**De Roxas’s Pig Farm Decision Support System**

**Chapter 1**

**Introduction**

This chapter deals with the presentation of the study. Specifically, this presents an introduction, the overview of the project, purpose and description, statement of the problem, objective of the study, and scope and limitations of the study.

**Background of the study**

A decision support system (DSS) is a computer software that an organization or corporation uses to support decisions, judgements, and courses of action. A DSS sorts and examines enormous amounts of data, amassing thorough knowledge that may be applied to problem-solving and decision-making. A computerized system known as a decision support system (DSS) collects, evaluates, and then synthesizes data to create detailed information reports. The purpose of an ordinary operations application, which is only to collect data, is different from a decision support system. With the use of decision support systems, better decisions can be made, difficulties can be resolved quickly, and operations, planning, and even management are dealt with more effectively.

The process of gathering, storing, and organizing data in a way that makes it possible for effective retrieval and use is known as information management. Its goal is to guarantee that the appropriate information is made available to the appropriate individuals at the appropriate time in order to assist decision-making and the effective running of an organization.

Farm management is the process of coordinating and carrying out decisions necessary to run a farm efficiently and profitably. Agricultural economics provides information on prices, markets, agricultural policy, and economic institutions like leasing and credit that is used in farm management.

Many farms, like De Roxas's pig farm, continue to use paper for applications, invoices, and the storage of other forms of information. A paper-based document management system is required to efficiently manage this expanding volume of paper documents. When compared to digital platforms, this approach has a number of drawbacks that should be taken into account before deciding how to keep your farm information safe and accessible. Manual documents can readily break, misplaced, lost, or taken. Information loss could result from a fire or other natural disaster. If you don't have any backups, you won't be able to restore the data if the files are deleted. A paper-based document must have all the text rewritten if you want to make changes. Every time you want to make further corrections, you must repeat this. To distinguish between all the modifications that have been made, you should make a copy of the original document. It is harmful for the environment and won't do much to improve your company's green credentials to use more paper.

The researcher’s will create a document-driven decision support system app using Android Studio entitled “De Roxas’s Pig Farm” containing information about the farm like, Total number of pigs, which sow is about to give birth, how many months is sow pregnant, which pig had their vaccination. The app supports the user to calculate if the farm is going to profit by inputting all the cost and current liveweight per kilo price. The app also produces excel sheet of information about the farm, in this way the owner is going to have a digital information about the farm rather than the old method of using paper to store information. Developing the app will help the farm to store information and support the farm by calculating and showing profit assuming that the owner decides to sell.