

# CHAPTER I INTRODUCTION

## 1.1.The Background

Recently, the development of technology is not only used as a platform for interconnection and educational advancement, but it can also be used to boost and increase the country's income. The birth of the digital economy is one of the impacts of technological development. The digital economy can generate new business ideas in various sectors so that it can create additional jobs and generate revenue growth for the government. Start-up is one of the new business ideas that became popular in this digital era.

In the latter-day, Indonesia is aggressively developing the digital economy ecosystem as well as the start-up ecosystem to growth the economy. The development is carried out because the government, especially our President, Mr. Jokowi Widodo, assesses that Indonesia is in the path of acceleration towards a digital golden era. The opportunity is seen by the number of internet and smartphone users that keep rising. For the number of internet users in 2018, Indonesia was in the top 4 worldwide. In 2019, the penetration of internet users continued to increase, reaching 73.7% of the population. For the number of smartphone users, Indonesia is also in the top 4 worldwide. The data about internet and smartphone users showed that Indonesia has a huge market and has the potential to make a significant leap in digital economic growth to exceed other countries in Southeast Asia.

No.		2013	2014	No.		2018
1.	China	620.7	643.6	1.	China	904.0
2.	US	246.0	252.9	2.	US	718.7
3.	India	167.2	215.6	3.	India	246.3
4.	Brazil	99.2	107.1	4.	Indonesia	171.1
5.	Japan	100.0	102.1	5.	Brazil	150.4
6.	Indonesia	72.8	83.7	6.	Nigeria	136.2
7.	Russia	77.5	82.9	7.	Russia	118.4
8.	Germany	59.5	61.6	8.	Japan	116.5
9.	Mexico	53.1	59.4	9.	Bangladesh	102.1
10.	Nigeria	51.8	57.7	10.	Pakistan	83.1

Users in millions. Sources: eMarketer, Nov 2014

Users in millions. Sources: International Telecommunication Union (ITU), 2018

Table I. 1 Top 10 Countries Ranked By Internet Users

Sources: eMarketer (2014) & ITU (2018)



Figure 1. 1 The Penetration of Internet Users in Indonesia, 2019-2020 (Q2)

Sources: Asosiasi Penyelenggara Jasa Internet Indonesia (APJII)

No.	Country	Population	Smartphone Penetration	Smartphone Users
1.	China	1,439,324,000	63.4%	911,924,000
2.	India	1,380,004,000	31.8%	439,424,000
3.	US	331,003,000	81.6%	270,001,000
4.	Indonesia	273,524,000	58.6%	160,232,000
5.	Brazil	212,559,000	51.4%	109,339,000
6.	Russia	145,934,000	68.5%	99,934,000
7.	Japan	126,476,000	59.9%	75,772,000
8.	Mexico	128,933,000	54.4%	70,139,000
9.	Germany	83,784,000	77.9%	65,236,000
10.	Vietnam	97,339,000	63.1%	61,374,000

Sources: Newzoo's Global Mobile Market Report, 2020

Table I. 2 Top 10 Countries Ranked By Smartphone Users

Sources: Newzoo's Global Mobile Market Report, 2020

Not only have the huge market, but Indonesians are also proven using start-up applications made in Indonesia.

No.	Start-Up	Users in Indonesia
1.	Gojek	29.2
2.	Tokopedia	84.9
3.	Ovo	115
4.	Bukalapak	70
5.	Traveloka	40
6.	Ruangguru	22
7.	Halodoc	18
8.	Dana	45
9.	LinkAja	40
10.	Tiket.com	32

Users in million, Sources: www.cnnindonesia.com

Table I. 3 Several Example of Indonesia's Start-Up Users

Sources: www.cnnindonesia.com

Another potential can also be seen by the daily problems that can be used as start-up business ideas in Indonesia. The start-up ecosystem is then prepared by changing the investing regulations and providing the start-ups with various programs that help start-ups get ready and confident to receive investments.

For the time being, the number of start-ups in Indonesia is in the top 5 worldwide, and Indonesia gets the most active start-up ecosystem in Southeast Asia.

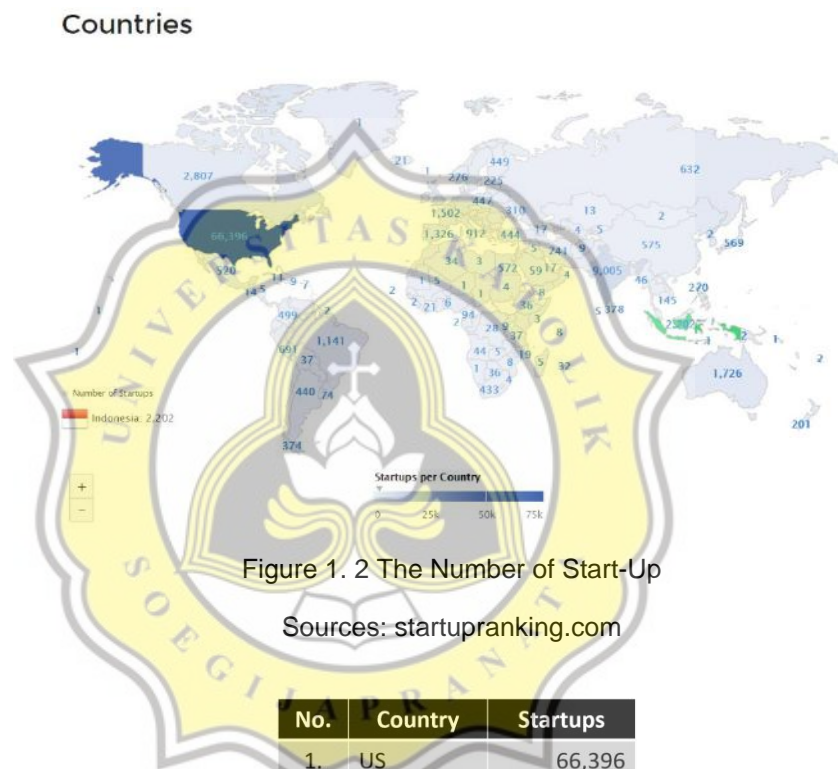


Figure 1. 2 The Number of Start-Up

Sources: startupranking.com

No.	Country	Startups
1.	US	66,396
2.	India	9,005
3.	UK	5,484
4.	Canada	2,807
5.	Indonesia	2,202
6.	Germany	2,166
7.	Australia	1,726
8.	France	1,502
9.	Spain	1,326
10.	Brazil	1,141

Sources: startupranking.com, 2020

Table I. 4 Top 10 Countries Ranked By The Number of Start-Up

Sources: startupranking.com

As more people are joining the game, the number of facilitators is also increasing. The facilitator is a company or organization that facilitate start-ups by providing business support resources. There are many types of start-up's facilitators in Indonesia. Each facilitator has different missions and fields to focus on. Usually, the facilitator's office, event venue, and the start-up's incubation space are placed in a different location. Time wasted on traffic congestion is unavoidable due to the requirement of being nomadic to undertake mentoring program and attend events. Besides, being in a small office filled with people in the same field will reduce the opportunity to do networking activities with people from different fields.

From the background description above, the idea to design a Start-Up Centre came up. The Start-Up Centre is presented as a Business to Business (B2B) model in architecture form, not to facilitate start-ups directly, but to facilitate the start-up's facilitators. The Start-Up Centre sells facilities in terms of property management to start-up's facilitators (business incubators, accelerators, pre-incubator, and competitions and event organizers) and at one time also provides flexible office for investors and facilitators. The Centre is filled with rental incubation offices and spaces to organize competitions in various fields, the net-working program with participants in the same or different fields, mentoring program, and seed funding.

Sued to move fast with a clear and innovative goals, Start-up is known to have a long but flexible working hours. Could be work overtime, Start-up needs to maintain the balance of Product and Product Capability so that they can still have the energy to produce the good quality idea. The P/PC balance is particularly important as it applies to the human assets of an organization, in this case are the employees. The capability in human refers to health system, either physical or mental health. In this Start-up Centre, Biophilic Design is brought to give the effect of refreshing rest and healing environment. With the positive effect of nature that brought in, it helps the employees to recover quickly from mental fatigue and helps to create a comfortable environment to hustle more.

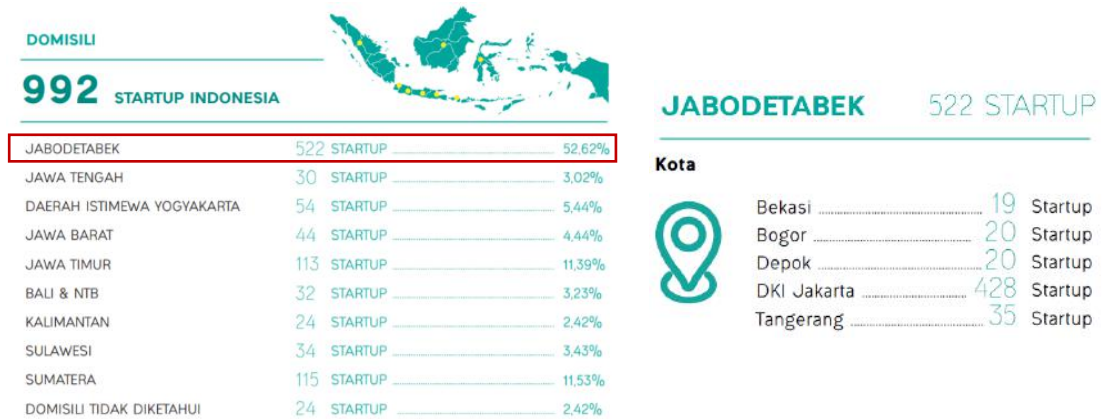


Figure 1. 3 Mapping of Indonesian Digital Startups 2018

Sources: Indonesia Digital Creative Industry Society

According to Indonesia Digital Creative Industry Society's survey in 2018, the JABODETABEK megapolitan area, especially Jakarta, is the place where many start-ups are established compared to other cities. It is no surprise because Jakarta is indeed the capital city and business centre of Indonesia. Following the existing market, the Start-up Centre is going to be built in Jakarta. However, due to congestion and crowdedness, Jakarta is considered unfeasible. Therefore, another area is selected. The Tangerang area is deemed to be more sustainable. With the cooperation between local governments and the private sector, Tangerang's infrastructure development has occurred rapidly. Integrated directly with Jakarta, Tangerang has an ideal space for offices and other business opportunities. Therefore, the Biophilic Start-Up Centre is going to be built in the city or regency of Tangerang.

## 1.2.Problem Statement

Based on the background explanation above, problems that are identified:

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?

### 1.3.The Objective

The goal of the project is to provide a centre that helps start-ups and their facilitators to do their activities practically and to provide an office that has a comfortable atmosphere to improve the health and well-being of employees in the built environment

### 1.4.The Advantage

#### A. For Start-Up's Facilitator

By providing rental incubation offices and spaces for various programs, Biophilic Start-Up Centre hopes that the facilitator will find it easier to organize and carry out activities in one building.

#### B. For Government

For the government, the development of start-ups can generate revenue growth.

#### C. For Society

The development of start-ups can create additional job vacancies and facilitate the society by providing services that solve real-life problems in Indonesia.

### 1.5.Originality

No.	Project Title	The Topic/Design Approaches	Author's Name	The Description
1.	Pusat Pengembangan Startup (Startup Incubator Dan Co-Working Space di Kota Pontianak	Minimalist Architecture	Aulia Maulani	Rental co-working space as start-up's incubation office
2.	Kantor Digital Kreatif Startup	Behavioral Architecture	Timothy, Mieke Choandi	A co-working space facilitated with a restaurant, rental exhibition hall, library and a research centre for start-ups
3.	Tangerang's Biophilic Start-Up Centre	Biophilic Design	Ong, Elisabeth Christella	Rental incubation offices for investors, business facilitators, and incubation participants under them. Facilitated with rental auditorium and multi-function hall for internal

				and external events as well as other supporting facilities (canteen, library, gym, etc.)
--	--	--	--	--

Table I. 5 Originality

Sources: Personal Analysis

