

Chapter 1

INTRODUCTION

In today's evolving digital age, technology is used in almost every aspect of our lives. Technology has witnessed impressive evolution in the past few decades, which has, in turn, transformed our lives and helped us evolve with it. Technology improvements have changed how we communicate with others, made it easier to do business, and ensured data accuracy. The technological revolution has also reached the world of sports, altering various elements of athletic performance, management, and spectator involvement. According to Soorya (2023), technology alters the game in sports by providing new tools and solutions for training, performance monitoring, and strategy development.

Globally, the sports industry is rapidly transforming through technologies like data analytics, performance monitoring, and strategy development (Sport GSC, 2019). In the Philippines, the sports landscape is evolving with a focus on development and excellence (Philippine Sports Commission, 2017). However, challenges such as limited resources and infrastructure constraints hinder in sports development (Tuliao & Carag, 2018). In Bacolod City, NOPSCCEA faces traditional management challenges like extensive paperwork and inefficient

communication, affecting effective sports event organization and athlete development (Bacolod City Government, 2024).

Negros Occidental Private Schools Sports Cultural Educational Association (NOPSCCEA) is a vital organization dedicated to promoting and growing sports. NOPSCCEA has played an important role in organizing athletic events and tournaments and developing a culture of sportsmanship in member schools. Despite its significant contributions, NOPSCCEA encountered difficulty managing registration, performance monitoring, athlete profiling, and document management processes. These challenges include extensive paperwork, insufficient communication, and a lack of centralized solutions for managing data. In response to the evolving needs of NOPSCCEA on reliance on manual methods, which are prone to human error and time-consuming, the proponents will develop the Sports Events and Athletes Management System to automate the manual processes in relation to sports events. This application aims NOPSCCEA to modernize its operations, improve data accuracy, and provide a seamless experience for sports directors, coaches, and student-athletes. In addition, the application will enable student-athletes to manage their profiles, highlighting their success and contributing to the overall development of sports within the organization.

Objectives of the Study

The main purpose of this study was to design and develop an innovative application that addresses the challenges faced by NOPSSCEA to enhance efficiency and promoting transparency in sports management within private schools using digital technology.

Specifically, this study aimed to:

1. to design and develop the Sports Events and Athletes Performance Management using digital technology:

- 1.1 Athlete Profiling Submission
- 1.2 Submission of Forms
- 1.3 Athlete Portfolio
- 1.4 Sports Registration Management
- 1.5 Sports event management
- 1.6 Athlete Performance Report
- 1.7 Provide Reporting Capabilities

2. to evaluate the system using ISO standardize questionnaire tool in terms of:

- 2.1 Functional Suitability
- 2.2 Reliability
- 2.3 Performance Efficiency
- 2.4 Usability

2.5 Security

2.6 Compatibility

2.7 Maintainability

2.8 Portability

Significance of the Study

In detail, the various sectors that will specifically benefit the study are as follows:

NOPSCCEA Administrator. This study is significant to NOPSCCEA Administrators as it provides a digital approach to managing sports events and schools, reducing administrative burden and enhancing transparency. It ensures accurate and timely reporting, facilitating better decision-making and oversight.

Sport Directors. For Sports Directors, the study offers an efficient system for managing registrations, athletes and coaches. This helps in better planning and execution of sports programs, leading to improved outcomes and athlete development.

Athletes. Athletes would benefit from this study through easier submission processes, comprehensive performance tracking, and a digital portfolio that showcases their achievements. This promotes greater engagement and personal development within their sports careers.

Coaches. Coaches would gain a powerful tool for monitoring and evaluating athlete performance, enabling more targeted training and development strategies. This digital approach facilitates better coordination during sports events, ensuring that coaches can manage logistics and athlete performance effectively.

SUCs. This study is significant to State Universities and Colleges (SUCs) as it improves the management of sports programs by streamlining event organization, athlete performance tracking, and registration processes. It fosters transparency and efficiency, contributing to the development of student-athletes and the overall excellence of sports in SUCs.

Researcher. Researchers can utilize the comprehensive data and reporting capabilities of the system to analyze trends, performance metrics, and the overall impact of digital technology on sports management. This study provides a rich source of data for further academic exploration and innovation.

Future Researchers. Future researchers will find this study valuable as a reference for developing and improving digital solutions in sports management. The insights and data collected can guide subsequent studies and technological advancements.

Scope and Limitations of the Study

The scope of this study entails the development of a comprehensive sports management system designed to optimize various aspects of sports administration. This system will include registration, performance monitoring, personal information collection, sports event management, and document management. Registration functionality will enable easy onboarding of athletes and participants, while performance monitoring will track their progress and achievements over time. Athlete profiling will allow for the gathering of detailed profiles to understand athlete backgrounds and contact details better. Sports event management will facilitate organizing sporting events, from scheduling to result dissemination. Additionally, document management will ensure the secure storage and efficient retrieval of important files and records related to athletes.

However, limitations exist. The system aims to optimize various aspects of sports administration, it is limited by its reliance on stable internet connectivity. In regions with poor or inconsistent internet access, features like real-time registration, performance monitoring, and event management may be hindered, affecting usability and effectiveness. Additionally, high network congestion or downtime can impact system performance and response times, making offline

capabilities essential to maintain data integrity and functionality.

Definition of Terms

To facilitate the understanding of this study, different terms are defined below conceptually and operationally, respectively:

Administrator

According to Cambridge Dictionary Press (n.d.), administrator is a person who is in charge of the operation of a network of computers, a website, a group of computer users, etc., and is able to make changes to it.

On this study, administrator refers to personnel who has elevated privileges or authority to manage, control, or oversee sports events, manage schools, and view reports within NOPSCCEA. Administrators typically have access to additional features or settings that regular users do not, allowing them to make changes, set permissions, and maintain the sports programs or platform they oversee.

Athletes

Athletes are individuals who are trained or skilled in exercises, sports, or games requiring physical strength, agility, or stamina (Merriam- Webster, [edition](#)).

In this study, athletes refers to individuals who participate in organized sports activities, competitions, or events, representing schools under NOPSCCEA. They undergo training and practice to improve their physical abilities and performance in their chosen sport.

Coaches

A person who teaches and trains the members of a sports team and makes decisions about how the team plays during games (Britannica Dictionary, [edition](#)).

In this study, coaches refers to individuals who manages and track athletes performance.

Events

It is anything that happens, especially something important or unusual (Cambridge University Press, [edition](#)).

Operationally, events refer to organized activities held annually, bringing together participants for competitions, showcases, or collaborative purposes.

NOPSCCEA

The abbreviation of the acronym NOPSCCEA is Negros Occidental Private Schools, Sports, Cultural, Educational Association ([acronymous](#), 2019).

In this study, NOPSCCEA refers to the National Organization of Private Schools Sports Coordinators, Coaches, and Education Administrators, abbreviated as NOPSCCEA, is an organization responsible for overseeing sports programs and activities within private schools, coordinating events, and facilitating cooperation among member institutions.

Sports Director

A sports director is in charge of a sports program or organization, usually for a school, athletic team, or recreational facility. Your main job duties are overseeing the entire athletic department by supervising the facility as well as hiring and managing coaches staff and other members. (ZipRecruiter, n.d.)

In this study, sports director refers to an individual responsible for managing athlete, coaches, and analytics reports.