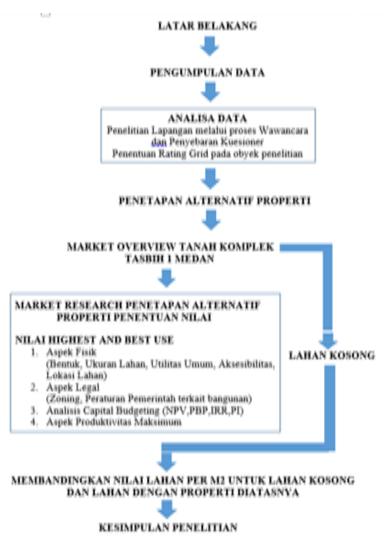


Figure 1.1 Conceptual Framework

2. RESEARCH METHODS

The type of research conducted is quantitative descriptive research where the data obtained from the research population sample is analyzed according to the statistical methods used and then interpreted. The location of this research was carried out on land in the Taman Setia Budi Indah 1 Complex with an area of -/+ = 36,000 m2, owned by Developer PT Ira Widaya Utama, which has not yet been utilized to the maximum, so research needs to be done to optimize the assets of the land. For the research time is from December 2021 to April 2022. Primary data is obtained through: (1) Field survey of land condition and size data, land sale/purchase price comparison, rental price comparison and similar property cost income in accordance with the proposed alternative. (2) Questionnaire to developers regarding alternative property proposals. (3) Questionnaire to the residents of the complex regarding alternative property proposals. (4) Experts (architects) on property alternative proposals. (5) Government agencies.

Secondary data is obtained through: (1) RUTRK, RTRW and RDTR data. (2) Library data, books, magazines, journals, government publications, census data. (3) The research journal that is required in the preparation of the research is related to the factors that influence HBU, public facilities and property values in the housing complex. Data analysis on the alternatives selected in this research using the principles of Highest and Best Use, namely:

- 1. The analysis of alternative types is reviewed from a legal aspect
- 2. Analysis of alternative types viewed from a physical aspect
- 3. Analysis of alternative types is reviewed from the aspect of maximum productivity
- 4. Financially eligible use analysis (Capital Budgeting)

Capital Budgeting is the entire process of planning and decision-making regarding the release of funds where the return period of the funds exceeds one year (capital expenditure).

3. RESULT AND DISCUSSIONS

3.1. Alternative User Determination

Based on the Results of the Questionnaire of the respondents in the field, the most respondents chose, the location of some land can be added with new public facilities, but some of the land remains in accordance with the previous conditions, namely public facilities for sports (ball fields). And for the alternative of new facilities, most respondents chose strategically to be used as a convention hall as well as a food court instead of only being used as a convention or food court only. Based on this, the author draws a conclusion that will be the object of HBU's analysis:

- 1. Convention hall as well as food court
- 2. Convention hall

3.2. Analysis of Legal Aspects (Legal Permissibility)3.2.1 Convention Building and Food Court

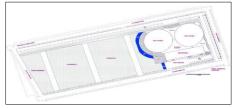


Figure 3.1

Master Plan Convention Hall & Food Court

The property data will be analyzed to see if it is in accordance with the legal aspect, that is, in accordance with the applicable government regulations, where the land is included in the RTH-1 zone

Table 3.1 Analysis of Legal Aspects Convention Hall & Food Court

Convention & Food Court Zona RTH Regulation Conclusion						
-	GSB = 14m	GSB = 9,5m			Suitable	
-	KDB = 19,7 %	KDI	B = 20%	6 Max		Suitable
-	KLB = 7.100 m2	KLB = 0,2 (7,200 m2) Max			Suitable	
-	KDH = 74,2 %	KDH = 80%		Unsuitable		
-	(the solution is to replace the used RTH land with land in another location					
	in 1 complex. Then the used land -/+ 5.8% (2,088m2) will be replaced with					
	land around the Sports Facility which has not yet been functional with an					
	available area -/+ 6,000 m2).					
-	Height of Building =	1 Lt	High	Maximal = 3	3 Lt	Suitable
-	Height of Building =	5 m	High	n Maximal =	13 m	Suitable
-	User: Conv,F.Court		User	= RTH Housi	ing	UnSuitable
	(for this, even though the allocation is RTH, it is still allowed to build					
	buildings according to the provisions of 20% of the land area).					
-	Rasio Parking :					
	Outdoor = 170 Car		9.30	0 : 100 = 93 C	ar	Suitable

From the analysis there are 2 points that do not match the allocation with the property to be planned. However, according to what the writer has described above, there is still a solution for the planned building to be implemented. So that from the aspect of the building law that will be planned in this case it can be accepted.

3.3.2.2 Convention Building

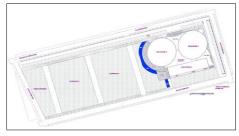


Figure 3.2 Master Plan Convention Hall

The property data above will be analyzed to see if it complies with the legal aspect, that is, in accordance with the applicable government regulations, where the land falls within the RTH-1 zone:

	Convention	Zona RTH Regulation	Conclusion	
-	GSB = 14m	GSB = 9,5m	Suitable	
-	KDB = 19,7 %	KDB = 20% Max	Suitable	
-	KLB = 7.100 m2	KLB = 0,2 (7,200 m2) Max	Suitable	
-	KDH = 78,05 %	KDH = 80%	Unsuitable	
	(the solution is to replace the used RTH land with land in another location			
	in 1 complex. Then the used land -/+ 1.95% (702m2) will be replaced with			
	land around the Sports Facility which has not yet been functional with an			
	available area of -/+ 6.000m2)			
-	Height of Building =	= 1 Lt High Maximal = 3 Lt	Suitable	
-	Height of Building	= 6 m High Maximal = 13 m	Suitable	
-	Penggunaan : Convention Peruntukan = RTH Perumahan Unuitable			
	Appropriate (for this, even though the allocation is RTH, it is still allowed			
	to build a building in accordance with the provisions of 20% of the land			
	area)			
-	Rasio Parking :			
	Outdoor = 170 Car	<u>7.900</u> : 100 = 79 Car	Suitable	

Table 3.2 Analysis of Legal Aspects Convention Hall

If seen from Peraturan Tata Kota Medan, the location of the property is in the RTH (Green Open Space) Zoning area in a housing complex. There are 7 legal aspects of GSB, KDB, KLB, KDH, building type, building height and parking ratio that must be met for the allocation. From the analysis there are 2 points that do not match the allocation with the property to be planned.

However, according to what the writer has described above, there is still a solution for the planned building to be implemented. So from the legal aspect of the building that will be planned in this case it can be allowed.

3.3. Physical Aspect Analysis (Physical Possibility)

The location of the research object is in the city of Medan, namely at Komplek Taman Setia Budi Indah 1 Jl.Cassia Raya This complex consists of 2 districts, namely Selayang District and Tanjung Rejo District

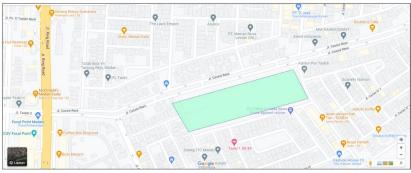


Figure 3.2 Location of Development Plan Convention Hall and Food court

The location is also supported by objects adjacent to one of the commercial areas of the complex. The condition of the research object land is as follows:

- North Region: Main Street Jl. Cassia Raya
- Southern Region: Complex Roads / Complex Commercial Areas
- Eastern Region : Road Complex / Housing
- Western Region: Road Complex / Housing

The shape of the land is rectangular with a width of about 118m and a length of about 340m, making building planning very easy and flexible. It is also supported by the density of mature land, the flat contour of the land and the elevation above the road, making this land very much meet the best and highest utilization criteria.

The land is in the Taman Setia Budi Indah 1 housing complex. Where in this complex, the general facilities related to utilities such as the availability of clean water, electricity and drainage are very adequate. Also networks related to communication such as telephone network, mobile, internet, cable TV, also optic cable are fully available.

3.4. Analysis of Financial Aspects (Financial Affordability

3.4.1 Convention Building

For the cost calculation, the author only calculates with the assumption that the land can be managed only, which is half of the land = 18,000 m2.

- For the period of completion of development: 1 Year.
- Estimated Investment: 5 Years
- Price / Cost Growth per year: 5% (Source: BPS Kota Medan)
- General Bank Interest Rate: 8 % (BI Source)

Net Operating Income (NOI) at the end of the planned investment period of 5 years, can be seen at the end of the fifth year at the alternative Convention Hall amounting to Rp 33,441,186,933.

 Table 3.3 Result NPV, IRR, PPI, PP
 Convention Hall

	Results		
NPV	10.794.029.259	NPV > 0	= Layak
IRR	10,54%	IRR > WACC = Layak	
Profitability index	1,08	PI > 1	= Layak
Payback Periode	4,40	PP < 5 Tahun = Layak	

It can be seen the calculation of cash flow on the value of NPV, IRR PI and PP of the Convention Hall Building as follows:

1. Determination of Net Present Value (NPV) from cash flows (cash flows) in the future, discounted with the appropriate cost of capital, then subtracted from the project expenditure

on the investment of the Convention building which is Rp. 10,794,029,256 or NPV > 0 (positive).

- 2. The Internal Rate of Return (IRR) calculates the interest rate that can equalize the present value of all cash inflows with the cash outflows from Convention building investment with an IRR value of 10.54%.
- 3. Profitability Index (PI) an index that can be used to ensure that limited resources are used for investment in Convention buildings with a PI value of 1.08 or PI >1.
- 4. Payback Period on the investment return from the annual cash flow generated by the Convention building investment project with a value of 4.40 years or < from the estimated investment for 5 years.

3.4.2 Building Convention & Food Court

For the cost calculation, the author only calculates with the assumption that the land can be managed only, which is half of the land = 18,000 m2.

- For the period of completion of development: 1 Year.
- Estimated Investment: 5 Year
- Price / Cost Growth per year: 5% (Source: BPS Kota Medan)
- General Bank Interest Rate: 8 % (BI Source)

Table 3.4 Result NPV, IRR, PPI, PP Gedung Convention & Food Court

	Results		
NPV	9.104.395.396	NPV > 0	= Layak
IRR	10,11%	IRR > WACC = Layak	
Profitability index	1,07	PI > 1	= Layak
Payback Periode	4,45	PP < 5 Tahun = Layak	

It can be seen the calculation of cash flow on the value of NPV, IRR PI and PP of the Convention Hall & Food Court Building as follows

- Determination of Net Present Value (NPV) from cash flows in the future, discounting with the appropriate cost of capital, then subtracting the project expenditure on the Convention building and Food Court investment which is Rp. 9.104395.396 or NPV > 0 (positive).
- 2. The Internal Rate of Return (IRR) calculates the interest rate that can equalize the present value of all cash inflows with the cash outflows from the Convention building and Food Court investment with an IRR value of 10, 11%.
- 3. Profitability Index (PI) an index that can be used to ensure that limited resources are used for investment in Convention and Food Court buildings with a PI value of 1.07 or PI >1.

4. Payback Period on the return of investment from the annual cash flow generated by the Convention building and Food Court investment project with a value of 4.45 years or < from the estimated investment for 5 years.

Financial Aspect Analysis Results

Each financial analysis of land development in the form of Convention or Convention & Food Court shows operational eligibility, so to determine the selected alternative (Highest and Best Use) is to look at each of the eligibility criteria, namely NPV, IRR and the largest PI, while Payback Period is the smallest. Here is a comparison of eligibility criteria from each alternative.

Table 3.5 Comparison of the Qualifications of Expansion Alternatives

No	Indikator Keuangan	Penggunaan Properti		
		Convention		Convention & Food Court
1.	Net Present Value (NPV)	10.794.029.259	>	9.104.395.396
2.	Internal Rate of Return (IRR)	10,54%	>	10,11%
3.	Profitability Index (PI)	1,08	>	1,07
4.	Payback Period	4,40 Tahun	<	4,45 Tahun
		Layak		Layak

From the results of the research obtained in terms of Financial Aspects that are eligible for investment is the use of land as a Convention building. But before that, the two uses of the property will be further analyzed on the aspect of maximum productivity

3.5. Analysis of Aspects of Maximum Productivity

If the alternative has a positive NPV value and is said to be eligible, then it is sought whether the value before and after the development of land/m2 is also maximal. And as a result of the development of the 2 building alternatives that were analyzed, it was found which building had the highest increase. The magnitude of the risk value is assumed to be the same as the interest rate, so that the value of MARR (Minimum Attractive Rate of Return) is equal to 2 x the average general bank rate of 8.00%, so it is assumed that the value of MARR (Minimum Attractive Rate of Return) is equal to 16%. To find the property value on the asset value at the end of the investment period obtained from the Net Operating Income (NOI) at the end of the investment period planned for 5 years divided by the projected MARR value of 16%, following the value of the property.

Convention Property Value

Rp 33,441,186,933 / 0.1600 = Rp 209,007,418,331

Property Convention and Food Court Value

Rp 33,650,901,545 / 0.1600 = Rp 210,318,134,656

The results of the analysis of the maximum productivity aspects of land use at Convention, as well as Convention and Food Court can be seen in the following Table 4.17

Description	Alternatif			
Description	Convention	Convention & Food Court		
Property Value	209,007,418,331	210,318,134,656		
Investment Value	131,822,000,000	134,406,000,000		
Land Cost	89,640,000,000	89,640,000,000		
Building Value	42,182,000,000	44,766,000,000		
Land Value	166,825,418,331	165,552,134,656		
Land Area/ m2	18,000	18,000		
Initial Land Value/m2	4,980,000	4,980,000		
Land Value/m2	9,268,079	9,197,341		
Land Value Addition/m2	4,288,079	4,217,341		
Productivity	86.11%	84.69%		

Table 3.6 Result Maximum Productivity

It can be seen from the results of the calculation of maximum productivity, with the development of the Convention property, an increase in the value of the land will be obtained from the initial value of Rp. 4,288,079/m2 in the sense of land utilization for the Convention building will provide a land productivity of 86.11%, Further from the results of the maximum productivity calculation, with the development of the Convention property and Food Court, an increase in land value will be obtained from the initial value of Rp. 4,217,341/m2 in the sense of land utilization for the Convention building and Food Court will provide a land productivity of 84.69%. So, the highest and best use alternative for the Perumahan Taman Setia Budi Indah 1 housing is the alternative use of the Convention building

3.6. Discussion

The Highest and Best Use (HBU) analysis has four alternative types of analysis, namely the legal aspect, the physical aspect, the eligible financial aspect, and maximum productivity. The HBU analysis was performed on the assumption of land with an area of 18,000 m2. With the object of analysis HBU Convention Hall as well as Food Court and Convention Hall only.

The first stage is the selection of alternatives, where alternatives are analyzed covering the Convention Hall and the Convention Hall as well as the Food Court. In the legal aspect it is known that the allocation of research land is for residential development. In the legal analysis, it is analyzed whether the legal aspect is in accordance with the applicable government regulations from the legal aspect of the building that will be planned both the Convention Hall and the Convention Hall as well as the Food Court in the legal aspect of the two types of property that will be planned can be accepted.

In the analysis of the physical aspect, the research land is located in a strategic area with rapid development, which is in Komplek Taman Setia Budi Indah 1 Jl.Cassia Raya. This consists of 2

districts, namely Selayang District and Tanjung Rejo District. The land position is located in one of the main entrance lanes of the Complex from the direction of Jl. Ring Road. The street is a developing commercial area that is already filled with various commercial facilities such as Malls and Shopping Centers, Hotels, Gas Stations, Shop Complexes and Hospitals, so the location of the object is very marketable.

In addition to this, the general facilities related to utilities such as the availability of clean water, electricity and drainage are very adequate. Also networks related to communication such as telephone network, mobile, internet, cable TV, also optic cable are fully available.

In testing the financial aspects, the alternatives that are said to be financially viable for the two properties are either the Convention Hall building alternative or the other Convention Hall building alternative as well as the Food Court with the Capital Budgeting method derived from financial projections in the management and development of the buildings

The last analysis is the maximum productivity analysis. On the analysis of the maximum productivity of land use at Convention, as well as Convention and Food Court. As a result of the calculation of maximum productivity, with the development of the Convention property, an increase in the value of the land will be obtained from the initial value of IDR. 4,288,079/m2 in the sense of land utilization for the Convention building will provide a land productivity of 86.11%. calculation of maximum productivity, with the development of Convention and Food Court properties, an increase in land value will be obtained from the initial value of IDR. 4,217,341/m2 in the sense of land utilization for the Convention building and Food Court will provide a land productivity of 84.69%

In the maximum productivity analysis, the highest and best use alternative for the land in Taman Setia Budi Indah 1 housing is the alternative use of the Convention building, with an increase in land value from the initial value of IDR. 4,288,079/m2 and provides a land productivity of 86.11%,

4. CONCLUSION

This research aims to determine the highest and best property building in the Perumahan Taman Setia Budi Indah 1. Medan. From the results of the analysis of the legal aspect and the analysis of the physical aspect, there are 2 alternative properties, namely the first Convention and the second Convention & Food Court.

From the results of the Highest and Best Use analysis that has been done between the first alternative of the Convention and the second alternative of the Convention & Food Court, the first

alternative of the Convention's land value is Rp. 4,288,079/m2 with the highest productivity of 86.11%,. It can be concluded that the allocation of land for property development in the Taman Setia Budi Indah 1 residential complex area with the Convention building is the best alternative use for the Perumahan Taman Setia Budi Indah 1. Medan.

BIBLIOGRAPHY

- [1] Mulyana, E. W. (2019). Determination of Use of Vacant Land by Highest and Best Use (HBU) Analysis. Journal of Global Business and Management Review, 1(1), 11-24.
- [2] MAPPI. (2015). Indonesian Appraiser's Code of Ethics (KEPI) and Indonesian Assessment Standards (SPI). VI Edition 2015.
- [3] MAPPI. (2018). Indonesian Appraiser's Code of Ethics (KEPI) and Indonesian Assessment Standards (SPI). VIIth Edition 2018.
- [4] Hadi, Valuation of Tangible Properties Volume I. Balai Pustaka (Persero), PT.
- [5] Kustamar, Tiong Iskandar dan Iwan Wijaya (2013) Faktor-Faktor Yang Berpengaruh Terhadap Permintaan Perumahan Tipe Cluster Pada Perumahan Palem Asri di Kota Jombang, Jurnal Info Manpro Vol. 4:49-59
- [6] Sagala, Peranita (2014) The Effect of Marketing Mix and Service Quality on Consumer Satisfaction Real Estate Puri Zahara 2 in Medan City [Thesis]. Medan, University of North Sumatra. Graduate program
- [7] Kotler (2013). Asian Perspective Marketing Management. Book Two. First Edition. First Print. Yogyakarta: Salemba Empat
- [8] Zain. H. (2012) Marketing Mix and Consumer Loyalty. Alphabet. Bandung
- [9] Amen. (2015). Income Approach In Property Investment
- [10] Machfud Siddik (2000), Property Valuation Model for Various Land Uses in Indonesia.
- [11] Widodo, Puji (2012). Analysis of Factors Influencing Demand for Cluster Type Housing Development in Semarang City [Thesis]. Diponegoro University. Civil Engineering Masters Program.
- [12] Suprapto, Siahaan, S, (2022). Effect of Basic Ethical Principles on the Quality of Assessment (Study on Appraisers in North Sumatra and Aceh Provinces). *Neuro Quantology*. 20(5). 312-322 https://doi.org/10.14704/nq.2022.20.5.NQ22176