

Factors affecting the development of branded property market in Vietnam

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Abstract: This article studies the factors affecting the development of the branded real estate market in Vietnam. Vietnam is an emerging and very potential market for high-end and branded real estate due to the increasing number of Vietnamese people joining the middle class and above and very high demand for real estate investment properties as decent places to live and to accumulate assets for a long term. The article applies both quantitative and qualitative analysis to find out the factors affecting the branded real estate market and from there, offers policy implications and solutions to promote this segment of the real estate market to the new heights. Research results show that there are three most important factors affecting the development of the branded real estate market in Vietnam: design has a direct impact on development potential; design directly impacts profitability; location has a direct impact on return value.

Keyword: Branded property, real estate market, real estate business, Vietnam.

1. INTRODUCTION

With the complicated development of the Covid-19 pandemic situation in 2021 in Vietnam, people's needs are gradually changing, focusing on finding a good space and safe place to live (Thin, 2021; Rewel, 2021). Investment demand has shifted to fixed products with high return value. According to statistics, Vietnam is a country with a very fast growth of the rich people, leading to an increase in the demand for accommodation (Feng et al, 2022; Chien et al, 2022; Dana, 2021; Vu, 2019; Thuan, 219). Branded real estate is the most suitable product for the above needs. Although it is a new and rare product in Vietnam, branded real estate has been established for a long time in foreign countries and is always in a state of insufficient supply to respond to rising demand. Realizing the potential of this type of development, we decided to investigate the factors affecting branded real estate market in Vietnam.

Thanks to this research, it is possible to quickly grasp the real estate market trend early. This is a valuable but extremely unexploited research area, so the sooner we understand, the higher we have chances of benefiting from development of real estate market. This article will be a useful document in assisting customers in consulting and understanding the real estate market in Vietnam. Branded real estate market is a new and very interested field, and this research will help clarify which factors will affect its development profoundly.

2. THEORETICAL ISSUES AND RESEARCH MODEL

2.1. Basic concepts

Real estate

Through the definitions in references, we can understand the concept of real estate in Vietnam as long-term assets that cannot or hardly can be moved, it is attached to the land (houses), apartments, buildings. It has a long-term value with the ownership of an individual or a group and the real estate needs to be fully legal in accordance with state regulations (Ngoc 2021b; Khue, 2021).

Branded real estate

After a series of typical concepts of branded real estate defined at the present time, it can be seen that branded real estate is a project built as a house for commercial purposes, this property is owned by individuals when they choose to buy and the last important factor is that branded real estate must be managed similarly by a 5-star international hotel with worldwide brands (Dung, 2021). When individuals own branded real estate, they live in their own house but enjoy all the services and amenities of a 5-star hotel.

Table 1: Differences between real estate and branded real estate

| <i>Real estate</i> | <i>Branded real estate</i> |
|---|---|
| <ul style="list-style-type: none"> – The location is suitable, has a clear population or planning and has potential for development. – Management units are small companies or self-managed by investors. – Architectural design inside and out is complete and beautiful, meeting the needs of residents. – Residents are people with needs from many different social classes. – Stable growth value, different price growth rate depending on the region. | <ul style="list-style-type: none"> – Unique location, close to outstanding amenities, river views or park centers... – The management unit must be a 5-star hotel management brand. – Architectural design inside and out must have its own distinctive, iconic mark. – Residents here are the elite, the rich or the super-rich in Vietnam. – Value grows steadily over time and will often increase rapidly. |

Source: Authors'

2.2. Branded real estate market

Branded real estate market in the world

The North American market has always dominated in the field of branded real estate products. The majority account for more than 50% of the world's branded real estate. However, from 2015 to now, branded real estate has begun to shift to Asia-Pacific, Europe, the Middle East and North Africa, especially Thailand and Indonesia with a rate of about 30% of projects. In addition, Dubai is the place to focus and attract the most branded real estate projects. The three-way "Win-Win-Win" formula is proven by Savills with convincing figures (in 2019): "Worldwide, the number of branded residences projects has tripled in the past decade and in three years it will increase to 27%. On average, the number of branded residences projects increased by 9% per year. Also according to Savills statistics, a total of 435 branded residences projects are located in countries with developed economies such as Dubai, New York, and Singapore (Dung, 2021; Frank, 2019).

Branded real estate market in Vietnam

Vietnam is also considered a very potential market with the rapid growth of the economy and the group of rich people in recent years, this is considered a premise to develop this field in Vietnam. The economic situation is volatile, but for the real estate industry, this is a great opportunity, because this industry is less affected by the pandemic (Ngoc, 2021, 2021a, 2021b; Ngoc & Tien 2020). Moreover, it develops more strongly after the Covid-19 pandemic. It can be easily seen that Vietnam is currently ranked 2nd in the top 10 countries and in the future can move up to be ranked first. The population of the upper class and the rich in Vietnam is projected to have a growth rate of 10.1% per year in the period 2018-2023. The increase of this group of people will positively support housing demand in Vietnam, especially valuable products that affirm their position such as branded real estate. In particular, branded real estate in Vietnam ensures all high-end standards like products in the world, but the price is quite cheap compared to the common ground, the current supply is also extremely scarce.

Research projects at home and abroad

Table 2: Factors affecting the development of branded real estate

| Author | Position/Location | Service | Brand | Legality | Profitability | Design | Utility |
|---|-------------------|---------|-------|----------|---------------|--------|---------|
| Van Tuan (2021) | X | | | | | | X |
| Smartland Vietnam (2021) | X | | | X | X | X | |
| CBRE Vietnam (2021) | X | | X | | X | X | |
| Ho Chi Minh City Real Estate Association HOREA (2021) | X | | | X | | | X |
| Savills World Research (2018) | X | X | | | X | | X |
| Macrothink Institute (2017) | | | X | | X | | |
| Skift (2021) | X | X | | | X | X | |
| Knight Frank (2019) | X | | X | | | X | |

Source: Authors'

2.3. Research hypothesis and model

Basis for proposing research model

Based on general research, amongst prominent factors of branded real estate development, in this articles, we selected 5 core factors (1) Location; (2) Services; (3) Brand operation and management; (4) Legality; (5) Design (Kamal & Pramanik, 2015; Ping, 2021). We decided to choose these 5 factors because most of the above factors are agreed by the authors of previous studies. Besides, we

also decided to combine the visibility factor with the location factor as mentioned above to be able to clearly state the role of location in the group of factors, because location determines the vision of residents and branded real estate must always ensure this factor, the inclusion of this factor helps to optimize the research but still ensures the completeness of the influencing factors.

Table 3: Summary of proposed studies

| | Proposed variables | Sources |
|---|-------------------------------------|--|
| 1 | Group of position/location elements | CBRE Vietnam (2021) |
| 2 | Group of service elements | Savills World Research (2018) |
| 3 | Group of brand management elements | CBRE Vietnam (2021) |
| 4 | Group of legal elements | Ho Chi Minh City Real Estate Association (HOREA) |
| 5 | Group of profitable value factors | Savills World Research (2018) |
| 6 | Group of design elements | CBRE Vietnam (2021) |

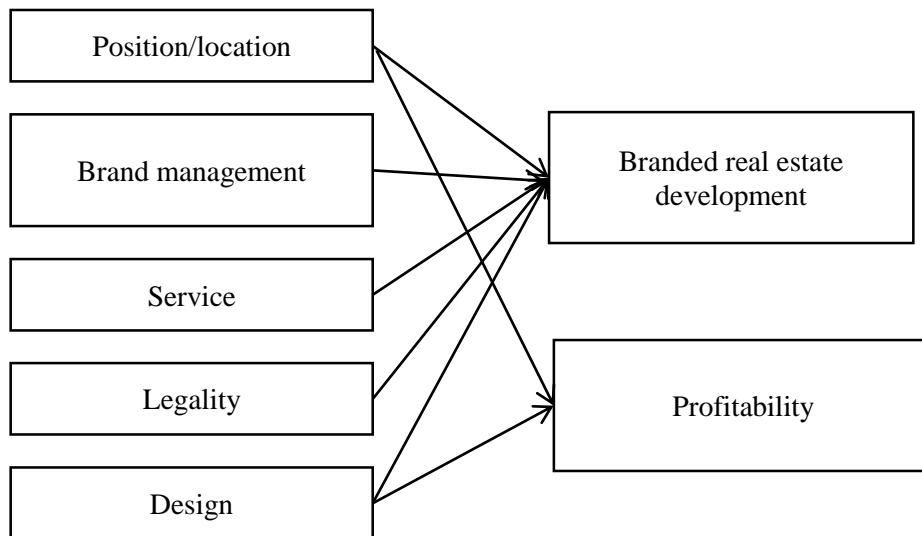


Illustration 1: Proposed research model

Location: this is considered the most important and prerequisite factor when it comes to any project and branded real estate. Branded real estate always has to own a unique, most expensive location in the market, the "center of the center" area, where all the elements are concentrated to ensure the most comfort for residents living there. In addition, the location will also determine the vision of the entire project, this is a factor that greatly affects the value and development of real estate.

Brand of management and operation: considered as a factor creating branded real estate products. The appearance of the world's leading brands of property management helps to increase the value of real estate, which is also a factor that ensures the quality and positioning with high value for any real estate product. The world's leading real estate management and operation brands can be mentioned as: Marriott International, Four Seasons, Hyatt, Accor (Skift, 2021). These brands are the guarantee for the value of asserting themselves, with world-class experiences and 5-star hotels.

Services: for branded real estate products, in addition to basic services like other real estate, there are personalized services according to international standards to ensure residents here enjoy the best possible service. It is the service factor that is a differentiator that makes branded real estate products stand out. Managed and operated by a world famous brand, branded real estate always owns special services along with experience that not everyone can inherit.

Legality: Legality is the first and foremost concern with any branded real estate project. Currently, there are many projects that have been opened for sale, but still have problems related to legal issues and delayed provision of certificate of ownership to residents. These events create risks, obstacles and worries for customers.

Design: including exterior landscape design and interior architectural design. Both of these factors create a highlight and difference for a branded real estate project. External landscape design helps to impress customers; interior architectural design is also very interested. Therefore, the architectural design needs to optimize the nooks and crannies and create an airy and relaxing space for the residents living here.

Research hypothesis

H1(+) The location of the project affects the development of branded real estate.

H2(+) Operational management brand affects the development of branded real estate.

H3(+) Services affect the development of branded real estate.

H4(+) Legal impacts on the development of branded real estate.

H5(+) Design affects the development of branded real estate.

H6-1: There is a difference in the evaluation of the development of branded real estate for individuals by gender.

H6-2: There is a difference in the evaluation of the development of branded real estate for individuals by industry.

H6-3: There is a difference in the evaluation of the development of branded real estate for individuals according to their interest and property ownership.

3. RESEARCH METHODOLOGY

3.1. Research methods

Preliminary qualitative research

In this preliminary research, we conduct research by reviewing domestic and foreign studies. In addition, we will combine interviews with sales staff about branded real estate at the companies, to understand what factors are considered to have the most impact on the development of branded real estate market. Through research papers and discussions with other staff, we can make statistics of the most reasonable factors for the preliminary research to conduct a preliminary survey.

Formal qualitative research

After conducting preliminary research, based on the survey results received, we conduct analysis and evaluation of the indicators. After that, based on research articles, practical knowledge, discussions with other sales staff we draw out the final factors that is considered the strongest impact on branded real estate market. From the above information, we conduct adjustment and official research.

Preliminary quantitative research

We conduct a preliminary survey with a sample of 50 people in the given occupations and operation fields. After collecting the results, we analyze the indicators, remove inappropriate variables. Conducting preliminary survey allowed us to evaluate the survey in terms of both content and form. From there, we proceed to adjust the official scale with more suitable and optimally edited variables.

Formal quantitative research

From the adjustments of the preliminary research, official research was formed to survey with a sample of 284 people in the research group according to the prescribed survey method. After completing the survey, we conduct data processing, check the reliability of Cronbach's Alpha, carry out exploratory factor analysis (EFA), regression correlation model, thereby making evaluation comments on the factors impacting development of branded real estate market.

Sampling

Minimum number of samples: Number of variables $\times 5 = 30 \times 5 = 150$ variables.

Formula for calculating sample size, according to Green (1991), $n \geq 8m + 50$; Where: n is the sample size, m is the number of independent variables in the model.

In this study, we have 30 independent variables in the model, so: $n \geq 8 \times 30 + 50 = 290$ variables.

To ensure enough votes for the survey, it is necessary to prepare a surplus of votes. So the most suitable number of questionnaires is: $290 \times (1 + 10\%) = 319$

3.2. Data analysis

Descriptive statistics

In this study, descriptive statistics were used to summarize the survey samples. In addition, it also helps to calculate indicators such as mean, median, and standard deviation to conduct evaluation, assessment and have an overview of the entire survey.

Cronbach's Alpha reliability assessment

Cronbach's Alpha is a necessary scale for any research paper, we use this scale to select the factors that are really suitable for the research paper with high reliability. From this analysis, we can adjust and complete the research more accurately. However, the Cronbach Alpha coefficient is greater than 0.6, the scale is accepted. The type of observed variables has a small-total correlation coefficient (less than 0.3), the standard for choosing the scale when the alpha reliability is greater than 0.6 (the larger the alpha, the better the internal consistency reliability).

Exploratory factor analysis (EFA)

The use of EFA helps to optimize the number of variables needed for a factor, eliminating unnecessary or duplicate variables while still ensuring accuracy and uniformity (Anh, 2021). In order for the results of the rotation matrix to be considered meaningful, the EFA should ensure the following conditions:

- KMO coefficient must be in the range from 0.5 to 1
- Barlett test with sig must be less than 0.05
- Eigenvalue greater than or equal to 1
- Total variance extracted is greater than or equal to 50%.

Confirmatory factor analysis (CFA)

According to Hair et al. (2010), for the value of CR, it is only achieved when $CR > 0.7$. For convergence of values, only achieved when:

- (1) The load factor of the variables must be greater than 0.5;
- (2) CR must be greater than 0.7;
- (3) AVE greater than 0.5.

For value discrimination, this value is considered discriminatory when the squared AVE of any factor must be greater than the correlation between them and the other factors (Hair et al., 2010). In addition, it is necessary to check the suitability of the model through the following criteria:

The ratio Chi-Square/degrees of freedom (χ^2/df) or CMIN/df: Hair et al (1998) suggest $1 < \chi^2/df < 3$. While, other researchers suggest χ^2 as small as better (Segar, Grover, 1993) or $\chi^2/df < 3:1$ (Chin and Todd, 1995). In addition, in some practical studies, two cases are distinguished: $\chi^2/df < 5$ (with sample $N > 200$) and $72/df < 3$ (with sample $N < 200$), then the model is considered as good fit (Kettinger and Lee, 1995).

Other test criteria: GFI, CFI, TLI values > 0.9 are considered as a good fit model. When this value is equal to 1, the model is perfect (Segar and Grover, 1993; Chin and Todd, 1995). Hair et al (1998); Taylor, Sharland, Cronin and Bullard (1993) suggest that the RMSEA index < 0.08 model is acceptable.

Test model and hypothesis using SEM

SEM was used to estimate the measurement model and the structural model of this study. The measurement model helps to verify the relationships between latent variables and observed variables. While structural model helps to verify the relationship between latent variables. The method of testing and evaluation in SEM analysis is quite similar to that in CFA analysis.

3.3. Scale building

Table 4: Scale of factors affecting the development of branded real estate

| Factor | Symbol | Observed variables |
|--------------------------|--------|---|
| Position | VT1 | Location is the most important factor of a branded real estate project. |
| | VT2 | Prime location enhances the ability to attract buyers. |
| | VT3 | Location directly affects the visibility of residents. |
| Brand of management unit | TH1 | Brand is a factor that enhances the value of branded real estate. |
| | TH3 | The larger the management brand, the higher the status for the owner. |
| | TH4 | Brand management helps to ensure the long-term value of the product. |
| Service | DV1 | Service quality is guaranteed by the project management brand reputation. |
| | DV2 | Services to help real estate brand different from other projects. |
| | DV4 | Highly personalized service is a prominent feature of branded real estate. |
| Legal | PL1 | Legal is the first factor to be considered in a real estate project. |
| | PL2 | Full legal help to ensure the long-term development of the project. |
| | PL3 | The clearer the legality, the more buyers it attracts. |
| | PL4 | The loosened legal policy helps to expand the number of foreign customers to buy the project. |
| Design | TK1 | The exterior design of each branded real estate project is unique in the world. |
| | TK2 | Branded real estate must be designed with high spiritual value. |
| | TK3 | Convenient interior design determines the growth value over time of branded real estate. |
| | TK4 | Branded real estate is designed to ensure a healthy living space for residents. |
| Profitable value | SL1 | Branded real estate has all the factors to ensure sustainable growth. |
| | SL2 | The scarce quantity helps the project profitability increase sharply over time |
| | SL3 | Branded real estate is considered a safe hoarding asset for yourself. |
| | SL4 | Profitable value from the project increases with the development of infrastructure. |
| Growth potential | PT1 | You believe that branded real estate will thrive in the future in Vietnam. |
| | PT2 | The Vietnamese market has all the elements to develop branded real estate. |
| | PT3 | Branded real estate is considered a good investment channel to hold current assets. |
| | PT4 | The rapid rise of the rich increases the development potential of branded real estate. |

Source: Authors'

3.4. Preliminary research results

Table 5: Summary of results from Cronbach's Alpha scale analysis

| | <i>Factor</i> | <i>Observed variables</i> | <i>Cronbach's Alpha</i> |
|---|------------------------------|---------------------------|-------------------------|
| 1 | Position | 5 | 0,711 |
| 2 | Operational management brand | 5 | 0,770 |
| 3 | Service | 4 | 0,667 |
| 4 | Legality | 4 | 0,739 |
| 5 | Design | 4 | 0,710 |
| 6 | Profitable value | 4 | 0,707 |
| 7 | Growth potential | 4 | 0,873 |

Source: Authors'

Through the preliminary results received after the survey period, it can be seen that the variables and factors selected for the survey are consistent with the set standards. The indicators showing the reliability of Cronbach's Alpha scale all reached the highest level of over 0.6 up to 0.873 and the correlation of the majority variable was greater than 0.3. However, there is an observed variable belonging to the design factor that must be excluded because the total correlation is less than 0.3, these variables need to be removed from the research model and we continue to conduct the official survey.

4. RESEARCH RESULTS AND DISCUSSION

4.1. Descriptive statistics of the studied sample

The total number of questionnaires conducted for the survey was 300 votes, corresponding to more than 300 people and 326 votes were collected, of which 26 were rejected due to unsuitability, the remaining 300 votes accounted for nearly 92%. Through SPSS software we summarize the results obtained and calculate the ratio for each variable to the overall. The research result has been presented as follows:

Sex

The total number of people conducting the survey is 300 people, of which 121 people are male with the rate of 40.3% and 179 people are female, equivalent to 59.7%. Thereby, it can be clearly seen that the number of women participating in the survey is higher than that of men, specifically 58 people (19.33%). However, the amount of this difference is not too large compared to the overall, this difference may be due to the survey source or other factors. In general, both sexes are interested in branded real estate products.

Occupation

From the statistics, it can be seen that the gap between occupations in the survey is not too high, most of the respondents in the survey work in the economic field and other related fields in addition to the fields of study. The mentioned above accounted for over 25%, the remaining group accounted for about 15% on average, lower than the other 2 fields but there was not too much difference in percentage. The economic related group accounted for 80 people (26.7%), real estate business 51 people (17%), investors accounted for 43 people (14.3%), banking industry 47 people (15.7%), the rest from other industries accounted for 79 (26.3%). This ratio is relative and evenly distributed across sectors, making the survey more accurate.

Knowledge of branded real estate

It can be seen that most of the survey participants had a vest interest or thorough understanding of branded real estate. The number of people who do not have real estate or are not interested accounted for a very low percentage of 8% of the total, the remaining 92% was the percentage of people who really understood and cared about real estate investment. There is a huge difference, it helps us to see clearly that people now have awareness and learn about branded real estate as well as the factors affecting its development.

4.2 Evaluation of the reliability of the CRONBACH ALPHA scale

Position

From the results of Cronbach's Alpha scale for the position factor including 3 variables (VT1, VT2, VT3), it can be seen that the reliability coefficient of this factor reaches $0.848 > 0.6$. At the same time, the variables of this factor also have the correlation coefficient of the total variable above 0.3 level. In addition, the coefficients of these variables, if removed, do not make the Cronbach's Alpha scale higher than the original level. Therefore, all 3 variables belonging to the position factor are accepted and used in the next analysis.

Management brand

The second factor that is analyzed is the brand of operation management or brand (TH) for short. This brand factor includes 3 main variables, TH1, TH2, TH3, and all three of these variables have correlation coefficients > 0.3 . In addition, the reliability coefficient of the brand factor also reached $0.850 > 0.6$ - satisfying the set requirements. However, if we consider removing the variable TH1, the reliability coefficient of the brand and operation management factor will increase by 0.01, specifically to 0.860, but because the

correlation coefficient of the TH1 variable is already greater than 0.3 Therefore, all three brand variables will continue to be kept unchanged for use in the next analysis and research.

Service

After analyzing the service factor, the results obtained from the reliability coefficient of the service factor reached $0.819 > 0.6$, which is within the required good measure. This service factor with 3 variables (DV1, DV2, DV3) all 3 satisfy the requirement of correlation coefficient of each variable > 0.3 . At the same time, if the variables of this service factor are removed, the total reliability coefficient of the service does not show signs of increasing higher than the old value, but on the contrary, it will decrease, so this is accepted and will be used for further analysis.

Legality

Legality is the next factor to be analyzed for reliability from Cronbach's Alpha scale. The legal factor has a confidence coefficient of $0.899 > 0.6$ - a pretty good measure for one factor. The variables belonging to this factor including PL1, PL2, PL3, PL4 all have correlation coefficients > 0.3 and if removing one of these four variables does not make the reliability coefficient higher. In summary, this factor has satisfied the requirements and all 4 variables of the factor will also be kept for later analysis.

Design

Design is the 5th factor to conduct reliability analysis of Cronbach's Alpha. The design factor includes 4 observed variables (TK1, TK2, TK3, TK4), the reliability coefficient of the design is $0.871 > 0.6$ and the variables of this factor also have a correlation coefficient > 0.3 . Both the requirements of the factor and the subject variable are satisfied, along with that, removing the variable of this factor does not increase the reliability coefficient and the variables satisfy the condition > 0.3 . Therefore, the above variables and factors will be kept unchanged and used for the next analysis.

Profitable value

Based on the results of the scale of the profitability factor, it can be seen that the Cronbach's Alpha reliability coefficient of this factor is $0.801 > 0.6$, satisfying the requirements. All four variables of the profitability factor (SL1, SL2, SL3, SL4) have correlation coefficients > 0.3 , meeting the requirements. In addition, if we remove 1 of the above 4 variables, the reliability coefficient will not increase. Therefore, we will keep 4 variables of this profitability factor and use it for the next section.

Growth potential

The last factor mentioned and the reliability analysis conducted through Cronbach's Alpha scale is a potential factor for development. This factor has a reliability coefficient of $0.810 > 0.6$ and variables from PT1 to PT4 all have correlation coefficients > 0.3 . Particularly, if the PT1 variable is removed, the reliability coefficient will increase to 0.818, but because this variable has a correlation coefficient > 0.3 , it will still be kept for further analysis.

4.3. Exploratory factor analysis EFA

According to Hair et al. (1998), when analyzing EFA, it is necessary to meet the following criteria:

- KMO coefficient (Kaiser - Meyer - Olkin) must be $0.5 < KMO < 1$.
- Bartlett's test (Bartlett's test of sphericity) shows that the observed variable has a correlation that must satisfy $Sig \leq 0.05$.
- Factor Loading indicates the correlation relationship between the observed variable and the factor. The minimum condition to receive the variable (Factor loading ≥ 0.3), has good statistical significance (Factor loading ≥ 0.5), has very good statistical significance when (Factor loading ≥ 0.7).
- Total Variance Explained 50%
- The new Eigenvalue ≥ 1 is kept in the analytical model.

Table 6: KMO and Bartlett test results for all variables

| KMO and Bartlett's Test | | |
|-------------------------------|--------------------|----------|
| KMO coefficient | | 0.832 |
| Bartlett's Test of Sphericity | Chi squared approx | 3779.214 |
| | Df | 300 |
| | Sig. | 0.000 |

KMO value = 0.832, this value satisfies the requirement of $0.5 \leq KMO \leq 1$, so factor analysis is appropriate. Bartlett's test has $Sig = 0.000 \leq 0.05$, showing that observed variables are correlated with each other in the factor. Factor Loading coefficients are all in the range > 0.5 , some variables > 0.7 show very well the correlation relationship between observed variables and factors. In addition, the EFA also showed that the total variance extracted from the study was 72.37% (greater than 50%) - satisfying the requirements. After analyzing starting with 7 factors and 25 observed variables, this research model retains the above 7 factors and at the same time the observed variables do not change with Eigenvalue = 1,111. prove one thing that at the breakpoint of 1,111, a total of 7 factors are selected to condense 72.37% of the data's variability and lose 27.63% of the observed variables' stagnation.

Table 7: EFA analysis results of independent and dependent variables

| Factor | Observed variable | Component | | | | | | |
|-------------------------|-------------------|-----------|-------|-------|-------|-------|-------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Legality | PL02 | 0.893 | | | | | | |
| | PL03 | 0.882 | | | | | | |
| | PL04 | 0.763 | | | | | | |
| | PL01 | 0.728 | | | | | | |
| Design | TK04 | | 0.907 | | | | | |
| | TK03 | | 0.852 | | | | | |
| | TK02 | | 0.723 | | | | | |
| | TK01 | | 0.685 | | | | | |
| Growth potential | PT03 | | | 0.833 | | | | |
| | PT04 | | | 0.758 | | | | |
| | PT02 | | | 0.721 | | | | |
| | PT01 | | | 0.586 | | | | |
| Profitable value | SL02 | | | | 0.809 | | | |
| | SL01 | | | | 0.706 | | | |
| | SL04 | | | | 0.674 | | | |
| | SL03 | | | | 0.653 | | | |
| Position | VT01 | | | | | 0.834 | | |
| | VT03 | | | | | 0.793 | | |
| | VT02 | | | | | 0.767 | | |
| Brand | TH02 | | | | | | 0.912 | |
| | TH03 | | | | | | 0.837 | |
| | TH01 | | | | | | 0.607 | |
| Service | DV01 | | | | | | | 0.886 |
| | DV03 | | | | | | | 0.728 |
| | DV02 | | | | | | | 0.717 |

Source: Authors' calculation

When completing the EFA, the results obtained from the rotation matrix show that, a total of 25 observed variables with 7 factors, all observed variables have factor loading coefficients greater than 0.5 and some factors greater than 0.7, no negative variables. From there, it can be confirmed that observed variables ensure convergent and discriminant values with 7 factors and 25 variables.

4.4. Confirmatory factor analysis (CFA)

Table 8: Modified research model

| | | |
|----------------------|----|------------------|
| Independent variable | VT | Position |
| | TH | Management brand |
| | DV | Service |
| | PL | Legality |
| | TK | Design |
| Dependent variable | SL | Profitable value |
| | PT | Growth potential |

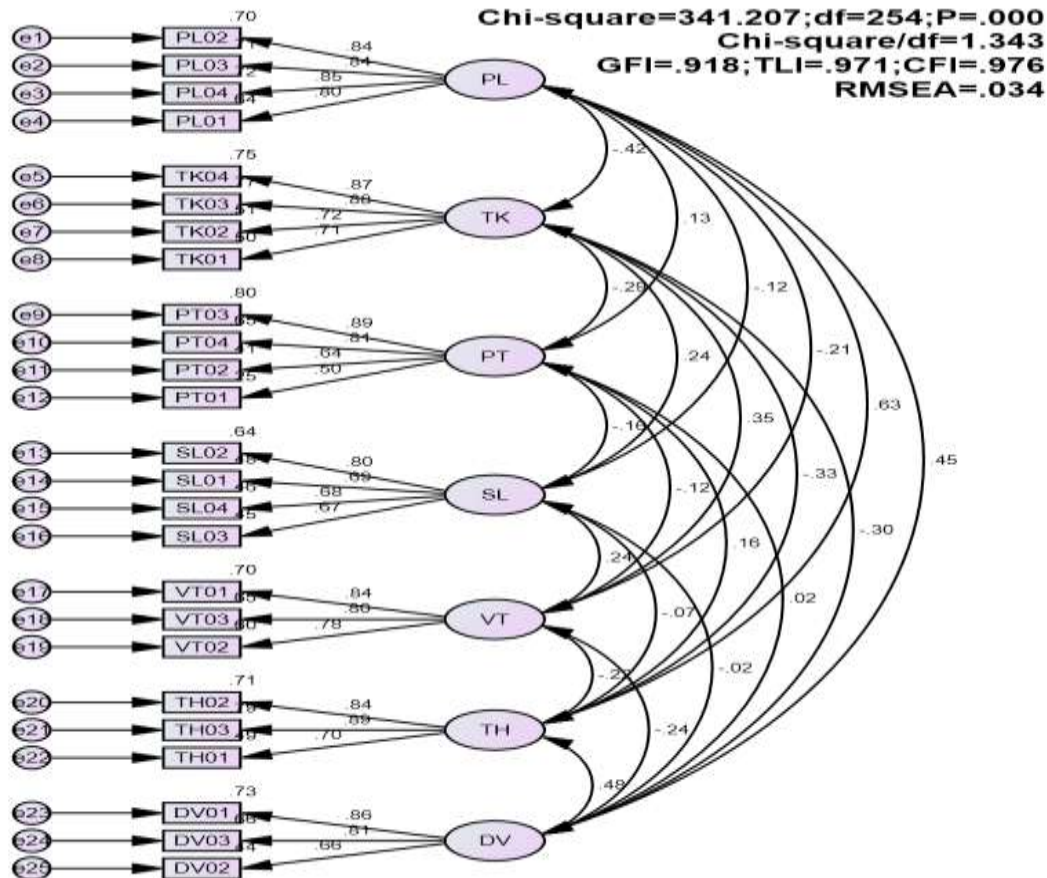


Illustration 2: CFA results

Model fit in CFA

- $CMIN/df = 1.343 \leq 3$ is good.
- $CFI = 0.976 \geq 0.95$ is very good (CFA ranges from 0 to 1).
- $GFI = 0.918 \geq 0.9$ is good.
- $TLI = 0.971 \geq 0.9$ is good.
- $RMSEA = 0.034 \leq 0.06$ is good.

It can be seen that all the obtained indexes satisfy the conditions, proving that the Model Fit model is suitable for CFA (Loc, 2020).

Quality of observed variables in CFA

The value of interest when checking the quality of the observed variable is P, this value represents whether the observed variable exhibits the properties of the latent variable. For the research model to be considered significant, $P < 0.05$ (***) means $P = 0.000$). The above study has results with all observed variables as $P = *** = 0.000 < 0.05$, so the observed variables in the article are significant in this model. From the results in the study above, most of the observed variables have Standardized regression weight > 0.5 , some variables even have a value > 0.7 . Such variables are retained observations and have a high model fit. However, the variable PT01 has a value of $0.497 < 0.5$ which does not satisfy the set conditions. Therefore, it is necessary to remove this variable and run the research model again.

Reliability, Convergence, Discrimination

According to Hair et al (2010), the threshold for evaluating the above indicators is as follows:

- Overall reliability: $CR \geq 0.7$.
- Convergence value: $AVE \geq 0.5$.
- Discriminant value: $MSV < AVE$; $SQRTAVE > \text{Inter - Construct Correlations}$

After completing the calculation of the indicators, the obtained results will be compared with the conditions of each factor of analysis, specifically as follows:

- General reliability: based on the above diagram, it can be seen that all CR coefficients of the analyzed factors are at ≥ 0.7 . Therefore, the overall reliability of the above scale has been ensured to meet the requirements

- Convergence value: through the diagram, it can be seen that all values of the analyzed factors have $AVE \geq 0.5$. Therefore, the convergence is also guaranteed, without any factors or observed variables being excluded, the convergence of the research model is guaranteed.

- Discriminant value: from the analyzes performed, a comparison of related indexes is conducted in which to ensure the discriminant validity requires two requirements: all values of $MSV < AVE$; $SQRTAVE$ values must be greater than all Inter-Construct Correlations, then the discriminant is guaranteed to meet the requirements.

4.5. Test hypothesis using SEM model

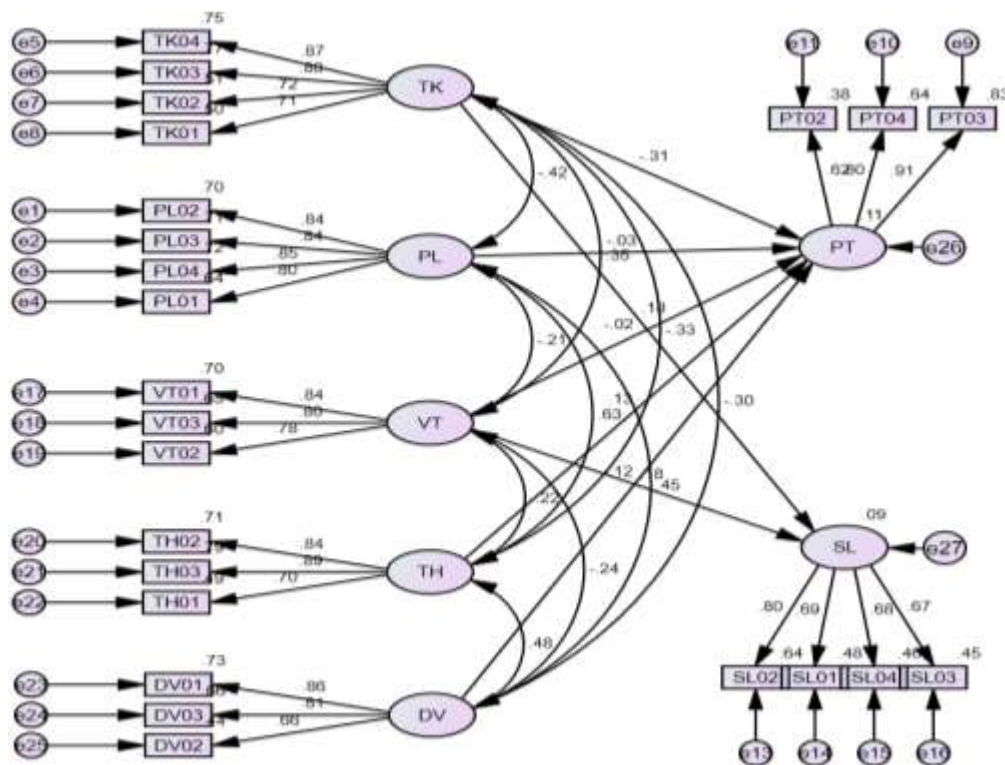


Illustration 3: SEM model

4.6. Research results interpretation

Design has a direct impact on growth potential

The hypothesis that design has a direct impact on development potential is accepted with an impact level of 0.000. With this hypothesis, there is an impact on the development potential of branded real estate, this impact is shown by the Estimate coefficient with a value of -0.318. The chosen hypothesis goes against the relationship that the study posits. The design of the whole project is considered to have a negative impact on the development potential, which may stem from the reason that the design of the survey subjects is not too important. For them, other quality factors will contribute to promoting the development of branded real estate than design. Therefore, it is also possible to consult this opinion to limit the design factor for the development of branded real estate.

Design has a direct impact on profitability

For the next hypothesis, $P = 0.012 < 0.05$ is satisfactory, this hypothesis is accepted. Contrary to the above hypothesis, design is considered to have a direct impact on profitability. With the Estimate value set at 0.142, this hypothesis is consistent with the relationship that the research topic has given in the above section. Design is considered to have a direct impact on the profitability of a branded real estate project. This impact is considered significant because each design for a branded real estate project is unique, has historical and symbolic value and has lasting value over time. In addition, the interior design also contributes to the prominence for the owners of these products. Therefore, design is considered to have a direct impact on the ability to increase the profitability of branded real estate.

Location has a direct impact on profitability

Position is the next factor to be hypothesized, position directly affects profitability value is accepted with $P = 0.017 < 0.05$ to meet the set limit. This theory is appreciated by the importance of location to any project. Location has a positive impact on the profitability of a project, which is clearly shown by the Estimate coefficient with a value of 0.208. As mentioned above, for any project, the location is an important factor that is of top concern, so the profitability value is no exception. The central location combined with the vision and other factors contribute to improving the profitability of a branded real estate project. Therefore, the location factor is considered to have an impact on the profitability of a project over time.

Location has a direct impact on growth potential

For the next hypothesis, location directly affects the development potential of branded real estate. The same hypothesis also has high expectations in the research due to the influence of the location factor. However, the location affects the development potential with $P = 0.769 > 0.05$, so this hypothesis is not accepted. In fact, whether location has an impact on the growth potential of a project depends on many other factors. Although expected high, but with this study, the above hypothesis is not appropriate. It is possible that for the location factor to affect the development potential, it also needs the support of other factors. Therefore, for this study, the above hypothesis has not been accepted

Legality impacts directly on development potential

Similar to the above, the legal hypothesis that directly affects the development potential is also not accepted because the requirements are not satisfied. This hypothesis has a P value of 0.759 which is far above the 5% level. This hypothesis is rejected because the legitimacy of a project largely affects trust and credibility. Therefore, the legal impact on the development potential is very low, so this hypothesis is not accepted.

Management brand has a direct impact on growth potential

Operational management brand has a direct impact on growth potential is the next hypothesis mentioned. This hypothesis has $P = 0.147 > 0.05$, so continue to reject this hypothesis. Brand is considered as a differentiating factor for branded real estate, so its impact on branded real estate exists. However, in this part of the study the impact of brand on growth potential was not accepted.

Services directly impact development potential

The last hypothesis mentioned is that service has a direct impact on development potential, the value of $P = 0.125 > 0.05$, so this hypothesis is not accepted. The explanation for this problem may be that the service factor is not large enough to affect the development potential of branded real estate. The service depends on the operating management brand, so its impact is not large enough to form a hypothesis.

5. IMPLICATIONS AND RECOMMENDATIONS

5.1. Overall of achieved results

From the studies, statistics are obtained after selecting 7 factors with 25 related observed variables. The next step is to conduct survey and analysis by the following scales: reliability assessment Cronbach's Alpha, exploratory factor analysis EFA, confirmatory factor analysis CFA, hypothesis testing by SEM model through 2 software SPSS 20 and AMOS 20 to test the relevance and accuracy of the proposed observed factors and variables. Each scale used will give results on factors and variables in the following order:

Reliability assessment results Cronbach's Alpha all factors and observed variables are guaranteed to meet or exceed the set indicators as required. This result initially proves that the factors are reliable in the requirements, ensuring the accuracy of the research topic. Therefore, all the variables and factors selected above are kept and used for the EFA exploratory factor analysis.

The results of factor analysis exploratory factor EFA of 7 factors and 25 variables also ensure to meet the proposed indicators. In which, the total variance extracted of the study is 72.37% ($> 50\%$) and the Eigenvalue = 1.111 This proves one thing that at the breakpoint coefficient of 1.111, a total of 7 factors are selected. 72.37% of the variability of the data was captured and 27.63% was lost. After completing the EFA exploratory factor analysis, this research model still retains the above 7 factors and at the same time the observed variables at first do not change.

The results of CFA confirmatory factor analysis were performed through a total of 3 steps to determine if any observed factors or variables were excluded. Model Fit model fit ensures good and very good satisfaction indicators, and has a good fit in CFA confirmatory factor analysis. The quality of observed variables is determined through P, most of the variables reach < 0.05 or more, especially with the PT01 variable value < 0.5 which does not satisfy the condition, it should be removed and rerun the research model. The reliability, convergence, and discriminability of the factors after re-running the model all ensure all three factors above, so continue the analysis to the next section.

Results of hypothesis testing by SEM model: Through the above analysis, three hypotheses were obtained, including: Design has a direct impact on development potential; Design directly impacts profitability; Location has a direct impact on return value. These are the hypothesis that meets the given requirements. The remaining proposed hypotheses are not accepted due to unsatisfactory $P < 0.05$, so those hypotheses must be discontinued.

5.2. Management implications

Location factor

The location factor is one of the seven factors selected to have a direct influence on the development of braded real estate market. As for the location factor playing a key role in any project, brand real estate is no exception, this factor also receives more attention than any other factor. The location determines the vision and future value of the real estate, living environment, utilities. Therefore, when choosing a project location, it is advisable to understand the construction area and the surrounding living environment, ensuring that high brand is followed throughout the process. At the same time, it is necessary to choose a location with an open view to a river or a park. These are a few necessary criteria to ensure that the product is truly a branded real estate product. In addition, the location where the branded real estate is located must be a place with unique and unique value and capable of generating high

and sustainable profits in the long run. These are some factors to consider when choosing a location to build branded real estate project in any country, in addition to the typical proposals above, there are many other issues that need to be taken care of. Therefore, it is necessary to have an accurate view, plan and clear choice when deciding on the construction of branded real estate because it directly affects the development of this type of project.

Design element

Finally, the design factor affecting the development of branded real estate project. Design affects both the outside and the inside of the project, so it directly affects the project's identity compared to other projects. At the same time, design plays a role in ensuring comfort and convenience for residents. They are benefits that create the development of branded real estate in the world market. The exterior design of the branded real estate needs to be unique, iconic, symbolizing an area. In addition to the unique appearance, the design also needs to ensure a cool and fresh space for residents to avoid stuffy and uncomfortable feeling. The design inside the project and the apartment also needs to have convenience, optimize the area, create a high end and comfortable living space for residents. As a product that affirms personal ego, class, position, with the rapid development of the economy and the number of rich people, this is the most suitable opportunity to promote the development of branded real estate market, projects and products.

5.3. Limitations and ways to overcome

Limitations

- The field of branded real estate is still quite new, so the number of surveyors who understand it deeply and make the most accurate judgment is limited.
- Domestic research models are still limited, most of the research is from abroad, so it is limited in factor selection analysis.
- The factors selected for research are the most typical, there will be other factors that have not been exploited.

Solutions to overcome limitations

- Expanding the survey audience is those who have a deep understanding of branded real estate, conduct surveys in person or online.
- The number of studies is limited because this is a new type. Therefore, this study will also contribute to increase the number of documents and be a premise for further investigations.
- Expand the scope of research to find out more deeply, discover other factors that also have an impact on the development of branded real estate market.

References:

1. Anh, T. (2009) "What are the factors that make luxury goods expensive" [online], VnExpress, accessed December 9, 2021, from <<https://vnexpress.net/hang-hieu-dat-vi-nhung-yeu-to-nao-2698548.html>>
2. Anh, D. B. H. (2021). Opportunities and challenges for real estate brokers in post Covid-19 period. *International Journal of Multidisciplinary Research and Growth Evaluation*, 1(5), 81-87.
3. Anh, D.B.H. (2019). Corporate Financial Performance due to Sustainable Development in Vietnam. *Corporate Social Responsibility and Environmental Management*, 27(2), 694-705.
4. Anh, D.B.H. (2018). Gaining Comparative Advantage from CSR Policy Change – Case of International Corporations in Vietnam. *Polish Journal of Management Studies*, 18(1), 403-417.
5. Chien, F. S., Hsu, C. C., Tien, N. H. (2022). The Role of Technology Innovation and Cleaner Energy towards Sustainable Environment in ASEAN Countries: Proposing Policies for Sustainable Development Goals. *Economic Research*.
6. Dana, L. P. (2021). Customer Care and Customer Relationship Maintenance at Gamuda Land Celadon City Real Estate Project in Vietnam. *Turkish Journal of Computer and Mathematics Education*, 12(14), 4905-4915.
7. Diem, D. L. (2021). Development of Tourism in South Central Coastal Provinces of Vietnam, *Journal of Archeology of Egypt/ Egyptology*, 18(8), 1408-1427.
8. Dinh, N. V., Tien, N. H., Ngoc, M. N. (2020). *Real Estate Brokerage Human Resource Training: Current Situation and Proposal to Amend the Training Program for the Issuance of Practicing Certificate*. Proceedings of National Scientific Conference: "Real Estate and Price Valuation Application Oriented Human Resource Training", 45-55, 12.11.2020, University of Finance and Marketing, Ho Chi Minh City.
9. Dung, Q (2021) "Brandes Residences (branded real estate) and the Win-Win-Win formula" [online], Youth Newspaper, accessed December 9, 2021, from <https://thanhvien.vn/branded-residences-bat-dong-san-hang-hieu-va-cong-thuc-win-win-win-post1034860.html>
10. Dung, N.T.H. (2021). Factor Affecting Tourists' Return Intention. A Case of Binh Quoi Village in Ho Chi Minh City, *Journal of Archeology of Egypt/ Egyptology*, 18(9), 493-507.
11. Dung, N.T.H. (2021). Assessing Customer Satisfaction for Can Gio Tourist Destination in Ho Chi Minh City, *Journal of Archeology of Egypt/ Egyptology*, 18(9), 249-268.

12. Feng, Y., Akram, R., Tien, N. H. (2022). The Impact of Corporate Social Responsibility on the Sustainable Financial Performance of Italian Firms: Mediating Role of Firm Reputation. *Economic Research*.
13. Frank, K. (2019) "Branded Residences Report" [online], accessed 12/18/2021, from <<https://content.knightfrank.com/research/1617/documents/en/global-branded-residences-2019-5874.pdf>>
14. Horea (2021) "Project summary: developing Ho Chi Minh City's real estate market in the 2016-2020 period, with a vision to 2025 and a vision to 2030" [online], accessed 15/ December 2021, from http://www.horea.org.vn/media/ftp/23-02-2018_Tom%20tat%20De%20an%20TTBDS.pdf
15. Kamal, M. & Pramanik, S. A. K. (2015) 'Factors Affecting Customers to Buy Apartments in Dhaka City'. Daffodil International University *Journal of Business and Economics*, 9, 37-49.
16. Khue, M. (2021) "What is real estate? How to distinguish real estate from movable property" [online], accessed 09/12/2021, from <https://luatminhkhue.vn/bat-dong-san-la-gi---khai-niem-ve-bat-dong-san--.aspx>
17. Kuc, B. R. (2021). Enhancing Social Responsibility and Sustainability in Real Estate Industry. *Turkish Journal of Computer and Mathematics Education*, 12(14), 4999-5013.
18. Loc, P. (2020) "Assessment of Model Fit model fit in CFA" [online], accessed 12/18/2021, from <https://www.phamlocblog.com/2020/02/do-phu-hop-mo-hinh-model-fit-cfa.html>
19. Minh, H.T.T. (2021), ASEAN and China in Vietnam's International Relations in the Region. *Journal of Archeology of Egypt/Egyptology*, 18(8), 2661-2680.
20. Minh, H.T.T. (2021), China and USA in Vietnam's International Relations in the Region. *Journal of Archeology of Egypt/Egyptology*, 18(8), 2681-2710.
21. Ngoc, N. M. (2021). Branding Strategy for Gamuda Land Real Estate Developer in Ho Chi Minh City Vietnam. Celadon City Project. *Psychology and Education*, 58(5), 3308-3316.
22. Ngoc, N. M. (2021a). The Impact of Financial Structure on Business Performance of Real Estate Enterprises Listed at Ho Chi Minh City Stock Exchange. *Journal of Archeology of Egypt/Egyptology*, 18(8), 92-119.
23. Ngoc, N. M. (2021b). Professional Risks in Real Estate Valuation in Commercial Banks. *Enterprise of the Future*. 2/2016, 79-90.
24. Ngoc, N. M., Tien, N. H. (2020). *Strategic Risks of Real Estate Businesses in Vietnam*. Proceedings of University Conference on: "New Trends in Global Trade and Practical Reality in Vietnam", p. 8. 25 February 2020, Saigon International University in Ho Chi Minh City.
25. Ping, N. T. S. (2021) 'Factors influencing buying behavior of real estate in Malaysia during covid - 19 pandemic'. *Management & Marketing*, Taylor's University.
26. Rewel J. S. J. (2021). Customer Care and Customer Relationship Maintenance at Gamuda Land Celadon City Real Estate Project in Vietnam. *Turkish Journal of Computer and Mathematics Education*, 12(14), 4905-4915.
27. Savills World Research (2018) "Spotlight: Branded Residences" [online], accessed 10/12/2021, from <<https://pdf.savills.asia/selected-international-research/1809-branded-residences-en.pdf>>
28. Skift (2021) "Examining Accor's Vision for Branded Residences" [online], accessed 12/15/2021, from <<https://skift.com/2021/11/15/examining-accors-vision-for-branded-residences/>>
29. Smartland (2021) "Factors affecting the real estate market need to know" [online], accessed 12/12/2021, from <<https://smartland.vn/cac-yeu-to-anh-huong-den-thi-truong-bds-nha-dau-tu-can-biet/>>
30. Think, T. (2021) "Covid - 19 and the test for luxury real estate" [online], Dan Tri Newspaper, accessed 12/12/2021, from <https://dantri.com.vn/bat-dong-san/covid19-va-phep-thu-cho-bat-dong-san-hang-hieu-20211222063615924.htm>
31. Thuan, T. T. H. (2019). Analysis of Strategic Risk of Domestic and Foreign Real Estate Enterprises Operating in Vietnam's Market. *International Journal of Commerce and Management Research*, 5(5), 36-43.
32. Tien, N. H. (2021), Relationship Between Inflation and Economic Growth in Vietnam, *Turkish Journal of Computer and Mathematics Education*, 12(14), 5134-5139.
33. Tien, N. H. (2021a), Development of Human Resource Management Activities in Vietnamese Private Companies, *Turkish Journal of Computer and Mathematics Education*, 12(14), 4391-4410
34. Tien, N. H. (2021b), The Impact of World Market on Ho Chi Minh City Stock Exchange in Context of Covid-19 Pandemic, *Turkish Journal of Computer and Mathematics Education*, 12(14), 4252-4264
35. Tien, N. H. (2021c), Enhancing Staff's Work Motivation in Vietnamese Companies, *Turkish Journal of Computer and Mathematics Education*, 12(14), 4402-4410
36. Tien, N. H. (2021d). *Real estate brokers in Vietnam in post Covid-19 period*. Proceedings of Van Hien University's Scientific Conference "Vietnam's Economy in Post Covid-19 Period". 30 August 2021, Ho Chi Minh City.
37. Trang, T.T.T. (2021), Current Path to Community Based Sustainable Tourism Development of Khanh Hoa Province in Vietnam, *Journal of Archeology of Egypt/ Egyptology*, 18(9), 508-525
38. Tuan, V. (2021) "What factors help luxury real estate conquer the market?" [online], Financial Magazine, accessed 12/12/2021, from <https://tapchitaichinh.vn/thi-truong-tai-chinh/yeu-to-nao-giup-bat-dong-san-hang-hieu-chinh-phuc-thi-truong-342924.html>
39. Vu, N. T. (2019). Determinants of Real Estate Bubble in Vietnam. *International Journal of Research in Finance and Management*, 2(2), 75-80.
40. Wikipedia (2021) "The concept of a brand name" [online], accessed December 9, 2021, from <https://en.wikipedia.org/wiki/H%C3%A0ng_hi%E1%BB%87u>.