The primary research aim is to develop an accurate predictive model for forecasting the outcomes of cricket matches in The Hundred format. This new and innovative format, introduced in 2021, presents an exciting opportunity to explore the factors influencing match outcomes and contribute to the growing field of sports analytics.

To accomplish this goal, data from the official website cricsheet will be utilized, which provides comprehensive match and player statistics for various cricket tournaments, including The Hundred. By leveraging this rich dataset, the research will analyze team compositions, playing strategies, and performance metrics to identify the key determinants of success in this format.

The research will be guided by several questions, such as identifying the most influential factors contributing to a team's victory in The Hundred, understanding how team composition, playing strategies, and specific game situations impact the likelihood of winning, and evaluating the ability of machine learning algorithms to accurately predict match results while determining the techniques that yield the highest predictive performance. Additionally, the research will explore how the insights gained can be applied to optimize team strategies and decision-making processes during matches.

To ensure a structured approach, a detailed dissertation plan will be created using a timeline or calendar, highlighting key stages, milestones, and deadlines. The research project report will be structured into several sections, including an introduction, literature review, methodology, results and discussion, and conclusion.

The methodology section will describe the data collection process, data preprocessing steps, feature engineering techniques, and the machine learning algorithms employed, such as Poisson and logistic regressions, decision trees, random forests, and support vector machines. The results and discussion chapter will present the findings, including the identification of key success factors, the performance of the predictive models, and an analysis of their practical implications for teams and stakeholders.

The conclusion will summarize the main contributions of the research, address limitations, and propose avenues for future work, while also highlighting the potential applications of the findings in areas such as sports betting, fan engagement, and decision-making processes within the cricket industry.

Throughout the research process, ethical guidelines will be adhered to, ensuring the reliability and validity of the data and methods employed, while maintaining a critical and objective approach. The aim is to contribute valuable insights to the field of sports analytics and provide practical benefits for teams, coaches, and stakeholders involved in The Hundred format.

A critical aspect of the research will be the comprehensive literature review, which will critically analyze existing studies on predicting sports outcomes, machine learning techniques applied in this domain, and the unique characteristics of The Hundred format. This review will help identify gaps in the current knowledge and provide a solid foundation for the proposed research.

Furthermore, the research will explore the potential impact of rule changes and format modifications on team performance and match dynamics in The Hundred. As a relatively new format, understanding how teams adapt to the unique rules and strategies will be crucial in developing accurate predictive models and providing valuable insights to cricket administrators and stakeholders.

Comparing the key success factors and predictive model performance between The Hundred and other established cricket formats, such as Twenty20 (T20) and One Day Internationals (ODIs), will be another important aspect of the study. This comparative analysis can shed light on the similarities and differences between the formats, contributing to a more comprehensive understanding of the sport and its evolution.

In addition to the primary focus on predicting match outcomes, the research will also investigate the potential applications of the findings in other domains, such as sports betting and fan engagement. By exploring these diverse applications, the study can open up new avenues for future research and practical implementation, further enhancing the impact and relevance of the work.

Moreover, the research will delve into the economic and social aspects of cricket, drawing insights from existing studies on the impact of events like the Indian Premier League (IPL) on the economy, employment, and social cohesion. Understanding these broader implications of cricket can provide valuable insights for policymakers and sports administrators, contributing to informed decision-making processes for the development and promotion of the sport.

Throughout the research process, a collaborative approach will be encouraged, involving experts from various domains, such as data scientists, sports analysts, and cricket enthusiasts. This interdisciplinary collaboration can lead to the development of more sophisticated and accurate predictive models, as well as a deeper understanding of the nuances and complexities of the sport.