# A FEASIBILITY STUDY ON THE IMPLEMENTATION OF BIOMETRIC DEVICE (FINGERPRINT) IN ATTENDANCE TRACKING FOR UITM STUDENTS

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## ABSTRACT

The use of biometrics in accordance with tracking attendance in secondary educational environment is a very controversial issue. In this research, biometric devices relating to the use of tracking attendance and addressing issues and concern that educational institutions face in deciding whether or not this biometrics is implemented in attendance tracking for UiTM students. Biometrics Fingerprint device is a popular technique for determination of attendance no matter whether in the working place or for students attendance. Many companies and a few IPT in Malaysian have using it are as a part of daily transaction. With using this biometrics Fingerprint device, we can make attendance tracking easier than traditional attendance tracking. A Fingerprint is an imprint made by the pattern of skin on the pad of a human finger. These ridges are commonly believed to provide traction for grasping objects. No two humans, not even identical twins, have ever been found to have identical fingerprints. Fingerprints are widely believed to be unique. Also, fingerprints do not change significantly with age. Because of these characteristics, a person's fingerprint can be used as a method to identify human individuals. Biometrics is the ability to automatically recognize a person using distinguishing traits such as fingerprints, face, retina, or iris from the eye, voice, or hand geometry. Each of these methods of recognition has advantages and disadvantages. Attributes such as cost, size, and reliability, operating environment, speed and accuracy help determine the suitability for different applications. Without examining each of these biometric recognition methods in detail, a case can be made that fingerprint recognition has the broadest applicability foe most systems and is the best place to begin a search for an appropriate biometric. So Biometric Fingerprint is suitable device to use for attendance tracking for UiTM students because it is electronic record that saves the attendance automatically when we put the finger at that devices. The main objective of this study is to determine the necessity of Biometric Fingerprint devices for attendance tracking of UiTM student. On this research, the approach will be through quantitative research by distributing questionnaire and interview sessions among 150 lecturers from various faculties in UiTM Shah Alam to get primary data. I also hope that this research will throw light on what information they know about it. This thesis also provides several recommendations and suggestion in order to get the best way to implement the biometric fingerprint device in attendance tracking fot UiTM students.

# CHAPTER ONE

# INTRODUCTION

## 1.0 Background of the Research

Biometrics or biometric technology is a word for identifying a human identity by using a unique physical or behavioral characteristic. Fingerprints, facial recognition and iris scans are some of the biometrics commonly found in biometrics applications.

There are two types of functional purposes of biometrics, one-to-one match or verification and one-to-many match or identification. To verify that an individual's identity documents are being presented by the legitimate bearer and to identify or confirm the claimed identity of an individual by searching an existing database of biometric records for a match.

This biometric is a very important to identify the unique identity of an individual, it is needed and has been used in many sectors such as business sector, finance, health care, transportation, entertainment, law enforcement, security, access control, border control, government, and communication. Among all the biometrics technique, fingerprint-based identification is the oldest method which has been successfully used in numerous applications. Everybody is known to have a unique, immutable fingerprint. A fingerprint is made of a series of ridges and furrows on the surface of the finger. The uniqueness of a fingerprint can be determined by the pattern of ridges and furrows as well as the detailed points. A detailed point is a local ridge characteristic that occur at either a ridge split or a ridge ending.