ANALYSIS STRATEGY OF BUILDING UTILIZATION OPTIMIZING IN PUBLIC WORKS TRAINING CENTER REGION IV SURABAYA

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ABSTRACT

Public Works Education and Training Center in Region IV of Surabaya is one of work units from education and training center, ministry of public work. It has a role as the organizer of any educational and training as the administrator of non-taxable revenue. Public Works Education and Training Center in Region IV of Surabaya has building which can be used by the internal institute or by the public through the non-taxable revenue fee. However, the property itself is not sufficient compare to the activities held. It caused the utilization of the building is not optimal. The aim of this research is to analyze the strategy of improving the utilization of public work education and training center building area IV Surabaya. The method used in deciding the strategy was by analyzing the internal and external factors through SWOT method. The analysis process of the internal and external factors was done by using the Focus Group Discussion (FGD) method; they were determining the internal and external factors, evaluating them, and developing strategy. The FGD was attended by the internal authorities. By using the Grand Strategy Matrix would be gained the grand strategy of improving the utilization of the building, which then the derivative strategy was analyzed based on the highest score in EFI and EFE matrix. The result is the organization position in the big strategy matrix was in the first quadrant which encourages the aggressive growth. The grand strategies which believed suitable to the organization condition were the market development, market penetration, and product improvement.

Keywords: Public Work Education and Training Center in Region IV of Surabaya, SWOT Strategy, Focus Group Discussion, Grand strategy matrix

I. INTRODUCTION

Public Works Education and Training Center in Region IV of Surabaya is one of nine Public Works Education and Training Center owned by Ministry of Public Works throughout Indonesia. In implementing main duties and function as Insitution executing educational and training activities, Public Works Education and Training Center in Region IV of Surabaya has asset in the form of office building (Muchtaruddin Office Building), school buildings (Rana and Rio Susilo Buildings) and dormitory buildings (Suhodo and Suryono Buildings). Suhodo and Suryono Buildings, used as lodging for training participants, both regular training and training held by outsiders by leasing. It is possible that it can be used by the leasing party outside the activity or from public needing alternative places to stay.

To improve the service and the comfort of the building users, Public Works Training Center in Region IV of Surabaya continuously performs enhancement of its facilities and infrastructures quality. This activity includes renovation/repairment of classrooms, halls, rooms and surrounding environment and facility replacement to make the building users more comfortable, but the activity is performed periodically up to present. The expectation regarding the enhanced service quality beside making the users more comfortable, it also gives positive impact to Non-Tax State Revenue (PNPB) quotation. It needs a strategy so that the building asset can be utilized optimally, one way is by analyzing internal and external factors influencing the continuity of building asset function.

The objective of this study is to obtain a proper strategy in improving the utilization of Public Works Training Center in Region IV of Surabaya.

II. LITERATURE REVIEW

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| STAGE I : THE INPUT STAGE |
|--------------------------|
| **External Factor**      |
| Evaluation (EFE) Matrix  |
| **Competitive Profile**  |
| Matrix (CPM)             |
| **Internal Factor**      |
| Evaluation (EFI) Matrix  |
STAGE 3 : THE DECISION STAGE

Quantitative Strategic Planning Matrix (QSPM)

Figure 1. Framework Analysis Strategy Formulation [2]

There are several stages in the plan of strategy formulation analysis, comprising:

A. Input Stage
In this stage, environment scanning is performed to internal and external factors and competitive situation faced by an organization.

1. Formulation of Internal Factor Evaluation (EFI) Matrix
It is used to evaluate internal factors of an organization related to the strengths and weaknesses owned by the organization which are assumed affecting the success of an organization. Here are the steps of EFI matrix development:
   a. Compiling the strengths and weaknesses of an organization in column (1).
   b. Giving weight to each factor in column (2), starting from 0.0 (highly not significant) up to 1.0 (highly significant). This weight shows the relative importance of those factors for the success of an organization. The total number of weight is 1.00.
   c. Giving rating in column (3) to each factor, starting from 1 (very weak) up to 4 (very strong) based on the organization condition.
   d. Multiplying the quality and rating to achieve the weighting factor (in column 4). The result is in form of weighting score for each factor which varies from 1.0 (very weak) up to 4.0 (very strong).
   e. Totalizing the weighting scores to obtain total scores of organization weighting. This total value shows how a certain company reacts to its external strategic factors.

Table 1. Internal Factor Evaluation Matrix [4]

| Internal Factor | Weight | Rating | Score |
|-----------------|--------|--------|-------|
| Strengths S:    |        |        |       |
| a. Strength 1   | 1      | 2      | 2*1=2 |
| b. Strength 2   | 1      | 2      | 2*1=2 |
| Total Strength  | 2*2=4  |        |       |
| Weaknesses W:   |        |        |       |
| a. Weakness 1   | 1      | 2      | 2*1=2 |
| b. Weakness 2   | 1      | 2      | 2*1=2 |
| Total Weakness  | 2*2=4  |        |       |
| Total           | 2*2=4  |        |       |

2. Formulation of External Factor Evaluation (EFE) Matrix
It is used to evaluate external factors of organization by opportunities and threats considered important to the organization continuity. The steps of EFE matrix evaluation are not much different from the formulation of EFI matrix.

Table 2. External Factor Evaluation Matrix [4]

| Opportunities | Weight of Opportunity 1 | Weight of Opportunity 2 | Rating of Opportunity 1 | Rating of Opportunity 2 | Score |
|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------|
| a. Opportunity 1 | 1                       | 2                       | 1                       | 2                       | 1*2=2 |
| b. Opportunity 2 | 1                       | 2                       | 1                       | 2                       | 1*2=2 |
| Total          | 2                       | 4                       | 2                       | 4                       |       |

B. Matching Stage
Strategy is often defined as matching made by an organization between resources and skills and opportunities and risks created by external factors.

1. SWOT matrix is an analysis predicting Strengths and Weaknesses as internal factors, and Opportunities and Threats as external factors influencing the formulation of the strategy which will be used.

Picture 2. SWOT Matrix [4]

2. SPACE (Strategic Position and Action Evaluation) Matrix
SPACE is 4 quadrants plan showing what kind of strategy which is most aggressive, conservative, defensive, or competitive for a certain organization.

Picture 3. SPACE Matrix [2]

3. Boston Consulting Group (BCG) Matrix
BCG Matrix graphically illustrates the difference between divisions in term of market share relative position and level of industrial growth.

Table 3. Boston Consulting Group (BCG) Matrix

| Competitive Relative Position (Market Share) | Competitive Position |
|--------------------------------------------|----------------------|
| High                                      | STAR                 |
| Low                                       | QUESTION MARK        |
| Cash                                      | DOGS                 |

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4. Internal-Eksternal (IE) Matrix

IE Matrix is used to put a company business unit into a matrix consisting of 9 cells. IE matrix is based on these two following criteria: scores of EFE matrix – this value is plotted on y axis. Meanwhile, score from EFI matrix is plotted on x axis, as illustrated in Figure 5.

5. Grand Strategy Matrix

Based on the scores of analysis result of EFI and EFE matrix obtained, then the organization current position in form of coordinate of point (EFI, EFE) on SWOT quadrant diagram can be illustrated.

C. Decision Stage

The third step is used to evaluate objectively various alternatives produced in matching stage so that it can be implemented

Focus Group Discussion (FGD)

Focus Group Discussion contains three key words: a. Discussion (not interview or conversation); b. Group (not individual); c. Focused (not free). In definition, although it is basically a discussion, FGD differs from interview, meeting, or conversation done by several people. FGD can be simply defined as a discussion done systematically and focussed on a certain issue or problem.

III. MATERIALS AND METHODS

Materials

In this study, two types of data are employed, comprising:

1. Primary Data, that is data collected during research from the results of observation, survey, non-structured direct interview.

2. Secondary Data, that is data obtained through documentation study by examining various writings through relevant literature books, activity report related to asset management and internet media.

   - Organization structure of each stakeholder
   - Relevant policies / regulations in relation to building utilization / management
   - Relevant policies / regulations in relation to estimation and determination of building rental fare
   - Management data of Public Works Training Center in Region IV of Surabaya, in form of:
     - Building manager data
     - Building, room and residence technical data
     - Administration data,
     - Operational and maintenance cost data (electrical, water, management costs)
     - Investment and replacement data
     - Service fare, residential rent, laundry and catering or other services fares if any.

   Internal and external variable components influencing the determination of building utilization strategy

Methods

This study is a descriptive study aiming to collect information regarding status of an existing condition and is not intended to test a certain hypothesis [1]. Descriptive study is employed to elaborate the strategy in improving the utilization of building asset without making comparison and relationship between variables.

Interview is used to obtain physical data, management and rental fare in similar asset used to estimate rental fare based on market price. Interview being employed is non-structured direct interview.

Meanwhile, FGD is used to analyse the strategy which is started at the stage of development of internal and external factors influencing the determination of strategy up to the development of alternative strategy.

Based on the identification result of internal and external environment conditions which are further used in the research of strategy analysis and estimation of fare increase of Public Works Training Center Utilization in Region IV of Surabaya.
| **A.2** Human Resource | Building management. | Access to the building area |
| **A.3** Organizational Resource | Building management organizational structure. | Facilities in good condition. |
| **B** Finance | Source of funding (APBN or PNBP) | Asset information system. |
| **B.1** Funding | Rehabilitation/enhancement/building development | Wifi network. |
| **B.2** Investment | Operating and maintenance costs of the building | Facility with the latest technology (AC, PC, LCD, lamp) |
| **C** Pemasaran | Target consumer. | | |
| **C.1** Analysis of consumers, identifying needs and desires of consumers | The type of room that is often required by consumers. | | |
| **C.2** Analysis of consumers, identifying needs and desires of consumers | Promotional activities. | | |
| **D** Product | Ease of getting information. | | |
| **D.1** Process Capacity | Ease in the booking process. | | |
| **D.2** Process Capacity | Convenience in the payment process. | | |
| **D.3** Quality | The capacity of the number of activities in the first year budget. | | |
| **D.3** Quality | The need for space for training activities. | | |
| **II** Eksternal Factor | Facilities in good condition. | | |
| **E** Economics | Intensity of hygiene. | | |
| **E.1** Rental rates | The tendency will demand the best service. | | |
| **E.1** Rental rates | Growth hotels around the location of assets. | | |
| **F** Social, cultural, demographic, and environment | The need for building | | |
| **F.1** Environmental conditions surrounding assets | Environment and location of assets. | | |
| | Regional security | | |
| | The existence of similar assets | | |

In analysing strategy in this study, SWOT analysis is employed. SWOT analysis is performed by using these following steps:

1. **Variable of Study Determination**
   Variable of study is determined through Focus Group Discussion (FGD). In the way of purposive sampling, FGD participants are the employees of Public Works Training Center in Region IV of Surabaya which are considered influential in making strategic decision and organization management so that the Office Head as the person in charge at the office, Sub-Head of Administration Office as the person in charge in office administration and domesticity manager, Head of Program and Service Section as the person in charge in the field of activity planning and PSPM Officials representing Commitment Making Officials as the financial managers of work unit.

2. **Weighting and rating of strategic factors**
   Scanning to internal and external factors is performed to use Internal Factor Evaluation (EFI) matrix and External Factor Evaluation (EFE) matrix by distributing spreadsheets of weighting and rating to the managers in FGD activity, the steps of analysis are as follows:
   a. Each FGD participant fills the spreadsheet of rating and weighting based on the first result of FGD. Scale of rating and weighting uses likert scale 1 up to 4.
   b. The result of rating and weighting is recapitulated to further be analyzed regarding the magnitude of weight and rating of each internal and external factor.
   c. Recapitulation result of weight and rating on stage “b” is filled in EFI matrix spreadsheet and EFE matrix spreadsheet to obtain internal and external factor scores. The result of this step is the score of total weight for EFI and EFE matrix is obtained.

3. **Determining organization position**
By using Grand Strategy Matrix we can determine the position of organization. Position of organization will be mapped into Grand Strategy Matrix in form of cartesian diagram with the number of EFI scores shows coordinate on “y” axis and the number of EFE scores shows coordinate on “x” axis. By using grand strategy matrix, position of organization is obtained to show which strategy is proper based on its position/quadrant. Here is the division of quadrant of grand strategic matrix, which is:

a. Quadrant 1, will show the strategy supporting aggressive growth policy (growth oriented strategy).

b. Quadrant 2, will show strategy using power to utilize long-term opportunity in the way of market product diversification strategy.

c. Quadrant 3, will show strategy which minimalizes company internal problems so that it can seize better market opportunity.

d. Quadrant 4, an organization facing various internal threats and weaknesses so that the strategy emerging which is to reduce both of them.

4. Strategy Development

Based on Grand Strategy obtained, further is developing Grand Strategy based on organization condition. In the strategy development later will review the main strength and weakness of organization and the biggest opportunity and threat which can influence organization. In this case, the preparation of strategy uses two internal and external factors with the highest score as the reference of strategy determination.

IV. RESULTS AND DISCUSSIONS

FGD process is performed twice. The result of FGD I execution is the discussion of variables which are influential to strategy determination. Of the eight research variables proposed in the study it can be thoroughly accepted by FGD participants, with notation that there are modification and addition of several subvariables as shown in Table 4.

| No | Variable | Before FGD | After FGD |
|----|----------|------------|-----------|
| A. | RVB (Resource Based View) | RVB (Resource Based View) |  |
| B. | Building | Building condition; | The main supporting facility; |
| C. | Human resource | Human resource |  |
| D. | Organizational resource | The principal tasks of organizational |  |
| E. | - | Strategic location; |  |

Table 4. Result of Research Variable Discussion

| D. Product | Product |
|------------|---------|
| Process | The process of booking and payment; |
| Capacity | Capacity and number of rooms; |
| Quality | Quality of facilities and the facilities in good condition; |

| E. | Ekonomics | Ekonomics |
|----|-----------|-----------|
| Tren of low cost rent | Tren of low cost rent |
| Economic growth | Economic growth |

| F. | Social, Cultural, Demographic and Environmental | Social, Cultural, Demographic and Environmental |
|----|-------------------------------------------------|-------------------------------------------------|
| Environmental conditions surrounding assets | Environmental conditions surrounding assets |
| Access to the location of assets | Access to the location of assets |

| G. | Politik, Pemerintahan & Hukum | Politik, Pemerintahan & Hukum |
|----|--------------------------------|--------------------------------|
| Enactment of the Regulation of the Minister of Guidance Restriction Meeting in hotel | Enactment of the Regulation of the Minister of Guidance Restriction Meeting in hotel |

| H. | Technology | Technology |
|----|------------|------------|
| Information system | Development of information systems (website) and social networking media as a media of information and promotion |
| Building inspection have not been done to get a Certificates worthy building functions | Building inspection have not been done to get a Certificates worthy building functions |
| Building inspection have not been done to get a Certificates worthy building functions | Building inspection have not been done to get a Certificates worthy building functions |
| Internet connection | - |
| Technological development of electronic equipment | Technological development of electronic equipment |

To obtain factors of strengths, weaknesses, opportunities, and threats for organization, it needs scanning to internal and external environment of organization first. Furthermore, the process of scanning and data collection regarding organization and
The surrounding environment is performed by means of observation and survey. The results of scanning data analysis in internal and external environment (research variables) with the information obtained from FGD I is used as reference in determining the strengths, weaknesses, opportunities and threats of organization in FGD II. The analysis result is shown in Table 5 and Table 6.

Table 5. Result Internal Factor from FGD II

| No | Internal Factor                                      | Strenght (S) | Weakness (W) |
|----|------------------------------------------------------|--------------|--------------|
| A  | Assets, human dan organizational resources           |              |              |
| A.1| Strategic location;                                  | S            |              |
| A.2| Building condition;                                  |              | W            |
| A.3| The main supporting facility;                        |              | W            |
| A.4| Human resource;                                      | S            |              |
| A.5| The principal tasks of organizational;               |              | W            |
| B  | Finance                                             |              |              |
| B.1| Funding;                                             |              | W            |
| B.2| Financing and investment;                            |              |              |
| C  | Market                                              |              |              |
| C.1| Consumen market;                                     | S            |              |
| C.2| Marketing activities;                                |              | S            |
| D  | Product                                             |              |              |
| D.1| The process of booking and payment;                  | S            |              |
| D.2| Capacity and number of rooms;                        |              | W            |
| D.3| Quality of facilities and the facilities in good condition; | S | | |

Weighting and rating are performed regarding the factors determined in FGD II. Weighting and rating is assessed by FGD participants which are further used as the entry on EFI and EFE Matrix.

Table 6. Result External Factor from FGD II

| No | External Factor                                      | Opportunity (O) | Threat (T) |
|----|------------------------------------------------------|-----------------|------------|
| E  | Economics                                            | O               | T          |
| E1 | Trend of low cost rent                               |                 |            |
| E2 | Economic growth is shown by the growth of hotels     |                 |            |
| F  | Social, Cultural, Demographic and Environmental      | T               |            |
| F1 | Access to the location of assets                     |                 |            |
| F2 | Environmental conditions surrounding assets           | T               |            |
| F3 | The existence of similar assets around the site PU Training Center Region IV Surabaya | T | |
| F4 | The existence of a community center and public facilities | O | |
| F5 | Growth and development of a community or group activities | O | |
| G  | Politics, Government & Law                           |                 |            |
| G1 | Enactment of the Regulation of the Minister of Guidance Restriction Meeting in hotel | O | |
| G2 | As implementing policies that restrict the acceptance of functional PNBp types / kinds of specific consumer | T | |
| G3 | Building inspection have not been done to get a building functions acceptance | T | |

Table 7. EFI Matrix

| No. | Internal Factor                                      | Weight | Rating | Score (5 = 3 x 4) |
|-----|------------------------------------------------------|--------|--------|------------------|
| (1) | (2)                                                  | (3)    | (4)    |                  |
| Strenght | A.1 Strategic location | 0.070 | 1.50 | 0.105 |
|          | A.4 Human resource                                  | 0.098 | 2.25 | 0.220 |
|          | C.1 Consumen market                                 | 0.077 | 2.50 | 0.192 |
|          | C.2 Marketing activities                            | 0.077 | 2.50 | 0.192 |
|          | D.1 The process of booking and payment              | 0.091 | 3.00 | 0.273 |
|          | D.3 Quality of facilities and the facilities in good condition | 0.105 | 3.25 | 0.341 |
|          | Weighted amount                                     | 0.517 | 1.323 |
|          | Weakness amount                                     | 0.483 | -0.939 |
|          | Score amount                                        | 1.000 | 0.385 |

Table 8. EFE Matrix

| No. | External Factor                                      | Weighting | Rating | Score (5 = 3 x 4) |
|-----|------------------------------------------------------|-----------|--------|------------------|
| (1) | (2)                                                  | (3)       | (4)    |                  |
| Opportunity | E.1 Trend of low cost rent                           | 0.106 | 1.75 | 0.186 |
|            | F.4 The existence of a community center and public facilities | 0.064 | 1.50 | 0.096 |
|            | F.5 Growth and development of a community or group activities | 0.078 | 1.50 | 0.117 |
|            | G.1 Enactment of the Regulation of the Minister of Guidance Restriction Meeting in hotel | 0.085 | 2.25 | 0.191 |
By using Grand Strategic Matrix, organization condition can be determined by means of integrating total scores of internal and external factors into the matrix. The total scores of internal factor show y axis, whereas the total scores of external factor show x axis. For the total scores of internal factor is obtained 0.385 and for the total scores of external factor is obtained 0.301. Based on mapping result of coordinate of point is obtained that organization position is located in quadrant I which is quadrant where organization/company has a perfect strategic position. Organization in quadrant I is organization having excess adequate resources to benefit from various external opportunities emerging.

Grand strategy for organization included in quadrant I are market development, market penetration, product development, forward integration, backward integration, horizontal integration and relevant diversification.

To implement the alternative strategy, follow-up is necessary in form of:
1. Increasing electrical data, anticipating electrical use at maximum usage.
2. Increasing clean water supply. To overcome the lack of clean water supply from PDAM then make a cooperation with private party selling clean water from ridge (water tank truck) then store it in reservoir, thus reservoir establishment is needed, it can be in form of either open stock or underground stock. The use of drilling well can be employed to

### Table 9. Developing Alternative Strategy

| Grand Strategy | Alternative Strategies | Basic Decision |
|----------------|------------------------|----------------|
| Market development | Cooperating with civil servants to carry out training activities by providing training devices such as curricula, modules, teaching materials and instructor | According to S6, S5, O4, T5 |
| Market penetration | Contacting previous customers to implement cooperation. There will be a new tariff scheme with the addition of facilities and room services, such as for training activities / meetings will be given training kit / tool kit | According to S2, S6, O5, O4, T5 |
| Product development | Fixing products by renovating on the old components of building (room / classroom / auditorium) in order to fulfill current market demand | According to W1, W2, T4, T6 |
satisfy the field necessity because the groundwater quality in Surabaya is less good.

3. Rehabilitating building by doing renovation on the old components of building such as wall, floor covering, sills-sash % door, renovation of bathroom and architecture parts (interior and exterior). This activity is performed in the same direction with rehabilitating room, classroom and hall conditions to make the appearance more representative.

4. Completing facilities of service in rooms, classrooms, and halls such as bathroom fittings, food/snack, training kit/tool in the classroom/hall.

5. Developing website-based information system used as information and promotion media.

6. Adding one marketer who is also as website manager.

7. If necessary, cooperation scheme with the provision of training activity package, then curriculum, modules and teaching material and instructors are required.

V. CONCLUSIONS
Based on the results of this study the following conclusions are drawn:

1. Organization position of Public Works Training Center based on grand strategy matrix mapping is located on quadrant I which is quadrant where organization/company has a perfect strategic position. Organization having excess adequate resources to benefit from various external opportunities emerged.

2. A proper strategy for Public Works Training Center in enhancing building utilization can be taken from the analysis result of Grand Strategy in term of: Market Development that is performing cooperation with other organizations or parties, market penetration that is by new fare scheme making along with the addition of service and facilities, and product Development by renovating rooms/classrooms/hall to be able to satisfy current demand of market.

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