**CHAPTER I**

## INTRODUCTION

In this era, mobile phone has become fashionable to the public because it is very handy. With the availability of mobile phones, multiple issues have been solved and the bulk of the information is kept online. Initially, when mobile phones first came out, they were only useful for communicating; now they are of multiple usages. Moreover, mobile phones have become the colossal point of attention for individuals and businesses alike, courtesy of the various incredible features and opportunities that they offer (Chatterjee, 2014).

One of the markets or businesses needing to take advantage of mobile solutions is the learning centers. Due to the high turnabout of educators in these centers, the total process takes a lot of time. iLearnCentral helps solve this predicament. It is a mobile application (app) that helps ease the whole experience of learning centers from hiring and profiling of educators to scheduling and enrolment.

**Rationale of the Study**

Insufficient use of Information Technology (IT) is one of the significant reasons that slowed the growth of small and medium-sized enterprises (SMEs) in Asia (Yoshino, 2016). However, outsourcing IT services for SMEs is now a trend for business solutions. Outsourcing IT services can help SMEs by having lower cost, focus on core operations, and IT resources similar to the large establishment (Gluck, n.d.).

Most learning centers are SMEs and would gain an advantage if they would utilize outsourcing of IT. The core operations of learning centers involve manual procedures, and automation by IT can ease the processes. Having the ability to do work conveniently and efficiently by using IT gives the learning center a competitive edge.

It is vital for learning centers to select the best and most qualified educators for their students because they play an important role in building a child’s success in their first years of school. Educators do more than facilitate arts and crafts projects throughout the day. They provide structure and help children grow in their reading and writing skills, teach science and help children understand themselves (Hudson, 2017).

There is a multitude of reasons why educators in the Philippines are quitting their jobs. The attrition rate has steadily increased and according to Ingersoll and Smith (2003), educators' attrition rate has serious consequence in the workplace and students. Although attrition rate is inevitable, learning centers need to hire new educators swiftly without affecting the children’s progress. The faster and easier the process, the better the service.

The researchers use these problems as the basis to create a project that addresses these issues. The researchers are taking advantage of the growth of mobile technology and mobile computing and create the app iLearnCentral. iLearnCentral helps learning centers lessen the administrative burdens and offer an alternative solution for the attrition rate of educators.

**Objective of the Study**

The study aims to develop a cloud-based learning center platform with mobile technology for administrative staff, educators, parents, and students.

To achieve this aim, the specific objectives are:

1. to gather data on the issues encountered by small and medium learning centers;
2. to determine the mechanism for a recommendation system; and
3. to define a notification scheme.

**Scope and Limitations**

The development of the mobile and web app of this project study focuses on learning centers and educators within the Philippines. Features of the app are pre-defined for only the common problems across different types of learning centers. The apps have three different intelligences available. The apps compare the job-seeking educators' profile and details on every job hiring position and suggest the qualified potential hire to the learning centers depending on the pre-set requirements and qualifications of the job hiring position. On the other hand, job-seeking educators get a list of potential job career vacancy recommendations through the app. They can also search manually for institutions, hirings, or job vacancies they want to employ.

Another intelligent feature of the app is the scheduling and optimizing of classes and activity schedules for the learning centers and employed educators.

Lastly, the apps suggest classes to students and parents basing on their interests and recent searches.

The apps also have an enrolment management system to help students and parents process enrolment online. The mobile app is designed to operate on a system with an Android version of 5.0 and above and with an internet connection, while the web app is designed to run on Mozilla Firefox, Google Chrome, Microsoft Edge, and Safari browsers.

Unlike company-specific software that is developed to manage their specific needs, iLearnCentral cannot provide learning center-specific features for different types of learning centers. The app cannot help with the hiring of other staff members of learning centers as well, and the functionalities of the mobile app are limited offline.

**Significance of the Study**

The implementation of the system changes the methods and processes that the learning centers and educators are accustomed to and the outcome of the study is beneficial to the following:

**Learning Centers.** They can have an automated system for the common operational processes andthe hiring process of educators is simpler.

**Educators**. They can have a new platform to search for jobs easily. For educators that are already connected with a learning center, they can effortlessly manage their work schedules.

**Parents.** They are able to pay online for their children’s tuition fees, and monitor their children’s school status online.

**Students**. They get the best educator available to help them learn.

**Researchers.** In order to increase the personal knowledge of problem solving and improving their coordination, teamwork and programming skills.

**Future Researchers.** The ideas presented may be used as reference data in conducting new researches. The outcome of the study is beneficial to them as a cross-reference. This study may be one of the bases where a new theory in learning arises.

**Flow of the Study**

Flow of the study shows the inputs and the selection of the processes to be included on the study.

- data on the issues encountered by small and medium learning centers

- mechanism for recommendation system

- notification scheme

- Develop a mobile and web application that cover most of the basic processes of learning centers; hiring, profiling, scheduling and enrolment.

An Agile method that consist of the following phases:

* Requirements Phase
* Plan
* Design Phase
* Development Phase
* Market Release
* Track and Monitor

A Cloud-Based Learning Center Platform with Mobile Technology

**Input**

**Process**

**Output**

Figure 1: **Flow of the Study**

Figure 1 shows the flow of the study. The flow is divided into three parts. Firstly, an input is the requirement needed for the application. Secondly, process is the development of the application. Finally, an output is produced out of the input and process.

The inputs are gathering of information about the issues encountered by learning centers and determining a solution.

The process of the study implements the use of a Software Development Life Cycle methodology, which is the Agile Model. It is composed of 5 phases which include Requirement Phase, Design Phase, Development Phase, Market Release, Track and Monitor Phase.

The output of the study is a mobile and web application that would automate learning centers’ processes and assist educators entitled as "iLearnCentral:A Cloud-Based Learning Center Platform with Mobile Technology".

**Definition of Terms**

The following definitions have terms with meanings in the context of usage in the study. Some of the terms operate only to this study by providing more clarity.

**Class.** Periodic or sporadic meetings of enrolled students and educators to have lessons.

**Class Session.** A single instance of a class with a specific schedule.

**Cloud-Based Platform**. A software that provides services or resources via the internet from a provider’s server.

**Course.** The term for the study of a subject or program offered by learning centers.

**Educators**. They are the teaching staff of the learning center and the people seeking for a teaching job.

**Issues encountered by small and medium learning centers**. These are the problems encountered by the learning center’s operations, the educator’s class management and job seeking, and other problems regarding the parents and students.

**Learning Centers**. Are the SMEs that provides learning services. It could be academic, language, music and arts, etc.