

**Universiti Teknologi MARA**

**Locality-Based Advertising Using  
Geofencing**

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## **ABSTRACT**

Advertising is just one of the marketing activities being done by either a business owner themselves or any other paid-third party advertising agent to publicize the business operations or product to either a general audience or any specifically targeted audience, depending on the product or service functionality and significance. Over the years, the advertising industry have grown on a fast pace, yet is still implementing the traditional advertising methods. In this project, a locality-based advertising mobile application that implements the geofencing technique has been developed, simply to provide an alternative for business owners to market their business. The methodology that is being used consist of requirement gathering and analysis, design, prototype development, test and evaluation. The prototype focused on the ability of an Android native mobile application to detect its user's current location and later checks if it is within a Geofence area, the detection of registered client (business owner) available within the geofence area will then trigger advertisements to be displayed. This project implements the technique Geofencing to achieve locality-based advertising activity. The expected result from conducting several tests to the prototype is to have advertisements available within a Geofenced area to be displayed to the user and to have changes of advertisement display when user moves from one location to another. This project can be further developed in the future by implementing personalization of advertisement display. The system is expected to be launched in smartphones making it a platform of advertising without arising irritations from user, as it will not interrupt with user's activity. Besides, it will also help users in discovering service or product businesses that is available within a physical area.

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# CHAPTER 1

## INTRODUCTION

This chapter provides the background of study of this project, its objective, scope, the significance it brings as well as the rationale for the study. It also discussed in detail the significance of customised advertising, the issues related to it and the problems that led to this research.

### 1.1 Background of Study

Generally, advertising is a form of paid action performed by businesses or services owner exist throughout the world to convey their operations availability to whoever they might have targeted at first (Bullmore. J. (n.d). Retrieved on September 25, 2018, from Advertising Association Official website: <https://www.adassoc.org.uk/>). Quoting Kathleen Micken, the assistant professor of marketing for the Gabelli School of Business at Roger Williams University, “Marketing might be defined as everything an organization does to facilitate an exchange between itself and its customer or client. Advertising is just one of many marketing activities”. Marketing in general is a very crucial activity in sustaining a whole business, however this project studies specifically the course of locality-based advertising and how Geofencing is capable to perform the actions. Now, imagine having a business without any sorts of marketing activity being done. Who could’ve known the business you’re running? How would your business even grow?

There are many ways of performing advertising. One of the specific ways are by customising your advertisement to suits the desire of the targeted audience. Usually, before we are able to conduct that, we would need to learn and study