

# CHAPTER I

## INTRODUCTION

This chapter discusses background problems in research, problem formulation, the purpose of writing, problem boundaries, and writing systematics.

### 1.1 Background

The startup is a term that is very familiar to businesses in today's digital era. Startups appeared around 1998-2000 at the start of the global economic crisis. According to Blank and Dorf (2012), building a startup involves conducting several experiments on the market with repeated experiments to find the suitable business model and product that consumers need. Based on the understanding, according to Yevgeniy Brikman (2015), digital startups are a group of individuals who form an organization as a startup company that produces products in the technology field. By utilizing internet technology in an all-digital era, startups must be ready to enter the free market on the internet that can reach all consumers in expanding market share by doing market expansion on a large scale. So it is not uncommon for startups to disrupt large-scale technology from conventional models into digital forms that can be accessed without boundaries of space and distance. This is the basis for startups having targets for massive consumer growth at the beginning of their launch (Fisher, 2015). Initially, a startup was just a business entity for services and products, which were sought after and needed by many people with a small market reach (Kiwe, 2018).

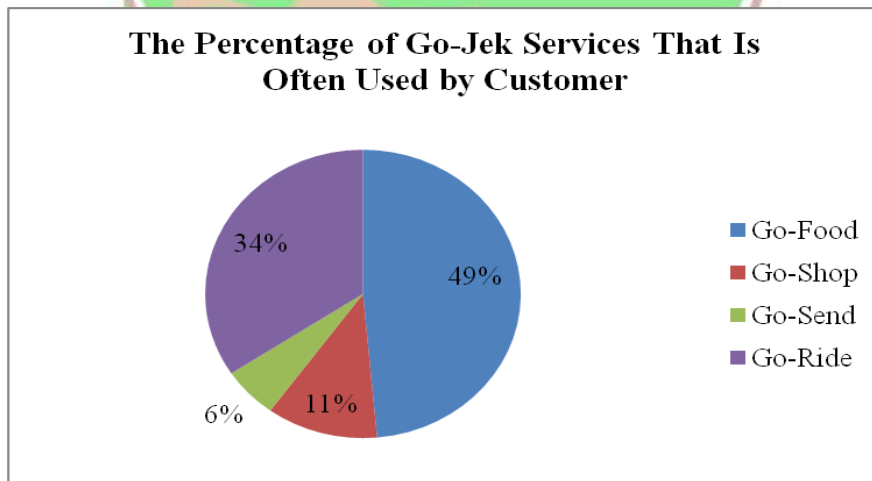
Indonesia is one of the countries that has revitalized the development of digital-based entrepreneurship. Several startup fields are developing in Indonesia, including startups in games, property, trade, insurance, and securities (Glints.com, 2018). Go-Jek is one of the startups engaged in service trading, specifically the on-demand multi-service platform and digital payment technology group. Go-Jek has earned the title of Decacorn, which means that Go-Jek has a valuation value of more than \$ 10 billion (Tirto. id, 2019).

Go-Jek initially provided transportation services. Now Go-Jek has more than 20 benefits ready to be delivered to consumers (Gojek.com, 2020). These services include Go-Glam, Go-Box, Go-Tix, Go-Ride, Go-Food, Go-Car, Go-Send, Go-Med, and Go-Pulsa.

Based on the results of research conducted by a research company from Indonesia, namely Alvara Research Center (2019), it is known that Go-Jek controls three of the five categories of mobile E-Commerce consisting of transportation, food delivery, and payment. This can be seen in the enthusiasm of the Indonesian people for the Go-Jek application, which has been downloaded 155 million times, and there are 100 million transactions that occur on the Go-Jek platform every month (Ekonomi.bisnis.com, 2019); (tekno.kompas.com, 2017) ).

Go-Jek has operated in 167 cities and districts in Indonesia. The number of drivers partnering with Gojek has reached 250,000 people and will continue to grow every month (Gojek.com, 2020). The city of Padang is one of the locations for Go-Jek's operations in West Sumatra. Go-Jek began operating in the city of Padang on April 1, 2017. According to a worker at the Go-Jek office's Padang branch, in September 2020, 6,000 Padang City residents partnered with Go-Jek as drivers.

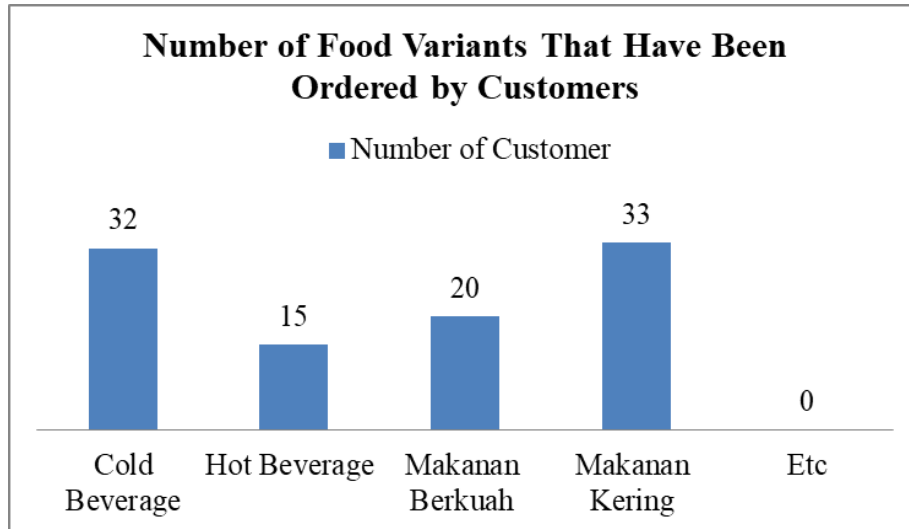
A Go-Jek driver can perform service actions in the form of customer or Go-Ride delivery, package delivery or Go-Send, purchase of goods or Go-Shop, and delivery of food or Go-Food. This service makes it very easy for customers to meet their daily needs, such as ordering food, delivering goods, and buying daily necessities. **Figure 1.1** is a percentage of the features most often used by customers based on a survey conducted on 35 respondents:



**Figure 1.1** The Percentage of Go-Jek Services That Customer Often uses

Based on Figure 1.1, it is known that the percentage of use of Go-Jek service features consisting of Go-Food, Go-Shop, Go-Send, and Go-Ride is 49%, 11%, 6%, and 34%. This data shows that the feature that is often used is Go-Food as a food delivery service, followed by Go-Ride, Go-shop, and Go-Send. Based on Figure 1.1, it can be concluded that the Go-Jek application with the feature food delivery feature is the most widely used by Go-Jek

customers. Furthermore, a survey was conducted to find out the types of food that Go-Jek customers often order. **Figure 1.2** is a chart that displays data on the types of food that have been ordered based on a survey conducted on 35 respondents:



**Figure 1.2** Number of Food Variants That Have Been Ordered by Customer

Based on **Figure 1.2**, it is known that several types of food are often ordered by customers through the Go-Food service feature of the Go-Jek application. These foods consist of cold drinks, warm drinks, soup foods, and dry foods. Soup food can also be interpreted as food that requires more handling in its delivery. Foods that fall into this category include oily foods, soups, and foods with many water content. In current conditions, motorbike taxi drivers deliver food without using tools in the form of bags or other media. The initial conditions can be seen in **Figure 1.3**.



**Figure 1.3** Current Food Delivery Conditions By Go-Jek Drivers

Based on **Figure 1.3**, it can be seen that the delivery of goods only uses plastic as a storage medium for food to be sent to the customer. This condition causes various difficulties

for drivers in delivering food. These difficulties have been identified through a survey conducted on 35 Go-Jek drivers. **Table 1.1** is a recapitulation of the difficulties experienced by Go-Jek drivers in delivering food:

**Table 1.1** The Obstacles Experienced by The Driver

No.	The Obstacles Experienced by The Driver
1	Food and drink spilled
2	Having difficulty in loading loads
3	Discomfort in driving a vehicle
4	Unable to maintain the temperature of food and drinks during the delivery process

**Table 1.1** shows some of the difficulties experienced by Go-Jek drivers in delivering food and drinks. First, spilt food or drink often occurs in drinks and foods that are fortified. Based on **Figure 1.2**, drinks and food in fruit are frequently ordered items through the Go-Food feature, so that the possibility of spilling drinks and food that occurs is higher. Furthermore, drivers have difficulty storing food and drinks that are brought because there is no proper place to store their luggage. This condition requires drivers to hang food with a plastic bag on a motor hanger. This continues to become another difficulty, namely the discomfort in driving a vehicle. This condition becomes increasingly uncomfortable for drivers when the food is hot. Drivers become unable to concentrate properly and interfere with the duration of food delivery. The next problem that occurs is that its initial conditions cannot maintain the food or drink temperature that is delivered. The conditions shown in **Table 1.1** resulted in a decline in Go-Jek drivers' performance in the process of delivering food and beverages to consumers. Go-Jek consumers who use Go-Food services have also felt this decline in performance. **Table 1.2** are the results of the preliminary survey carried out on 25 Go-Food service users who aim to find out the complaints that consumers have experienced while using Go-Food services:

**Table 1.2** Complaints Experienced by Consumer

No.	Complaints experienced by consumers
1	Food and drink spilled
2	the temperature of food and drinks can't be maintained
3	The duration takes to deliver food and drinks is long

**Table 1.2** shows the complaints experienced by consumers when receiving food and beverages using Go-Food services. The complaints experienced by consumers correlate with the complaints experienced by Go-Jek drivers in carrying out delivery activities.

There are several actors in the food business in the city of Padang. Some of them already have food storage media for food delivery services, but based on interviews conducted with drivers from each of these brands, it was found that there are some disadvantages and advantages of existing products. **Table 1.3** is the comparizon table of the advantages and disadvantages of food storage products for delivery services used in the food industry

**Table 1.3** The Comparison of Existed Delivery Box

No	Product	Advantages	Disadvantages
1		Delivery Box Pizza Hut	
		Large storage capacity	Just accommodate the food
		Simple design	There is no partition for storage
2		Delivery Box McD	
		Easy to carry	The rubber retaining design is not good
		There is a partition in the storage area	The strap for the drink glass cannot be adjusted
3		Delivery Box KFC	
		Luggage can be protected from water and dirt	Unable to maintain the temperature of food and drink
		Large storage capacity	There is no partition for storage

Based on the problems that have been described, it can be concluded that a storage medium for goods in services is needed that is by the needs of the driver. Survey data support this that 34 out of 35 people stated that storage media where needed. Therefore it is necessary to design a food or beverage storage media that can solve the problems experienced by Go-Jek drivers in the process of delivering food or beverages to consumers by using the Quality Function Deployment method.

## 1.2 Problem Formulation

Based on the above background, the problem is the absence of storage media in the process of delivering food or drinks to consumers by Go-Jek drivers, and this has caused problems in the form of spilt food and drinks, having difficulties in loading loads, discomfort

in driving vehicles and being unable to maintain the temperature of food and beverage. Therefore, the problem formulation in this research is how to design food and beverage storage media for Go-Jek drivers so that the design can solve the problems experienced by drivers.

### 1.3 Research Objective

This study aims to design food or beverage storage media that can solve the problems experienced by Go-Jek drivers in carrying out Go-Food services.

### 1.4 Research Scope

Research scope in this research are as follows :

1. The product to be made is a temporary storage area for food delivery with a maximum distance of 25 km
2. The product to be made is a temporary storage place for storing ready-made food and drinks
3. The subjects in this study were Go-Jek drivers in the city of Padang

### 1.5 Outline of Research

The outline of this final project consists of five chapters with the system as follows:

#### CHAPTER I INTRODUCTION

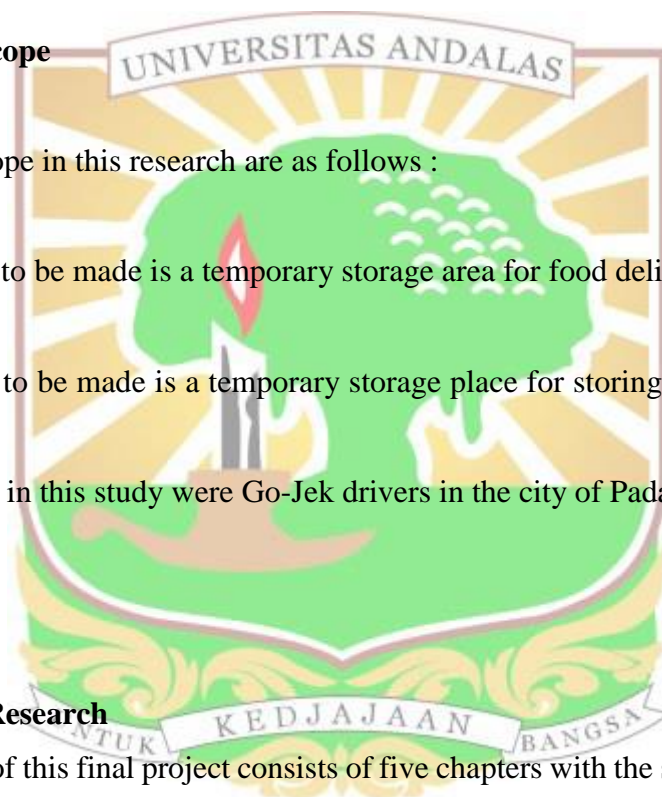
This chapter introducing the subject to be discussed that contains background problem formulation, objectives, scope, and outline of the research.

#### CHAPTER II LITERATURE REVIEW

The literature review provides an overview of all the theoretical of product, product design, Quality Function Deployment, house of quality, sampling method, questionnaire, morphological chart, ergonomic, and anthropometry

#### CHAPTER III RESEARCH METHODOLOGY

This chapter discusses the research methodology that is used in this final



project. Research methodology describes the systematic step to solve the problem of this research, from the beginning until the end of the study.

#### CHAPTER IV PRODUT DEVELOPMENT

This chapter contains the stages in data collection and processing data to achieve the objective of the study

#### CHAPTER V ANALYSIS

This chapter discuss about the result of research that achieve the objectives. The results will be analyses as detailed as needed.

#### CHAPTER VI CLOSING

This chapter contains the conclusion of the research and the recommendation for the next research.

