Chapter 1

**PROJECT OVERVIEW**

# **Background of the Study**

The prevalent view in various global circles is that man is presently living in an age of information gathering, processing and dissemination, popularly called the information age. For this reason, managers and other users of information especially in transport industries are demanding more kinds of information to support management and operations. They must therefore respond to the increasing requirement for information and data management. Electronic tickets, or e-tickets, give evidence that their holders have the permission to enter a place of entertainment, use a means of transportation, or have access to some Internet services. Online Ticketing System enables the customer to buy bus tickets, make payment, and ask for information online easily. Furthermore, staff can sell tickets using an online ticketing system after checking the ticket availability for the customer and print the bus ticket to the customer.

In today's tech era, the Internet has become much popular around the world. Almost all the devices, which are known as smart devices, can connect to the internet and access data from any corner of the world. There was a time when people used to waste their valuable time just to get a piece of information. Now the technology is more advanced than before. One of the blessings of technology is the systems. A system is an organized collection of parts (or subsystems) that are highly integrated to accomplish an overall goal.

Modern technology has paved the way for multi-functional devices like the smartwatch and the smartphone. Computers are increasingly faster, more portable, and higher-powered than ever before. With all of these revolutions, technology has also made our lives easier, faster, better, and more fun. improvement to human society, not everyone has equal access. Technology, in particular, often creates changes that lead to ever greater inequalities. In short, the gap gets wider faster. This technological stratification has led to a new focus on ensuring better access for all. These innovations have been used in various areas including transportation. Traveling through a bus has its different kind of approach. Not all bus companies have their own fixed schedule of departure time. Some would wait for passengers to fill in the seats as many as possible before leaving the terminal while some would pick up passengers along the way. While the approach varies, all share one commonality and that is to provide people the best service possible.

Online Ticketing System for Bus Transportation in Lingayen-Dagupan is an online reservation system that allows visitors to check for bus ticket availability, avail bus tickets and pay the bus ticket online (Asaad, Ayad and Hayder, 2012). A solution to reserve seats, invalidation of seats and different types of Inquiry which need an instant and quick reservation.

In 1974, American airlines were the first to use an automated booking system, which was still almost manual. Technology grew, and a computer reservation system was developed. In this present era, the online booking or reservation system has improved the operations of various sectors of a nation’s economy deploying this system. Online Bus Ticket Reservation System being a web based system that ensures that the company would be able to transform most of the processes carried out manually into automated, error-free and easy to use operations in the organization especially in the area of transportation; also it would be able to generate reports for the management decision purpose.

Like in San Luis, Argentina, there is a system for bus companies that automates the ticketing system. Using a hand-held device, an employee from the bus company can now issue tickets to the passengers. The system can do the computation of the price based on where boarding and departing entries are. It can also provide driver's name and conductor tags for the customer. All the data collected from the buses can be used to create reports for the head office.

In Nigeria, the use of bus traveling is a large growing business. Hence, the Online Bus Ticketing System deals with maintenance of records of each passenger who had a seat for a journey. It also includes maintenance of information like schedule and details of each bus (Shivaji, 2010). Doing it manually, it takes a lot of time and causes many errors. Due to this, sometimes a lot of problems occur and they are facing many disputes with customers. To solve the above problem, and further maintaining records of items, seat availability for customers, price per destination, and other things, weare offering this proposal of a ticketing system.

The researchers will create an online reservation system that will help people avail tickets through prepaid credit payment. It is recommended that despite the present functionality of the designed software, additional functionality such as the use of Email to send tickets and notifications to the customer and an online payment scheme should be implemented into the system.

# **Statement of the Problem**

This study aims to design and develop an Online ticketing system for Bus Transpo in the Lingayen-Dagupan route.

Specifically, it aims to achieve the following:

1. What are the issues in the existing modality of the ticketing system for Bus Transportation in the Lingayen-Dagupan route?
2. What are the features of the proposed online ticketing system for Bus Transportation in the Lingayen-Dagupan route?
3. What is the acceptability level of the proposed online ticketing system for Bus Transportation in the Lingayen-Dagupan route?

# **Objectives of the Study**

The goal of this study is to develop an Online Ticketing for Bus transportation in the Lingayen-Dagupan route to automate the manual procedures of reserving bus ticket for any journey

Specifically, it aims to achieve the following:

1. To identify the issues in the existing modality of the ticketing system for Bus Transportation in the Lingayen-Dagupan route.
2. To enumerate the features of the proposed online ticketing system for Bus Transportation in the Lingayen-Dagupan route.
3. To determine the acceptability level of the proposed online ticketing system for Bus Transportation in the Lingayen-Dagupan route.

**Significance of the Study**

An Online Ticketing System is a significant tool that helps commuters of Lingayen-Dagupan to search for available tickets and get their data easily without any prior experience queuing at the counter.

The study is favorable and beneficial for the following entities:

**To the Passengers**. This allows passengers to book in advance of their desired trip with a peace of mind that they have reservations and go on with their trip seamlessly.

**To the Transport Operators.** This allows an advantage to transport operators as they would have a more modern booking system. Which leads to fewer delays in departures.Make adjustments on how many buses to deploy depending on the time of demand.

**To the Developers:**This allows the developers to further improve the system by experience.

**To the Future Developers.** Other developers may further the development of this kind of system in the future.And gain more profits as there are multiple bus transport operators in the country. Which leads to more potential clients.

**To the Researchers.** Researchers would gain knowledge from this system and through the data they gather they could provide helpful insights to developers to further improve this system.

**To the Future Researchers.** This will serve as a way for other researchers to contribute significantly to the development of our knowledge to possess these features of the work and to improve the reader’s understanding on how the reader interprets the topic about the Reservation System.

**Definition of Terms**

The following terms were used in this study and are being defined conceptually and operationally:

1. **Online Ticketing System**- is a system that allows visitors to check bus ticket availability, buy bus tickets and pay the bus ticket online.
2. **Tech Era**- An era of accelerated technological progress characterized by new innovations whose rapid application and diffusion typically cause an abrupt change in society.
3. **Technological Stratification**- Makes people far more marketable in an increasingly technology-based job market and leaves our society divided into those with technological knowledge and those without.
4. **Inquiry**- An act of asking for information for ticket reservations.
5. **Automate**- To operate by machines or computers, in order to reduce the amount of work done by humans.
6. **Commonality**- The fact of sharing interests, experiences, or other characteristics with someone or something.
7. **Hand-Held Device**- Any computing or electronic device that is compact and portable enough to be held and used in one or both hands.
8. **Prepaid**- A payment system in which people pay for things in advance like load credits for mobile devices, rfid toll systems.
9. **Modality**- A particular way of doing or experiencing something; reserving tickets online to avoid long queues.
10. **E-Tickets** - An electronic record confirming the purchase of a seat on a Bus.
11. **Credits**-a sum of money added to an account.