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"Building the Digital Future of Basketball in Zimbabwe – An Action Plan for a Centralised Data Management System for Basketball Union of Zimbabwe."

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Abstract

This study investigates the most appropriate digital data management system for the Basketball Union of Zimbabwe (BUZ), with the goal of improving governance by enhancing administrative efficiency, competition management, stakeholder engagement, and long-term player development. In response to increasing demands for accurate, accessible, and real-time basketball data, this study evaluates the current challenges facing BUZ's data collection and management processes, examines potential technology solutions, and proposes a practical roadmap for implementation.

The research was guided by one central question: *What is the most appropriate data management system for Basketball Union of Zimbabwe, and how can it be effectively implemented?* This was addressed through three key sub-questions:

1. What are the current data management challenges faced by BUZ and its provincial associations and other stakeholders?
2. What are the available data management platforms, what are the features, benefits, limitations and implementation requirements of these, and which one best aligns with BUZ's needs and stakeholder expectations?
3. What is the feasible action plan to implement such a system, including the challenges might BUZ face in transitioning to a digital data management system, and how they can be mitigated, considering BUZ's limited budget and organisational capacity?

A mixed-methods approach was used, combining structured interviews with provincial leaders, administrators, and platform providers, alongside surveys targeting coaches, players, media, and fans. The findings show that current systems are outdated, inefficient, and lack transparency. Stakeholders expressed strong support for digitisation, especially systems offering live statistics, performance analytics, and mobile integration.

A comparative review of two leading platforms - FIBA Organizer and NBN23 - highlighted the former as the more appropriate option for BUZ. FIBA Organizer, developed by Genius Sports and supported by FIBA, offers essential competition management tools, lower entry costs, and scalability across provinces. NBN23, while strong in mobile usability and data visualisation, poses higher cost and licensing complexity.

The report includes a detailed, step-by-step action plan that addresses change management, stakeholder training, system piloting, ethical concerns (especially around betting-linked data), and governance approvals. Recommendations are prioritised to suit BUZ's small federation status and limited resources, beginning with securing Board and Congress approval and ending with national rollout and sustainability measures.

In conclusion, this report not only identifies FIBA Organizer as the most viable data management solution for BUZ but also presents a grounded, inclusive implementation strategy. It calls for

further research on long-term impacts, data ethics, and integration of digital tools to support youth and women's basketball development. By embracing this roadmap, BUZ can modernise operations and elevate Zimbabwean basketball to higher standards of transparency, performance, and engagement.

Résumé

Cette étude examine le système de gestion des données numériques le plus adapté à la Fédération de basket-ball du Zimbabwe (BUZ), dans le but d'améliorer la gouvernance en améliorant l'efficacité administrative, la gestion des compétitions, l'engagement des parties prenantes et le développement à long terme des joueurs. Face à la demande croissante de données de basket-ball précises, accessibles et en temps réel, cette étude évalue les défis actuels auxquels sont confrontés les processus de collecte et de gestion des données de la BUZ, examine les solutions technologiques potentielles et propose une feuille de route pratique pour leur mise en œuvre.

La recherche s'est articulée autour d'une question centrale : quel est le système de gestion des données le plus adapté à la BUZ et comment le mettre en œuvre efficacement ? Trois sous-questions clés ont été abordées :

1. Quels sont les défis qui entravent actuellement la gestion des données au sein de la BUZ et de ses associations provinciales ?

2. Quels sont les points forts, les limites et les exigences des plateformes disponibles, notamment FIBA Organizer et NBN23, et laquelle répond le mieux aux besoins de la BUZ ?

3. Quel est le plan d'action le plus réaliste à adopter, compte tenu du budget et des capacités organisationnelles limités de la BUZ ? Une approche mixte a été utilisée, combinant des entretiens structurés avec des dirigeants provinciaux, des administrateurs et des fournisseurs de plateformes, ainsi que des enquêtes auprès des entraîneurs, des joueurs, des médias et des supporters. Les résultats montrent que les systèmes actuels sont obsolètes, inefficaces et manquent de transparence. Les parties prenantes ont exprimé un fort soutien à la numérisation, en particulier aux systèmes offrant des statistiques en direct, des analyses de performance et une intégration mobile.

Une analyse comparative de deux plateformes phares – FIBA Organizer et NBN23 – a montré que la première était l'option la plus appropriée pour BUZ. FIBA Organizer, développée par Genius Sports et soutenue par la FIBA, offre des outils essentiels de gestion des compétitions, des coûts d'inscription réduits et une évolutivité interprovinciale. NBN23, bien qu'excellent en termes d'ergonomie mobile et de visualisation des données, présente des coûts plus élevés et une complexité accrue en matière d'octroi de licences.

Le rapport comprend un plan d'action détaillé, étape par étape, qui aborde la gestion du changement, la formation des parties prenantes, le pilotage du système, les questions éthiques (notamment concernant les données liées aux paris) et les approbations de gouvernance. Les recommandations sont hiérarchisées en fonction du statut de petite fédération et des ressources limitées de BUZ, en commençant par l'obtention de l'approbation du Conseil d'administration et du Congrès, puis en terminant par le déploiement national et les mesures de durabilité.

En conclusion, ce rapport identifie non seulement FIBA Organizer comme la solution de gestion des données la plus viable pour BUZ, mais présente également une stratégie de mise en œuvre

solide et inclusive. Il appelle à des recherches plus approfondies sur les impacts à long terme, l'éthique des données et l'intégration des outils numériques pour soutenir le développement du basketball féminin et des jeunes. En adoptant cette feuille de route, BUZ peut moderniser ses opérations et élever le basketball zimbabwéen à des normes plus élevées de transparence, de performance et d'engagement.

Chapter I: Introduction

Sports organisations collect and use a significant amount of data in their daily operations, ranging from player registration to team administration and competition logistics. For such organisations to operate effectively, they require systems that ensure data is accurate, timely, and accessible. This review focuses on the Basketball Union of Zimbabwe (BUZ), providing a background of its structure and operations, and presents a clear rationale for the adoption of a centralised database management system.

Background of the National Federation

Basketball Union of Zimbabwe is the recognised national federation for basketball in Zimbabwe, affiliated directly with the International Basketball Federation (FIBA), as well as the continental and regional bodies - FIBA Africa and FIBA Africa Zone VI respectively. It was constituted in 1981 and is registered with the Ministry of Sport, Recreation, Arts and Culture via the Sports and Recreation Commission. BUZ is also an affiliate of the Zimbabwe Olympic Committee. It comprises of ten Provincial Basketball Associations and other affiliated entities such as the National Association of Primary School Heads (NAPH), National Association of Secondary Heads (NASH), Association of Trust Schools (ATS) and Zimbabwe Universities Sports Association (ZUSA). Its mandate includes governing, promoting, supervising and managing the sport across all levels, organising national and continental competitions, overseeing the participation of male and female players across all age groups, fighting against use of illegal and other performance enhancing substances and promoting the training of technical and administrative officials (BUZ Constitution, 2008).

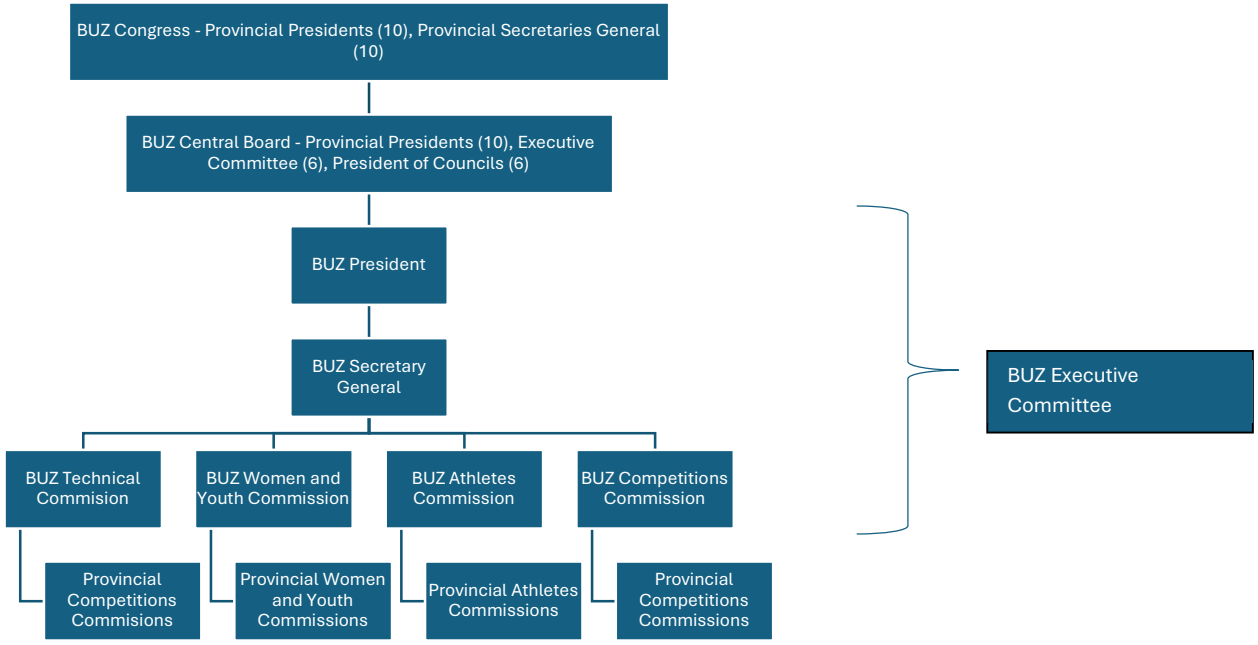

Figure 1 - BUZ Organogram

Under the guidance of FIBA, the Federation underwent an Operational Planning Process, through a programme called FIBA Plus and improvement of administration and governance was one of the goals set by BUZ, as shown in figure 2, below. Information management is one key avenue to achieving this goal.

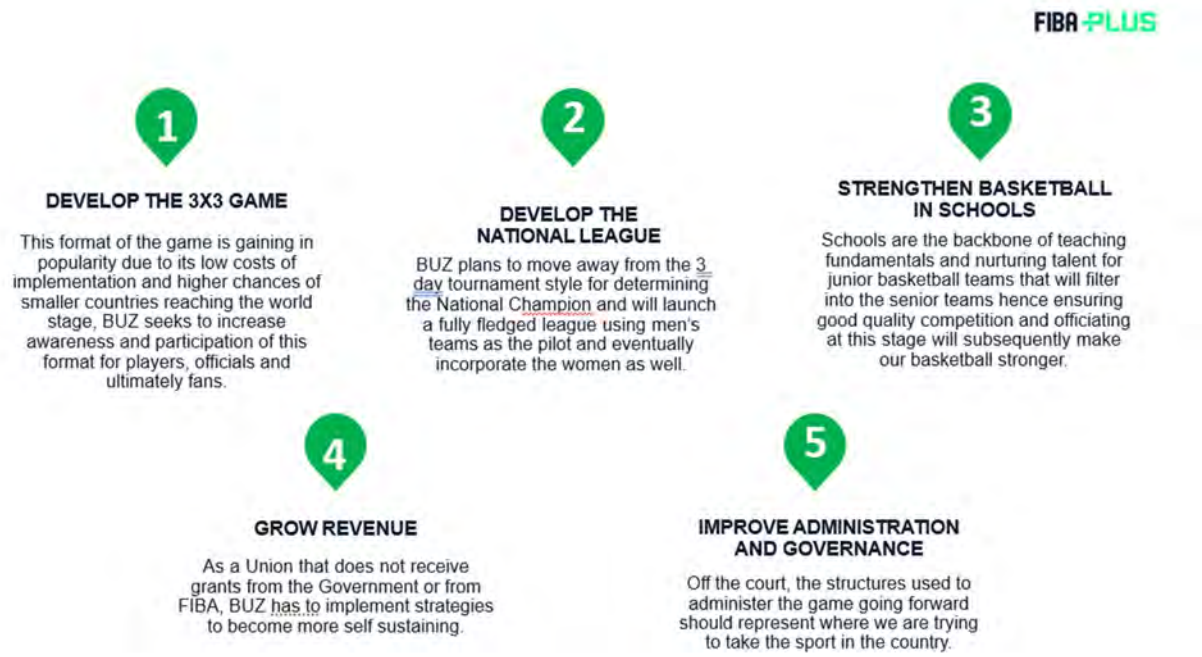

Figure 2 - BUZ Operational Plan Goals

Presentation of the problem

Information is crucial for effective management and good governance; it also helps to manage resources effectively and improves communication with all stakeholders. Basketball Union of Zimbabwe needs to gather and use various types of information including:

- Numbers of leagues in Provinces – this allows for better governance of Provincial leagues, as well as determination of qualification slots to national competitions.
- Player registrations in leagues – this is also for better governance of teams and leagues through internal records and confirmation of eligibility, and onward registrations for FIBA competitions.
- Numbers of players and their various categories – this is not only crucial for internal records and generation of player and coach development programmes; but also allows the Federation to meet regulatory reporting requirements of the Sports and Recreation Commission, and for potential sponsors who will want to know the size of the audience that their brand will be exposed to, or the level of impact their contribution will have.

- Competition schedules – this assists the Referees Council in the assignment of technical officials for the various competitions, fan engagement as fans get information on what games are being played where so they can go and support, and value to sponsors as this shows them the number of game days that their brands will get exposure during the leagues or tournaments.
- Records of results, statistics and logs – these assist with coaches scouting efforts, and informs the national Federation on team and national development needs
- Player performance statistics – this assists with coaches scouting efforts, and informs the national Federation on team and national development needs
- Technical officials and coaches' registrations and qualifications – this assists the Technical Commission of the National Federation on appointment of officials to competitions and teams, and assessment of development needs for the registered officials.

Currently, neither the Provincial Associations nor BUZ maintain an online database to collect, store, or distribute information about players, teams, officials, or competitions. Instead, player registration is done manually, typically using paper or soft copy forms. These are often submitted as pictures or PDFs through WhatsApp or email. As a result, the system is fragmented, inconsistent, and vulnerable to errors. Records of competitions are on manual scoresheets that do not have a systematic filing and archiving method, leading to loss of records. Databases of technical officials and coaches are also fragmented across the provinces, although BUZ has recently launched a Referees Council that is working towards collecting all the information pertaining to technical officials at a national level.

This lack of a centralised data management system leads to significant issues, including:

- Use of unregistered or ineligible players as teams and administrators have no place to check on the registration or eligibility status of players, affecting the integrity of competitions at provincial and eventually national level.
- Difficulty in verifying records during disputes or appeals as scoresheets or statistics do not have a single repository where they can be safely stored and retrieved from, when needed.
- Increased administrative workload and communication breakdowns as team and league administrators may need to constantly collect information that may have been lost along the way.
- Conflicts during provincial and national competitions due to inconsistent data handling as explained in the points above.
- Inconsistent appointments of technical officials and coaches as the Technical Commissions do not have a dashboard view of all the available officials and the qualifications. This usually leads to the same known or popular officials continuing to get assignments, leaving no room for new or younger officials to get the requisite experience.

- Uninformed development plans for players, coaches and referees as this is based on the discretion of administrators and not always necessarily backed by facts and figures.

These challenges underscore the urgent need for a reliable and integrated information management system. The purpose of this action plan is to explore potential digital solutions that can address these inefficiencies and establish a unified, accessible, and secure database solution for basketball in Zimbabwe, and eventually make recommendations on the implementation of such a solution.

According to Camy & Robinson (2007), accurate and well-managed information is essential for effective governance. Good information should be accurate, authentic, complete, relevant, timely, usable, and contextualised. They describe information management as a three-part cycle: acquisition, custodianship and distribution, and disposal. Without a structured system, BUZ is unable to fully support this cycle, undermining its governance, administrative and strategic goals.

As grassroots and national sports bodies around the world increasingly adopt digital tools, many are experiencing improved efficiency, better stakeholder engagement, and enhanced governance. This action plan will also draw lessons from similar organisations that have implemented database systems, highlighting both the benefits and the challenges of such transitions.

Research aim and questions

The following research section aims to identify and evaluate a suitable, scalable, and sustainable data management system for the Basketball Union of Zimbabwe (BUZ), in order to improve registration, communication, governance, and competition management across all levels of the sport.

The primary research question, therefore, is "*What is the most appropriate data management system for Basketball Union of Zimbabwe and how can it be effectively implemented?"*

To address this question, this review will focus on 3 key sub-questions:

1. What are the current data management challenges faced by BUZ and its provincial associations and other stakeholders?
2. What are the available data management platforms, what are the features, benefits, limitations and implementation requirements of these, and which one best aligns with BUZ's needs and stakeholder expectations?
3. What is the feasible action plan to implement such a system, including the challenges might BUZ face in transitioning to a digital data management system, and how they can be mitigated, considering BUZ's limited budget and organisational capacity?

Chapter II: Review of existing knowledge

1. Foundations of Effective IT Systems in Sport Organizations

Launching an Information Technology (IT) initiative within a sport federation requires a strategic understanding of organisational needs, user demands, data infrastructure, and operational objectives. Camy and Robinson (2007) underscore the importance of aligning digital initiatives with institutional goals, ensuring that any technological intervention is both relevant and sustainable. Sports organisations, particularly in resource-constrained environments, must assess existing workflows, data structures, stakeholder capacity, and technological gaps before system selection and implementation.

Blobel, Rumo, and Lames (2021) observe that many federations and sports clubs globally are in transition, seeking Sports Information Systems (SIS) tailored to their specific requirements. A key challenge lies in balancing customisation with cost-effectiveness while ensuring scalability.

2. Components of Modern Sports Information Systems

Modern sports information systems typically consist of several interrelated modules:

- Competition and fixture management
- Membership and licensing databases
- Integration with external digital systems (e.g., federations, anti-doping, insurance)
- Real-time reporting and analytics
- Web and mobile interfaces for ease of use

These systems increasingly leverage cloud infrastructure, allowing federations to centralise data and enhance accessibility, security, and performance monitoring (Hype Sports Innovation, 2023; KPMG, 2022). Systems must also comply with data protection regulations such as GDPR (General Data Protection Regulation) or equivalent local laws, underscoring the need for secure and transparent data governance.

3. Benefits of Adopting a Database Management System

A centralised Database Management System (DBMS) can lead to measurable improvements in data accuracy, operational efficiency, and transparency. Research indicates that digital solutions facilitate better performance analytics, faster decision-making, and more compelling sponsorship proposals due to data-backed demographics and impact metrics (Wicker & Breuer, 2011). These

benefits are particularly relevant for National Federations aiming to build credibility with stakeholders such as government, sponsors, and international bodies.

Moreover, digital systems enable federations to manage compliance more effectively by maintaining up-to-date membership records, health data, and player eligibility - critical for tournaments and league operations (García & Llopis-Goig, 2012).

4. Challenges to Implementation

Despite the appeal of digital solutions, several barriers must be anticipated:

- Financial limitations: Grassroots federations often lack the budget to invest in commercial-grade systems (Camy & Robinson, 2007; García et al., 2012).
- Human capacity gaps: Volunteer-led national and provincial associations may lack IT literacy, requiring significant training and change management.
- Resistance to change: Stakeholders may resist digital transformation, fearing disruption to established routines or job roles (Kotter, 1996).
- Data reliability issues: Without standardised input protocols, databases may suffer from incomplete or inconsistent entries (Blobel et al., 2021).
- Cybersecurity risks: Personal and sensitive information must be protected from breaches, especially where multiple user tiers are involved.

5. Review and evaluation of alternative platforms

In recent years, numerous digital platforms have emerged to support sports federations, basketball in particular, in managing competitions, data, and stakeholder engagement more efficiently. These platforms vary in scope, functionality, cost, and suitability depending on the size and capacity of the federation.

Popular options include FIBA Organizer, NBN23, SportsEngine, TeamSnap, and LeagueApps, among others. Each offers different features for game scheduling, player statistics, communication, and fan engagement. Given the strategic goal of the Basketball Union of Zimbabwe (BUZ) to digitise its data management and competition systems, this section focuses on a comparative review of FIBA Organizer and NBN23 - two platforms with demonstrated use in African and international basketball ecosystems. This evaluation will assess their functionalities, implementation requirements, and fit for BUZ's context, and will conclude with a recommendation on the most suitable option for adoption.

FIBA Organizer

FIBA Organizer, developed by Genius Sports in partnership with FIBA, offers a unified platform for basketball federations. Its ecosystem includes:

- FIBA Organizer (competition and player management)
- FIBA LiveStats (live match data entry)
- FIBA Hosted Website and Game Centre (public data interface)
- FIBA LiveStats Widgets (embeddable on websites)

The Premium Application Programming Interface (API) packages allow real-time and historical analytics, providing rich data for internal decision-making or external partners like sponsors or media. Its integration across global basketball networks enables standardisation and data compatibility with FIBA events and tournaments.

The most notable feature of the FIBA-Genius Sports offer is its commercial value-in-kind arrangement, wherein BUZ could receive free access in exchange for exclusive data rights for betting. While this eliminates upfront costs, it potentially sacrifices a long-term revenue stream from betting-related data sales - a trade-off requiring strategic consideration.

Australia's adoption of FIBA Organizer illustrates its real-world application. Their system supports competition scheduling, live data collection, and national reporting standards, significantly reducing manual processes and errors. Closer to Zimbabwe, South Africa also adopted FIBA Organizer for its Basketball National League (BNL).

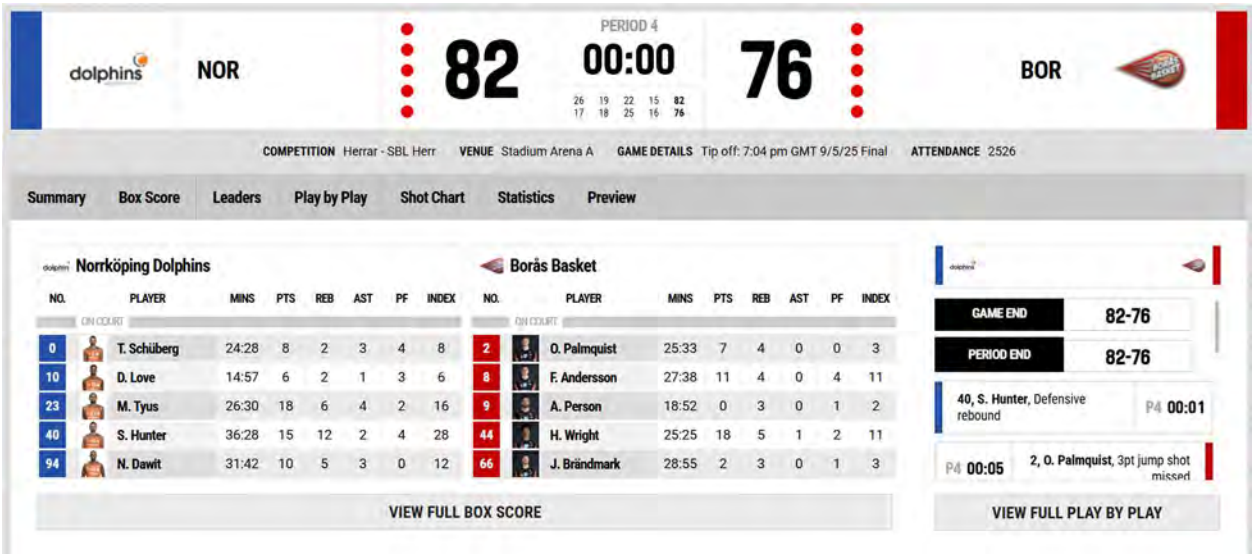

Figure 3 - screenshot of Game Centre for a league using FIBA Organizer

NBN23

NBN23 is another widely adopted digital sports management platform, particularly within European federations and emerging basketball nations. It features:

- Digital match sheets and in-game statistics tracking via an app-based tool called Ingame, a digital scoresheet that can be easily used by scorers.
- Real-time player and team analytics via the Swish platform
- Club-level access for data decentralisation
- Integration with FIBA standards via its compatibility layers

What distinguishes NBN23 is its modular scalability and user-friendly mobile interfaces, making it particularly suitable for grassroots environments with limited infrastructure. The Swish platform for fan and player engagement has a free and a paid subscription with different functionalities for both options. The NBN23 system has gained traction in Spain, France, and some African federations. It also offers data monetisation tools, although often through third-party partners rather than exclusive deals.

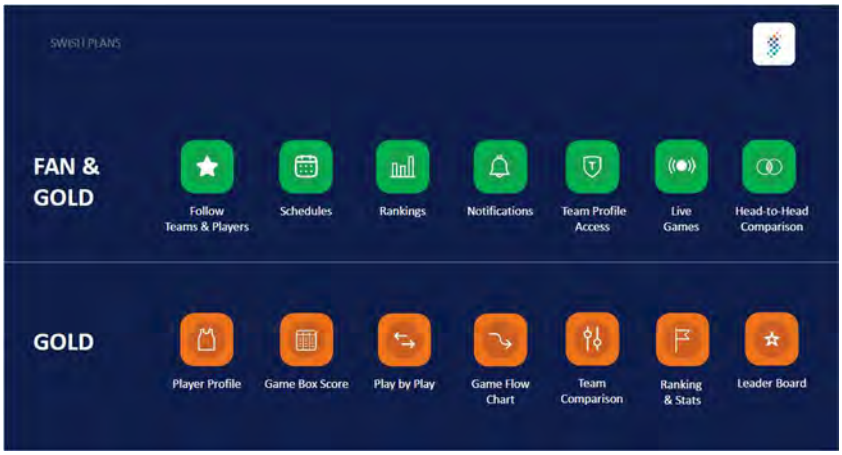

Figure 4 - example of game schedule screenshot on NBN23 Swish Platform

Figure 5 - comparison of free and paid Swish fan plans

6. Comparative Analysis: FIBA Organizer vs. NBN23

Feature	FIBA Organizer	NBN23
Developer	Genius Sports + FIBA	NBN23 (Spain-based tech company)
Integration with FIBA	Native (official platform)	Compatible, not native
Live Data Tracking	FIBA LiveStats	Digital match sheets / StatApp
Web Interface	Game Centre + Widgets	League portals
Costing	Free with betting rights OR paid Application Programming Interfaces (API) $10,000 rest API, $20,000 live API- per annum	Licenses typically charged per use ($1.15 per registered player), Swish plans are free or paid for fans
Data Ownership	Conditional – Genius Sports holds rights	Federation-retained
Use in Africa	Growing but limited	Increasing adoption
Best for	Large federations and federations aligned to FIBA model	Flexible grassroots to mid-tier use

Table 1 - Comparative analysis of FIBA Organizer and NBN23

FIBA Organizer offers high-level integration for federations directly aligned with FIBA strategic objectives, especially those competing internationally. However, it requires institutional maturity and is more hierarchical in access. NBN23 offers decentralised tools, making it more adaptable for federations still building their technical and governance frameworks.

7. Change Management Considerations

Change management is critical for the successful implementation of either platform. Camy and Robinson (2007) emphasise that resistance to digital systems is best addressed through proactive communication, inclusive planning, and thorough training. Kotter (1996) recommends an 8-step process, including stakeholder engagement, short-term wins, and institutionalising new practices.

Both systems require champions within the federation, including provincial coordinators and IT personnel, to support adoption and mitigate implementation fatigue.

Review of existing knowledge conclusion

A robust and modern data management system is no longer optional for federations aiming to professionalise and scale operations. For BUZ, the choice between FIBA Organizer and NBN23 hinges on strategic priorities: alignment with FIBA's digital ecosystem versus control over data ownership and modular adaptability. Both options offer transformative potential if paired with strong leadership, change management, and a phased rollout plan. A pilot program may be an effective method to assess capacity and refine training needs before full national implementation.

Chapter III: Data Collection and Analysis Methods

Research Focus

The primary research question is: *"What is the most appropriate data management plan for the Basketball Union of Zimbabwe (BUZ) and how can it be effectively implemented?"* along with 3 key sub-questions. To address these, data was collected through interviews with service providers, past users, and provincial administrators, as well as surveys from players, coaches, media, and fans.

Data Sources

1. **Semi-structured Interviews** – Conducted with Genius Sports, FIBA, NBN23, Angola Basketball Federation, and the South Africa Basketball National League for bench learning on whether FIBA Organizer or NBN23 would be a good fit for BUZ, and the Federations' experiences with the systems. Interviews were also conducted with local Provincial Secretaries General to explore operational and administrative perspectives on database needs, perceived barriers, and openness to adopting new systems. This method was ideal for gaining in-depth insights into stakeholder attitudes, as it allows flexibility while maintaining a degree of consistency across interviews (Gill et al., 2008; Silverman, 2020). Interviews were also conducted with coaches in the premier leagues to gain insights into what their expectations would be from a database system and how the platform would inform their work and decisions.
2. **Structured Surveys** – Distributed among players, fans, media and some coaches to gather broader opinions on expectations, usability, accessibility, and satisfaction with current or proposed systems. Surveys offer breadth and comparability across stakeholder groups, a key advantage when triangulating findings (Kumar, 2019; Saunders et al., 2019).

Data Preparation

- **Transcription**: Interview recordings were transcribed verbatim for qualitative coding, as recommended by Silverman (2020), to ensure data richness and authenticity.
- **Survey Cleaning**: Survey responses were cleaned to remove incomplete or duplicate entries. Quantitative responses were coded for statistical analysis using Survey Monkey, while open-ended responses were categorised thematically.

Qualitative Analysis (Interviews)

A thematic analysis approach was used, guided by Braun and Clarke's (2006) framework:

1. **Initial Coding**: Transcripts were reviewed, and open coding applied to identify meaningful statements relating to system usability, security, support, and implementation challenges.
2. **Theme Development**: Codes were grouped into broader themes such as data security concerns, administrative burden, and training needs.
3. **Frequency & Relevance**: Recurring themes across participants were tracked to identify dominant concerns.
4. **Comparison**: Themes were compared across provinces to identify provincial differences in needs or resistance.

Quantitative Analysis (Surveys)

The survey included yes/no, check box, Likert-scale, and open-ended questions. Analysis proceeded as follows:

1. **Descriptive Statistics**: Frequencies and means were calculated for yes/no and Likert-scale items of expectations from the system, trust in data security, and system satisfaction (Saunders et al., 2019).
2. **Cross-tabulations**: Differences across stakeholder groups (e.g., players vs. coaches) were explored.
3. **Thematic Coding of Open-Ended Responses**: These were analysed similarly to interview data to enrich the quantitative findings (Creswell and Plano Clark, 2018).

Integration of Findings

A triangulation approach was used to combine insights from both methods. This mixed methods design enabled greater validation through convergence and divergence of data sources (Creswell and Plano Clark, 2018).

- For example, if administrators raise data security concerns in interviews and survey respondents report low trust in digital platforms, the finding is reinforced.
- Divergences (e.g., users finding the platform usable but administrators concerned about rollout) will guide targeted recommendations.

Outcome

The analysis led to a grounded, stakeholder-informed conclusion on the most efficient database plan for Basketball Union of Zimbabwe, with specific evaluation of the system's strengths, limitations, and suitability. Recommendations will reflect a synthesis of stakeholder perspectives, operational feasibility, and system performance.

Chapter IV: Data Analysis and Discussion of Findings

Key Themes from Semi-Structured Interviews

1. Positive Bench Learning from Angola and South Africa

Both Angola and South Africa strongly endorsed digital transition, with participants advising BUZ to proceed with the implementation. These federations have seen improved engagement and communication between administrators, coaches, and players and appreciation from fans about the improved engagement the systems bring. This supports the thematic finding that digital systems facilitate organisational efficiency and transparency (Blobel, Rumo & Lames, 2021).

a) Benefits of Digitalisation

Interviewees praised features such as real-time statistics, ease of scheduling, and data accessibility. The standard FIBA Organizer was used by the Basketball National League in South Africa, while the premium paid version was not used due to cost, the league accessed the betting rights-based model. The league appreciated the financial trade-off, despite ethical concerns that had to be managed through informed consent and data anonymisation. Angola, on the other hand has been utilising NBN23 which they praise for its decentralisation and how fans and family members can track their players or children's games and performances online, if they cannot make it to the game.

b) Challenges

Reported implementation challenges included:

- Initial resistance to change
- Lack of digital literacy among regional administrators, and
- Unclear policies on data ethics in relation to betting rights.

2. Positive bench learning from service providers

Genius Sports

Interviews with Genius Sports revealed that several National Federations and their leagues have been using the FIBA Organizer platforms and there are more innovations to follow as Genius Sports have renewed their contract with FIBA. A lot of information about the system was already provided in the initial meeting as shown in the evaluation above. However, there was still the question of the betting rights issue that Genius Sports responded to by confirming that they have a robust selection of integrity services positioned to protect the reputation and integrity of their partners.

Genius Sports only trades the data to regulated and licensed sportsbooks and their specialist integrity team closely monitor the betting markets to combat match-fixing by ensuring there are optimum rules, regulations and procedures in place as well as identify suspicious activity with their bet monitoring system, cross-referencing odds movements with their predictive algorithms.

The results of the surveys, in terms of expectations from Coaches and Players, as shown in the upcoming survey results section were shared with Genius Sports who confirmed that their services provide access to all the information that is expected, include functionalities to analyse and export data as needed. Genius Sports also confirmed that the products will be integrated into a BUZ website, designed to provide players and/or fans with the most accessible and engaging experience possible.

Regarding training of the administrative personnel, Genius Sports confirmed that they have a dedicated customer onboarding team who will lead and direct on implementation, making it a seamless process for the Federation.

NBN23

The meeting with NBN23 mostly provided factual information on the products as presented in the evaluation above. NBN23 provided company profile, and product information as well as a link to the Swish platform demo environment where one can get to explore and experience the platform without any obligation, before making any commitment. Following a positive response on the demo environment, an interested Federation would have to send information regarding numbers if leagues, games per year and volume of players. The NBN23 representatives would then send a business proposal for the Federation to consider. At the moment, NBN23 is currently implementing a business model where Federations or leagues pay 1euro per digitised licence / player and then Swish is used under individual subscription by the fans. This way, BUZ would only pay for the players digitised under the NBN23 digital scorecard.

FIBA

The meeting with FIBA revealed that Genius Sports is a trusted service provider for the International Federation, who meets FIBA standards such that the product even carries the International Federation's name. FIBA and Genius Sports announced a renewal of the contract between the two entities, ensuring a long-term relationship, with added innovations and features released at the FIBA mid-term congress that was held in Bahrain in May 2025. Regarding the issue of betting, the FIBA representative confirmed that no ethical complications were yet to be reported hence they feel confident that Federations can safely engage Genius Sports as a service provider.

3. Provincial SG Interviews: Operational Readiness and Concerns

Interviews were conducted with 5 out of the 10 Provincial Associations. The interviewees were from Bulawayo, Harare, Mashonaland East, Matabeleland North and Midlands Basketball Associations.

Recurring Themes Across Provinces

1. Manual, fragmented data collection systems
    - All provinces currently rely on paper forms, WhatsApp, Excel, or a combination of these.
    - There's no centralised or standardised system; most data is stored personally by one individual, making it prone to loss or disorganisation.
2. Recognition of the need for digitisation
    - All interviewees expressed support for the concept of digital systems like FIBA Organizer.
    - Digital transformation is widely seen as a solution to inefficiencies, with respondents noting it would allow for better organisation, transparency, and historical tracking of player data.
3. Infrastructure & resource constraints
    - Laptops, internet/data, and electricity access are universally noted as required but currently limited.
    - Staff mostly rely on personal smartphones, which are not ideal for full system use.
4. Concerns about adoption and compliance
    - Change management is a major concern: people are used to informal methods and might resist structured digital processes unless adoption is made mandatory.
    - Several noted the need to start implementation before the season starts to ensure uptake.
5. Positive but pragmatic view on betting-linked suppliers
    - Most accept the betting-linked data model from Genius Sports as a necessary compromise given financial constraints.
    - There's consensus that this model is tolerable as long as stakeholders are well-informed and legal implications are reviewed – especially the Data Protection Act that has been recently passed in Zimbabwe.

Notable Differences Between Provinces

Province	Differences / Unique Observations
Mashonaland East	Has no digital system experience at all; restarting league activities after a hiatus. Emphasised that digitisation must be mandated.
Harare	Previously attempted PlayPass but dropped it due to limited functionality in the free version. Suggested that costs be absorbed in affiliation fees. Association currently has livestreaming infrastructure.
Matabeleland North	Has previous experience with PlayPass, used for a single season. Already owns a laptop. Suggested central federation licensing of the platform.
Bulawayo	Emphasised use of volunteers and youth who could be trained to use the system. Recommended piloting in larger provinces first. Also interested in school-level integration.
Midlands	Highlighted legal concerns around data protection laws and the need to consult POTRAZ. Also raised power access issues at courts.

Table 2 - notable differences between provinces

Provincial SG Interviews Results Summary

- Common Ground: There is a broad recognition that digitisation is necessary for the long-term efficiency and sustainability of basketball administration. Key needs include infrastructure, training, and change management support.
- Differences largely lie in digital readiness (e.g., prior system use, equipment availability), ideas for rollout strategies, and concerns about legal frameworks.

These variations suggest the need for a phased and adaptive implementation strategy, starting with better-equipped provinces and providing robust support and communication to others as they come on board.

Four (4) of the Provincial Associations – Bulawayo, Harare, Manicaland and Matabeleland North have attempted to implement a digital system to assist with the competition management. Bulawayo Basketball Association used the NBN23 Swish platform for one season. Harare and Matabeleland Basketball Associations have tried to use a platform called PlayPass, while Manicaland Basketball Association used League Lobster for a season as well.

While these Provinces had attempted to implement digital systems independently, there has never been a joint effort that led to a centralised system, hence there was majority interest in the implementation of one national level system that would provide this functionality. FIBA Organizer's alignment with the mother body (FIBA), however, was a big swaying factor to most of the interviewees.

Survey Results: Coaches, Players, Media, and Fans

The survey link was shared via WhatsApp groups and a total of 44 respondents answered to the survey, however only 34 completed all the questions. This could be as a result of the "long" response time, with an average of 6 minutes 42 seconds, or the short answer questions that required respondents to type after the multiple choice or check-box questions.

The survey had a total of 23 questions. The first 13 questions were generic to all the respondents. The thirteenth question asked respondents to choose their role – player, coach, media or fan.

Below is a representation of the spread of respondents:

Respondent role	*Responses (number)*	*Responses (%)*
Player	21/44	47.73%
Coach	13/44	29.55%
Media	4/44	9.09%
Fan	6/44	13.64%
Total	44	100%

Table 3 - roles of survey respondents

The generic questions focused on gathering insights regarding BUZ social media visits, satisfaction levels with the current levels of technology and what the respondents would like to see when digitisation has been completed. Below are the results:

Engagement and Perception

- 100% support for digitalisation of BUZ's systems.
- Most respondents check BUZ social media 2–3 times a week; 25% check daily.

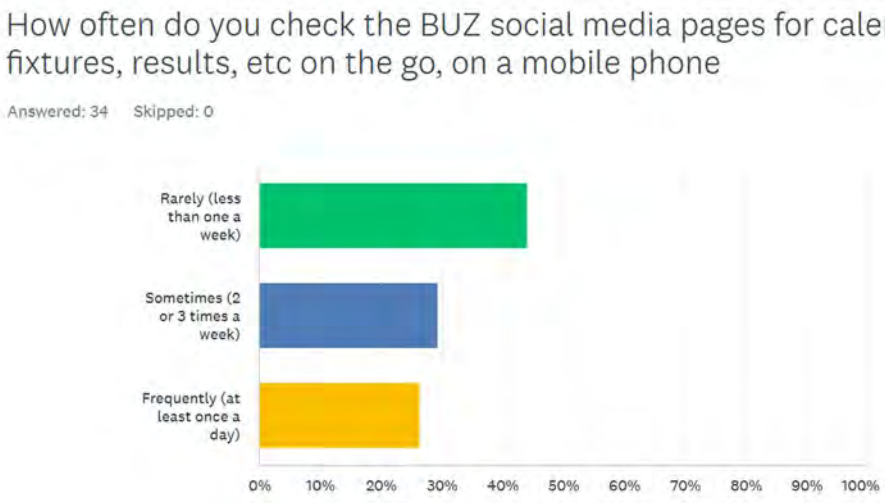

Figure 6 - frequency of visiting BUZ social media pages

Current satisfaction levels

Satisfaction with current digital technology was low, averaging 1–3 on a 5-point scale.

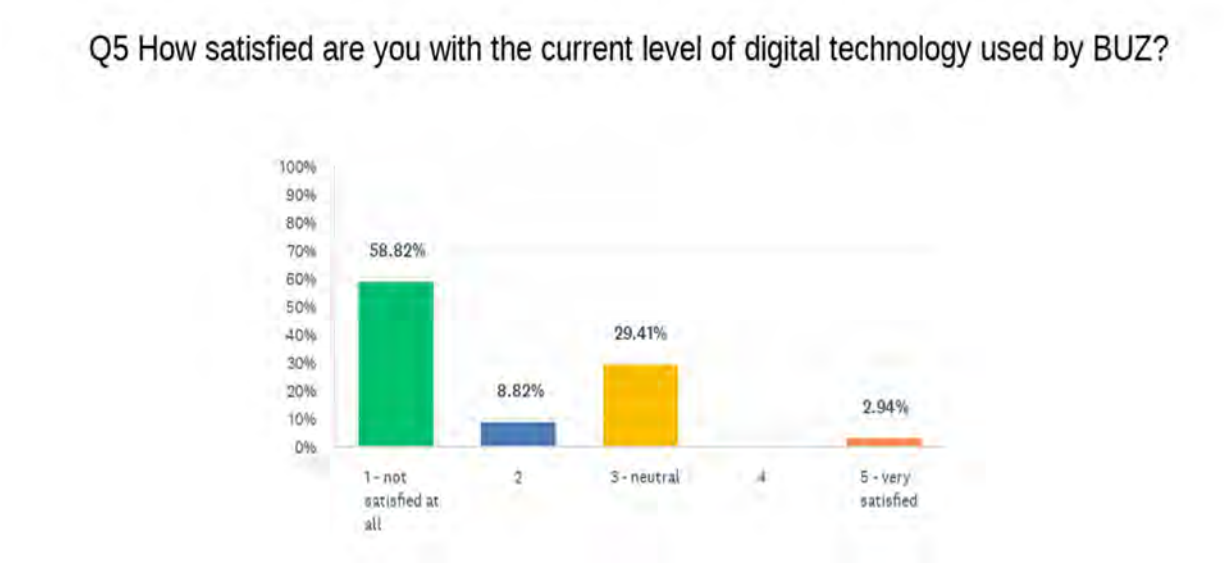

Figure 7 - satisfaction levels with current use of technology

Digital Feature Preferences

- Over 75% want more access to stats, performance logs, and real-time updates.
- Strong demand for live updates, box scores, player profiles, and videos.
- Mobile-friendly platforms and apps were consistently requested.

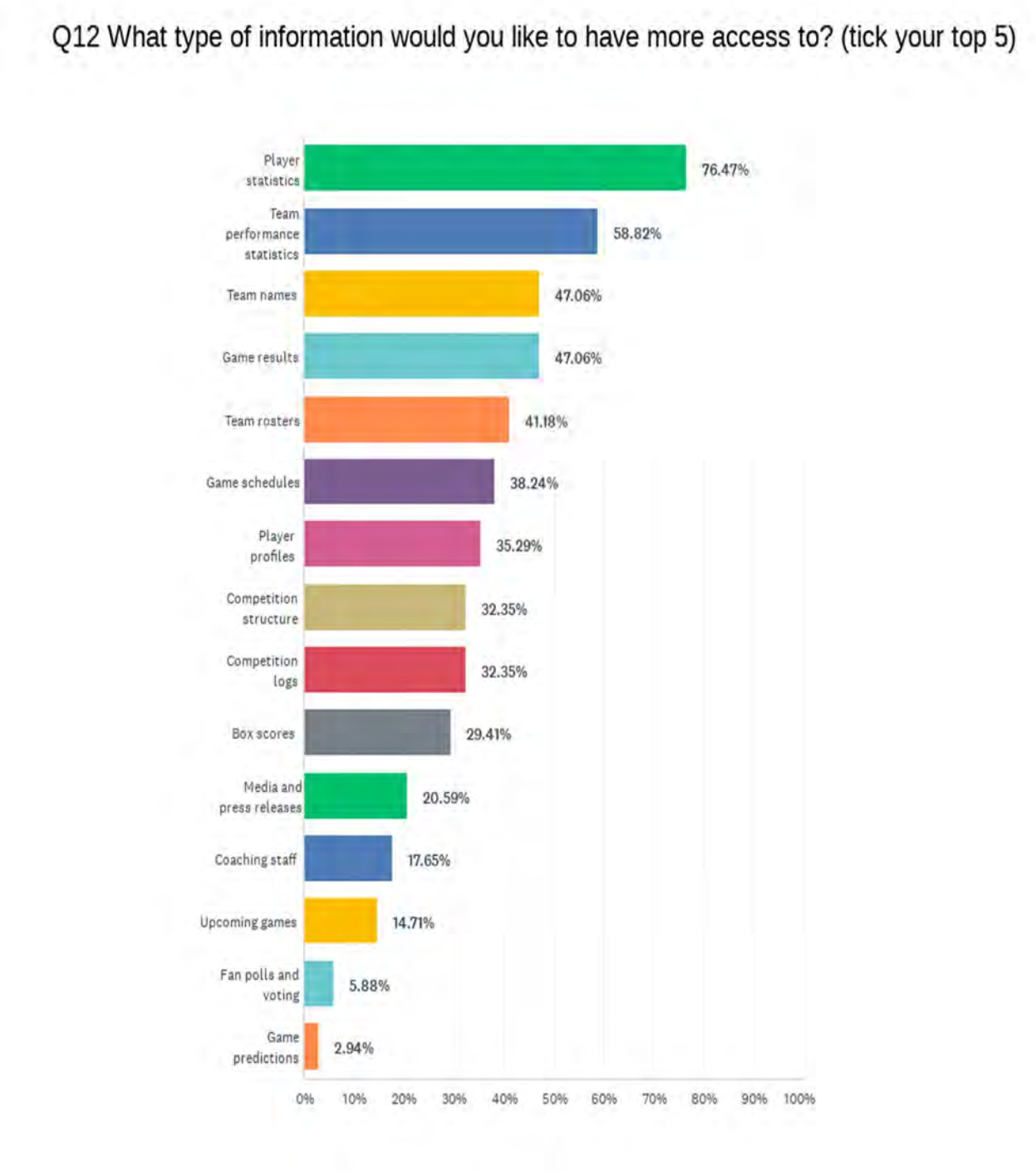

Figure 8 - respondents' preferences on information to see on digital platform

Depending on the response to the role of the survey respondent, they were taken to specific sections of the survey that asked questions directed to their role.

Players - Privacy and Betting Concerns

- Most players were concerned about unauthorised data use, requesting informed consent, with some admitting that the public availability of their performance and statistical data would be beneficial for coaching and scouting purposes.
- Majority agreed to data being used for betting purposes, vis a vis the benefits of the system.

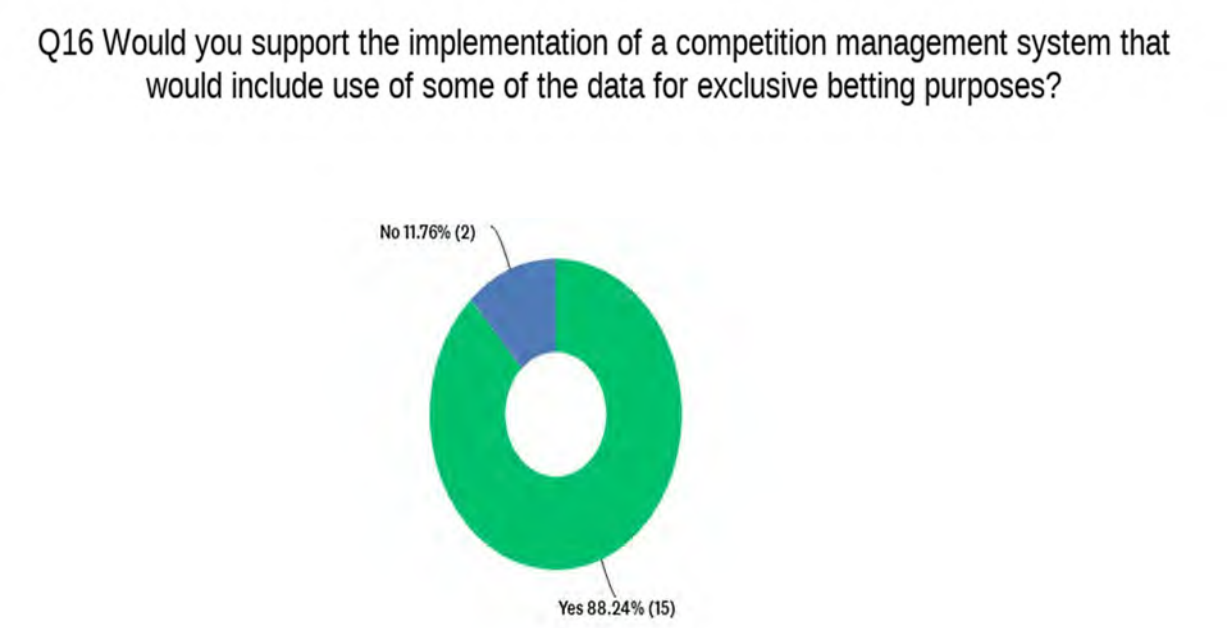

Figure 9 - support for platform with exclusive rights to data for betting purposes

Coaches – demand for performance analytics

Coaches emphasised the strategic value of digital statistics in:

- Tailoring training programs,
- Conducting opponent analysis,
- Supporting player development and recruitment.

However, current challenges included:

- Inconsistent access to player data,
- Lack of real-time stats, and
- Errors and delays in manually collected data.

Coaches expressed strong interest in digital tools for scouting and development, with desired features including box scores, player profiles, and analytics dashboards.

Player performance and team performance
Shooting, blocks, Steals, efficiency
Efficiency game by game
Player improvement and quality of the game
Team performance through the season

Table 4 - responses from coaches on what they want to see on the platform

Media and fans

The media and fans shared similar views on what would be better ways of engaging with them as stakeholders through the digital platform and below is a table of their responses:

Keep us updated
Make LIVE Games available for viewing
Post updates about games, players etc at least once a day on their social media platforms. They should be more visible.
Creating relatable apps and more engagement on social media
To send updates, communicate all Information and give us feedback
Post games and results of games being played in all province
Live streaming (broadcast games& tournament Digital marketing Community forum.host online forums for fun's to discuss games share options
Anyhow

Table 5 - media and fans engagement needs

Chapter V: Recommendations and Actions

Recommendation 1: Adopt FIBA Organizer via Option 2 (Betting Rights Exchange)

Given Basketball Union of Zimbabwe's resource constraints and the extensive value-in-kind offer from Genius Sports, adopting FIBA Organizer through the 5-year betting rights model is a financially sound decision. This must, however, be conditional upon the following actions:

Actions:

- Negotiate contractual clauses to ensure data is anonymised.
- Implement a clear data privacy and ethics policy to inform athletes and stakeholders.
- Include opt-in/opt-out clauses in athlete contracts.

Recommendation 2: Launch a Phased Rollout with Training and Support

Gradual implementation will mitigate resistance and technical gaps, especially at provincial level.

Actions:

- Begin with a pilot program in 2-3 digitally ready provinces (Harare, Bulawayo, Midlands / Manicaland)
- Deliver structured training workshops for administrators, coaches, and volunteers.
- Develop a comprehensive user manual and help desk support system.

Recommendation 3: Prioritise Digital Infrastructure Investment

To ensure equitable access across provinces, BUZ must improve internet connectivity and access to digital devices.

Actions:

- Partner with local Internet Service Providers or mobile providers to subsidise data by offering data bundle sponsorship for the system administrators in the pilot provinces.
- Apply for grants or sponsorships from private sector or FIBA Africa to support infrastructure rollout.

Recommendation 4: Engage Players and Fans Through Tailored Digital Platforms

Real-time data engagement tools will foster fan loyalty and player motivation.

Actions:

- Develop a mobile-first digital platform with real-time stats, box scores, and schedules.
- Integrate social media and live update widgets.
- Include player and coaches pre- and post-game interviews on social media to enhance interaction.

Recommendation 5: Institutionalise Data Governance

Concerns over privacy and ethical use of data must be addressed through policy.

Actions:

- Develop a Data Protection and Ethics Policy aligned with national standards according to the Data Protection Act.
- Implement mandatory digital consent forms for all player data usage.

Recommendations Conclusion

The research reveals overwhelming support across stakeholder groups for digital transformation of BUZ's data and competition management systems. FIBA Organizer is widely regarded as an appropriate, trusted, and cost-effective solution - especially if negotiated under a value-in-kind model. However, successful implementation hinges on ethical data practices, user training, digital infrastructure, and phased change management.

Chapter VI: BUZ Digital Transformation Action Plan

Priority	Recommendation	Actions Required	Lead	Resources	Timescales	Critical Success Factors
1	Secure Board and Congress approval for digital system adoption	- Prepare and present policy brief -Showcase benefits and sustainability - Seek formal resolutions from both bodies	BUZ SG + BUZ President	Internal presentations Minimal travel costs	0–1 month	Formal mandate Unified leadership support Transparency
2	Adopt FIBA Organizer under betting rights (value-in-kind) model	- Sign MoU with Genius Sports - Define data usage terms - Include opt-in in athlete registration	BUZ SG + Legal Representative	Legal review Existing staff time	0–3 months	Legal clarity Player data protection Cost-free access

3	Draft and adopt a BUZ Data Protection and Ethics Policy	- Draft aligned to Zimbabwe standards - Conduct policy sensitisation workshops	BUZ SG + Policy Advisor	Pro bono legal aid Templates	1–3 months	Trust from players Compliance with law Stakeholder awareness
4	Develop a phased provincial rollout plan	- Select 2-3 pilot provinces - Conduct digital readiness assessments - Develop scalable onboarding roadmap	BUZ Technical Subcommittee	Volunteer support Minimal operational costs	3–6 months	Smooth pilots Provinces involved early Learning from pilots
5	Deliver user training and support tools	- Create user guides and videos - Conduct workshops for provincial SGs, administrators, coaches	BUZ Admin & IT Officer	Free online tools Printing budget	3–9 months	User confidence Low resistance Readiness at grassroots

		- Assign provincial tech leads				
6	Improve low-cost digital access points	Partner with local ISPs for subsidised access - Deploy shared devices	BUZ + Provinces	Donated/ refurbished devices Partnerships	6–12 months	Affordable access Security of equipment Use during peak seasons
7	Launch BUZ public engagement platform via FIBA Organizer	- Activate public-facing dashboards - Link to BUZ website/social media - Share stats, schedules, results	BUZ Media Officer	FIBA tools BUZ platforms	6–9 months	Real-time updates Player/fan visibility Ease of access
8	Integrate mobile-first communication tools	- Enable mobile notifications - Sync calendars with provincial leagues	BUZ Communications	Free apps Volunteer moderators	6–12 months	High mobile usage Low cost Fan-friendly interface

		- Use WhatsApp/ for updates				
9	Roll out interactive fan content	- Post MVPs and polls - Run giveaways - Publish weekly top performers	BUZ Media Team	Canva, Meta tools Volunteer support	6–12 months	Engagement rates Fan feedback Content consistency
10	Monitor and evaluate digital transformation	- Quarterly M&E meetings - Capture learnings from each phase - Adjust rollout plans based on feedback	BUZ M&E Officer	Google Forms Analytics tools	Ongoing	Regular reviews Adaptation of plan Continuous improvement

Chapter VII: Final Conclusion

This document set out to identify the most appropriate data management system for the Basketball Union of Zimbabwe (BUZ), focusing on its current operational realities and stakeholder needs. At the core of the research was the primary question: *What is the most appropriate data management system for BUZ and how can it be effectively implemented?* To answer this, the study explored three key sub-questions: the current challenges faced by BUZ and its stakeholders in data management, the available platform options and their suitability, and the necessary steps to ensure successful implementation.

Key Findings

The research revealed that BUZ and its provincial associations currently operate under fragmented, mostly manual systems that limit the timeliness, accuracy, and accessibility of basketball competition data. Stakeholders - including coaches, players, media, and administrators — unanimously expressed a need for centralised, real-time systems that could streamline operations, improve player development, and enhance fan engagement.

Through interviews with existing users and administrators of digital systems, a comparative review of available platforms was conducted - specifically focusing on FIBA Organizer and NBN23. Both platforms offer substantial benefits; however, FIBA Organizer emerged as the more suitable option for BUZ due to its accessibility through a partnership with Genius Sports, alignment with FIBA governance structures, and an adaptable implementation path. NBN23, while strong on mobile usability and player stats, may present higher costs and integration complexities.

Significance of the Research

This research contributes to the growing body of work on digital transformation in sport governance, particularly in low-resource environments such as Zimbabwe. By highlighting the voices of BUZ's stakeholders and systematically evaluating platform options, the study demonstrates a pragmatic pathway for federations seeking to modernise without overwhelming their capacity or budget.

Recommendations and Actions

An action plan was developed to guide the adoption and implementation of the FIBA Organizer system, with practical steps ordered by priority. These include securing Board and Congress approvals, appointing a project team, securing limited funding and training, piloting the system in select provinces, and implementing continuous feedback loops. The plan accounts for change management challenges such as resistance, digital literacy gaps, and ethical concerns over data use, particularly with betting-linked data rights.

Limitations

The scope of this research was constrained by access to real-time user metrics from current FIBA Organizer or NBN23 implementations, and a relatively small survey sample from fans and media. Additionally, limited financial transparency regarding the full costs of the NBN23 platform

restricted the ability to conduct a complete cost-benefit analysis. Future phases should explore full technical audits and data policy compliance more deeply.

Future Research Directions

This action plan opens several avenues for further research. These include a longitudinal study on the impact of digital systems on league competitiveness and player development in emerging basketball markets, as well as deeper analysis of ethical data usage, especially in contexts where systems are funded by betting-related rights. Exploring how digital platforms can support gender equity and youth development would also align with broader FIBA and national priorities.

Final Thought

The digital transformation of Basketball Union of Zimbabwe's data management is not simply a technical upgrade - it represents a strategic shift in how Zimbabwean basketball is governed, supported, and experienced. With a clear roadmap, realistic goals, and inclusive implementation, BUZ is well positioned to usher in a more efficient, transparent, and engaging future for the sport.

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Use of Artificial intelligence – translation of the abstract from English to French, confirmation of the themes emerging from the surveys and interviews, alignment of conclusion with the requirements as stated in the project guidelines.

Appendix 1 – Interview and survey questions

Past users – Angola, South Africa

a. What advice would you give to BUZ as we aiming to digitise our data management processes?

b. How have digital systems impacted administrators, coaches and players' engagement and communication?

c. Are you using the

   i. standard FIBA-Organizer?

   ii. the premium version?

   iii. the betting option? This free version with rights to Genius Sports

d. Can you share your experience with FIBA Organizer? What have been the most significant benefits?

e. What challenges did you face during the implementation of the standard version, and how did you overcome them?

f. What best practices would you recommend for BUZ as it looks to implement this system?

g. What would be the benefits and constrains to subscribe to the Premium version?

h. How did you overcome the ethical concerns regarding the use of data for betting purposes?

Provincial SGs

a. What data do you prioritise for managing leagues and competitions effectively, and how is this data currently collected?

b. Have you made any attempts towards implementing digital management systems for data collection and management?

c. What are your thoughts on the package offered by Genius sports, the FIBA products? (See here https://www.fibaorganizer.com)

d. How do you envision the integration of such digital systems enhancing administrative efficiency within the federation?

e. What resources or training do you believe are necessary for staff to effectively utilise a new digital system?

f. What challenges do you think you may face during this implementation and how can we overcome them?

g. What are your thoughts on the engagement of a supplier who will use data for betting purposes?

Coaches and recruiters

a. How do you currently use data to inform your coaching strategies and player development?

b. What specific data points (e.g., player performance metrics) do you find most useful in your coaching or in scouting and evaluating talent?

c. What challenges do you face in accessing comprehensive player performance data?

d. What challenges do you face in accessing or analysing player data?

e. What features would you like to see in a digital system that would help streamline your coaching, scouting or recruiting efforts?

f. How could a centralised digital system improve the efficiency of the recruiting process?

g. What insights or trends would you like to track over time through a digital database?

Players, media and fans

1. How often do you check online the BUZ social media pages for calendar, fixtures, results, etc –
    a. At home

i. On a PC (Rarely (less than one a week) / Sometimes 2 or 3 times a week)/ Frequently (at least once a day)
ii. On a mobile phone (less than one a week) / Sometimes 2 or 3 times a week) / Frequently (at least once a day)

b. On the go
i. On a mobile phone (less than one a week) / Sometimes 2 or 3 times a week) / Frequently (at least once a day)

2. Do you think the current BUZ competition data collection and management processes are efficient?
   - Yes
   - No
   - Comments:
3. How satisfied are you with the current level of digital technology used by BUZ?
   - 1 (Not satisfied at all)
   - 2
   - 3 (Neutral)
   - 4
   - 5 (Completely satisfied)
4. Would you support the digitalization of the Basketball Union of Zimbabwe (including all Provincial Leagues) database and competition management systems?
   - Yes
   - No
5. Do you believe that digital systems can improve the accuracy and speed of competition results?
   - Yes
   - No
6. Should BUZ invest more in technology to support the growth of basketball in your region?

- Yes
- No

7. Would you prefer real-time updates and notifications about competition results through a digital platform?
    - Yes
    - No
8. Do you believe digital data systems would improve player performance tracking and development?
    - Yes
    - No
9. Should BUZ integrate mobile apps for better engagement and competition management for fans and players?
    - Yes
    - No
10. What type of information would you like to have more access to? (tick multiple boxes)
    - Team names
    - Team rosters
    - Coaching staff
    - Team performance statistics
    - Player profiles
    - Player statistics
    - Competition structure
    - Game schedules
    - Game results
    - Competition logs
    - Box scores
    - Upcoming games

- Game predictions
- Fan polls and voting
- Media and press releases
- Other ……

*** Are you a player, media or fan? (pick one)

For Players
11. What digital features would improve your experience in managing your performance and stats?
(Short answer)

For Players
12. What concerns do you have regarding privacy and security when it comes to your personal performance data?

(Short answer)

For Players

13. Would you support the implementation of a competition management system that would include use of some of the data for exclusive betting purposes?

- Yes
- No

For Media and Fans
11. How would you like the Federation to use digital platforms to enhance your engagement with basketball competitions?
(Short answer)