


# Chapter 5


## Leveraging Human Resource (HR) Analytics for Effective Talent Management in Public Sector Organisations

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### ABSTRACT

*The book chapter explores how HR analytics may improve talent management in the African public sector. Through case studies and theoretical insights, the chapter emphasises the adoption and influence of HR analytics on many aspects of talent management, such as recruiting performance evaluation, employee retention, and leadership development. The chapter explores the advantages and obstacles of adopting HR analytics, including issues like data protection, the need for HR professionals to enhance their analytical skills, and opposition to data-driven methods due to cultural factors. The implications for public sector HR management are significant, indicating a trend towards evidence-based HR approaches that closely align with organisational goals and strategic imperatives. The chapter ends by highlighting the importance of further research in HR analytics to gain a more profound insight into its lasting effects, addressing obstacles to its adoption and ethical concerns, and investigating regional differences in the African setting.*

DOI: 10.4018/979-8-3693-2889-7.ch005

## INTRODUCTION

Human Resource (HR) analytics involves the collection and implementation of talent data to enhance critical talent and business outcomes, promoting data-driven insights and positive employee experience (Elrehail, 2023; Gupta, 2023). The use of HR analytics is crucial for organisations striving to attract and retain skilled individuals in a competitive global environment, aiding in strategic workforce management decisions such as talent acquisition, retention, training, and development (Elrehail, 2023). The public sector in Africa experiences talent management obstacles that necessitate the implementation of equitable appraisal systems, the cultivation of leadership skills, and the proactive prediction of future human resource requirements (Ali & Elias, 2023; Anlesinya, Amponsah-Tawiah & Dartey-Baah, 2019a; Musakuro & De Klerk, 2021).

Talent management research in Africa is at an embryonic stage, with under-researched areas in North, West, and Eastern African sub-regions (Anlesinya *et al.*, 2019a). The South African public sector faces talent management challenges affecting workforce planning, compensation, training, and performance management (Musakuro & De Klerk, 2021). The future of HR analytics is linked to understanding data analytics, focusing on connecting data to HR policies and practices to influence overall business performance (Diez, Bussin & Lee, 2019). HR analytics is an emerging field with substantial practitioner and academic attention, contributing to the emerging subfield of HRM (Edwards, Charlwood, Guenole & Marler, 2022). This chapter addresses the prevailing deficiency of equitable and transparent appraisal systems within the public sector, which are essential for upholding integrity and fostering employee motivation. This gap has been addressed through the adoption of technology, specifically by leveraging digital transformation initiatives. These initiatives facilitate the implementation of data-driven performance management systems, thereby ensuring objectivity and fairness in the evaluation of employee performance. In addition, the study identified a gap in proactive human resources (HR) planning within public sector organisations, which typically respond to HR demands reactively rather than anticipating them. To bridge this gap, the implementation of digital tools and predictive analytics could revolutionize HR management. These technological advancements facilitate enhanced workforce planning and management by forecasting future HR needs based on observed trends and organisational objectives. Drawing from this background the chapter objectives are to:

- To establish the impact of HR analytics on public sector HRM in public sector organisations;
- To explore the adoption of HR analytics in talent management practises of public sector organisations; and
- To explore the impact of HR analytics on talent management

This section of the chapter begins with a theoretical background on HR Analytics, discussing its evolution and integration into talent management strategies within public sector HRM. It contextualizes the application of HR Analytics in African public sectors, tracing the evolution of talent management influenced by digital advancements. Methodology is detailed through a systematic literature review, examining key aspects from search strategies to data synthesis. The final sections explore the implications of digital transformation on HR practices, the role of HR Analytics in enhancing talent management, and the practical challenges and benefits observed in African public sector institutions. The chapter concludes by summarising the impact of HR Analytics on talent management and offering recommen-

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