

CHAPTER I

INTRODUCTION

1.1 Background

Marketing strategy is very crucial in deciding of a company's success. What you do as your marketing strategy may cause your revenue to soar high in the sky, or plummet to the bottom of the ocean. That all depends on what and *how* you do the marketing.

Marketing strategy has a very wide range of type, and all of them have their own advantages and disadvantages. For instance, an ads on a TV may gain a massive number of reach at the same time, but the cost will be far too high for a small company, but text marketing may gain a quite large number of reach (depending on the number list), with a significant cost reduction.

Marketer experts said,

Text advertising is cost efficient and produces the highest rate of return for your advertising dollar. (TXTConnect, 2013)

It might sounds exaggerating, but it's true! With 90% open-rate (TXTConnect, 2013) and low cost per text, text advertising outshines other advertising media, even the once-popular TV and radio advertising.

In Indonesia, text marketing can be used by a few different ways:

- Bulk SMS from a normal phone, or smartphone, without the aid of application
- Bulk SMS from a modem or other device developed for text messaging, with the aid of application (i.e. Kalkun)
- Bulk SMS using a text marketing provider

The 2nd option is interesting, because of the low cost nature compared to the 3rd option, which obviously will be more expensive, but also the hassle-free sending message when texting to many numbers at once, compared to 1st option which force the sender to input a long list of numbers, manually.

The catch is, 2nd option can only utilize one number from an operator, while in Indonesia there are a lot of mobile phone operators, and with the difference of cost when texting to the same operator and different operator,

choosing the best and cost-efficient among all of them can be a quite challenging task.

Optimizer (or Cost Optimizer for SMS Bulk) calculates the most cost-efficient operator to use in each unique list of numbers, quickly allowing you to decide what's the best operator to use, with an improved data structure known as FastLinkedList (S.Adamchik, 2009).

1.2 Scope

This Optimizer application is written in Java language as a desktop application. It accepts input from files, but can also generate random numbers, prefixes, and costs when needed. After the process, it will show the output as a table of comparison between different operators, showing the total cost needed if we choose a specific operator as the sender number, and a string output of the operator with the least cost.

1.3 Objective

To provide the best recommendation of sender operator to use in a Bulk SMS (SMS Blast) using a Java application.

