CHAPTER IV

ARCHITECTURAL DESIGN PROBLEM ANALYSIS

4.1 Problem Analysis

4.4.1 The Problem Within Building Function and Building User

As a form of a business-to-business model in architecture form (property management), Tangerang's Start-Up Centre functions as a flexible rental office for investors, facilitators, and start-ups in the early and middle stages. Apart from its basic function, this Start-up Centre is expected to be a home where the mentors and star-ups meet. The Centre has to unite and facilitates the movement of activities of both mentors and start-ups. Hopes that it can accommodate complex activities, the dimensions of space, and the circulation of building users must be considered so that the building does not seem messy and bulky. On top of that, the atmosphere of the building also needs to be considered, not just as a business model to attract revenues but, has to present a comfortable atmosphere for building users.

Start-ups themselves are known as workers who often do networking and brainstorming. For this reason, spatial planning patterns that can trigger interaction and activity need to be considered.

4.4.2 The Problem Within Building Function and Site

The following shows the site potentials point:

- a) accessible from 4 roads
- b) has a relatively flat topography
- c) the land surface of the site is relatively clean because it is not overgrown with any vegetation, only green grass

The potentials simplify the design process because there aren't any existing ones that have to be thought out. However, the accessibility point causes constraints related to the building demarcation lines of the three road accesses. The following building demarcation procedures will cut the effective land use.

Therefore, the arrangement of outer space needs to be considered to meet the space requirements.

4.4.3 The Problem Within Building Function and The Environment

BSD city developed with a green concept. The area looks greenery by just seeing the layout of the BSD green spaces and surrounding buildings. Apart from that, the biophilic design, which is applied to the start-up centre as the design theme, also has a greenery look but only focuses the garden on indoor spaces. Concern to that, the green concept needs to be added to harmonize the outdoor space with the environment.

4.4.4 The Problem Within Building Function and Design Theme

The work environment is divided into the physical environment and the non-physical environment. The physical environment is everything related to buildings and facilities to support the activities, while the non-physical environment includes work patterns, job content, leadership, relationships with colleagues, promotion systems and career paths, and organizational structure (Wen et al., 2018).

Work environment affects worker satisfaction while worker satisfaction itself affects the spirit at work. Spirit is the keyword to increase productivity and overall performance quality. When feeling discouraged, emotionally, or mentally drained, psychological exhaustion arises and tends to make workers want to leave their jobs. Conversely, when a positive office work environment generates enthusiasm, employees will feel at home, happy, and ultimately affect loyalty and engagement.

Founding the relationship between work environment and psychological quality and productivity, at the start-up centre, Biophilic Design is brought to give the effects of refreshing rest and healing environment for the employee.

4.2 Problem Identification

- 1. The inner spatial arrangement that can trigger interaction and involvement of startups
- 2. Harmonize the outer spatial arrangement and building exterior with surrounding buildings and environment
- 3. Applicate the Biophilic Design Patterns that relevant to the office building.

4.3 Problem Statement

Based on the problem identification above, problems that are stated:

- 1. How to design spatial planning patterns that can accommodate the start-ups' activities?
- 2. How to present outer spatial planning and building façade that aligned with surrounding buildings and environment?
- 3. How to apply the Biophilic Design to improve the health and well-being of employees in the built environment?